Body Pedagogies: How children come to understand their bodies and their selves during and following a health intervention in a New Zealand primary school

Denise Robyn Atkins

A thesis submitted to
Auckland University of Technology
in fulfilment of the requirements for the degree of
Doctor of Philosophy (PhD)

2015

School of Sport and Recreation

Abstract

Exploring how children understand their bodies and selves, the study adopted an interpretive epistemology which enabled children's voices to be captured through an ethnographic methodology. The researcher spent extended time with a year 3 and 4 level class at Tuihana School (ages 8-9 years), and engaged with the broader school context over a two year period (2012-13). The study examined a Healthy Homework (HH) intervention, and whole school concepts of *'Being healthy'* and *'Being human'* and the interrelationship between these, and body pedagogies (Evans, Rich, Davies & Allwood, 2008).

Underpinning the discussion and investigation of body pedagogies are three message systems that influence a school culture and shape children's learning - curriculum, pedagogy and assessment (Bernstein, 2000). The influence these message systems had on how children understood and saw their bodies were explored through two perspectives –considering performance and perfection codes (Shilling, 2004, 2010).

The study revealed the subtle and complex ways in which schools and schooling shape children's understandings about health, food, activity, and their own and others' bodies and behaviours. The socialisation of rituals concerning healthy food and exercise that were inculcated into the school culture were exposed, enabling overt and hidden messages to prevail, mostly centred on corporeal identity that privileges an unrealistic bodily ideal.

Discourses of healthism and obesity were clearly associated with and embedded in children's thinking, understanding, actions and language. The concept of being 'healthy' was seldom espoused with any critical thought, suggesting that children were not exposed consistently enough, to sociocultural and critical pedagogy within their school environment, despite this being an intention of the New Zealand Curriculum (Ministry of Education, 2007).

Futhermore, the study demonstrated that children's (8-9 year olds') knowledges were fragmented into discrete health topic areas that demonstrated an understanding of their

bodies and their selves. They perceived this as being separate from the social and cultural constructs within their learning environment and wider lives. This suggests there is an opportunity for teacher professional development in order to understand the philosophy and intent of health education and physical education within the New Zealand Curriculum.

A major recommendation based on the findings is for schools to consider adopting a kaupapa Māori [1] approach to health pedagogy. Such an approach aligns with a salutogenic perspective on health, endorsed in recent studies (Fitzpatrick & Tinning, 2014; McCuaig, Quennerstedt & Macdonald, 2013). Ideally education systems need to encourage young people to adopt a critical perspective when considering body perfection and performance, that is, transforming their thinking through disrupting and dissecting the values and social connotations of traditional norms of body size, weight, scale, and participation.

Finally, schools have a responsibility to ensure that any health interventions complement the teaching and learning within the school curriculum and do not merely replicate popular media and health policy, and the discourses these privilege. Health interventions can have an impact on the micro-culture of a school, and the HH intervention provided a catalyst for a distinct focus on health enabling some understanding of bodily knowledge for children.

---

[1] Kaupapa Māori , is a Māori philosophy, strategy or theme

Table of Contents

List of Figures

Attestation of Authorship

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

Denise Robyn Atkins

Acknowledgements

Ethics Approval

This project was approved by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 14 November 2011.

Ethics Application Number: 11/24

Preface

A jigsaw puzzle is an appropriate analogy for this thesis and is used to introduce the sections. A jigsaw puzzle requires the assembly of, often oddly shaped, interlocking and tessellating pieces. Each piece usually has a picture on it and when complete, a jigsaw puzzle produces a complete picture.
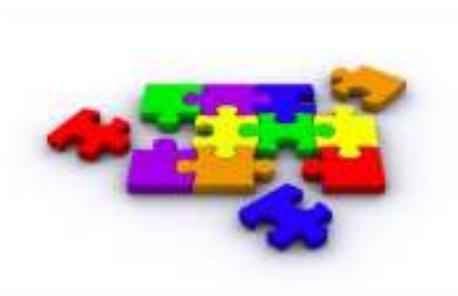
The journey I have taken in this study resembles a jigsaw puzzle. I was curious (puzzled) as to why schools were seemingly so open to health professionals designing and wanting to implement health programmes in an education setting. Through my career as a health and physical education teacher, I was aware of the influence of the messages pertaining to ill health that were being promulgated in society. These focused on: fatness and a lack of fitness endangering wellness; overweight people deemed as 'unhealthy citizens' and thereby becoming recipients for cardiac disease and diabetes, which in turn leads to negative impact on the health system; and lastly, the responsibility on the individual of maintaining wellbeing through regular exercise and healthy eating. I was concerned about the deficit thinking that these messages adopted, which in turn influence thinking about health and wellbeing. The messages – pathogenic in nature – appeared to create a discourse that persuaded people to adopt biomedical initiatives and interventions in order to prevent illness and disease. I was concerned that over the years, that biomedical interventions that focus on nutrition and exercise, along with their inherent messages about health and bodies, were becoming more prevalent in primary schools in New Zealand.

The pieces pertaining to the puzzle needed to be considered. Some early questions that contributed to my research question were posed:

- What discourses are evident in the messages expressed in and legitimised by health interventions in schools?

- How does the classification and framing (Bernstein, 2000, see Chapter 2) of health messages affect students' learning?
- What was the effect of a specific biomedical health intervention on children's thinking about health, about their bodies, and about their selves?
- What are children's perceptions and experiences of a health intervention?
- How are children's voices heard, and what is the relevance of children's voice?

And so the assembling of the puzzle begins. This thesis aims to take the reader, as it has me, through a series of research steps in order to create a whole – a jigsaw puzzle. This research puzzle may never be 'solved' in any definitive sense. The study and thesis, will, however, have assembled some unique findings, answered some pertinent questions, justified the purpose of inquiry and importantly joined up some of the pieces in order to find an end to increase understanding.

First you start with a single piece

I started with my inquiry questions above and sought to find some answers to these through embarking on a doctoral study. I read widely on health education literature. I sought out scholarly journals for reviews and papers on health interventions in schools. I read up on literature pertaining to body pedagogies. I considered different methodologies. I could envisage the puzzle coming together.

I was fortunate to be able to align my study with a project called *Healthy Homework* (HH). This project was a Health Research Council funded school based project in New Zealand that involved schools following an eight-week programme of weekly lessons and homework tasks (HH teachers manual, 2010). It aimed to improve children's health outcomes through focusing on behaviours such as healthy eating and engaging in regular physical activity. The *Healthy Homework* programme was a prompt for my study, with my interest centring on how the health messages foregrounded in the initiative were expressed or challenged over time in a school, in and through body pedagogies.

Assembling the research puzzle

Chapter 1 introduces the thesis, the details of the study and the research question. It provides a background to the purpose of the study.

Chapter 2 introduces the reader to literature central to the study. It focuses on the phenomenon of body pedagogies and health interventions in school settings. The relevance of children's voice in relation to how they see their bodies and in how they understand the concept of health is explored. The social-cultural constructs of the interrelationship between the body, school and society are discussed.

In *Chapter 3* I discuss the methodology chosen for my study and specifically discuss the relevance and challenges of using an ethnographic method in an education setting. I introduce my participants and describe my role as a researcher and 'the research instrument', engaging in my participants' social world at school, over a two year period.

Chapter 4 introduces a series of chapters that present and discuss the findings from two years spent at Tuihana School (pseudonym). The chapter introduces the school and the four themes that frame the chapters that follow.

In *Chapter 5* I consider theme one, 'The culture of health' within my classroom setting and in the wider school and discuss health promotion processes as discovered in my findings.

Productive and destructive discourses that influence understanding of health and the body is the theme and focus for *Chapter 6*. Children's voice is pieced together and covert and overt messages arise as a result of obesity and healthism discourses.

The theme explored in *Chapter 7* aligns the pieces of curriculum, pedagogy and assessment into a coherent structure that enables discussion of students' learning about themselves, their bodies and their learning environment. I provide examples of the activities undertaken by students' that enhances their understanding of their own and others' bodily existence.

In *Chapter 8* I consider how this learning environment has shaped the existence of perfection and performance codes for my three students and in the participating class. I assemble and reassemble the pieces to make sense of the existence of body pedagogies within my study.

I conclude with *Chapter 9* where I reflect on my role and my positional experience as a researcher. I consider the issues and implications of my findings as described through my themes. I attempt to piece the puzzle together to make a whole. I accept that there will be no definitive completion as further research is warranted. This process undertaken in order to complete my research puzzle is indeed the means to the end.

Chapter 1. Introducing the puzzle pieces

Health professionals with good intentions pursue interventions that will have short term effect on children's lives, but for sustainable behavioural change, learning activities in school environments, including classroom programmes, must meet the developmental and wellbeing needs of children. In New Zealand schools, health education programmes *should* be designed to meet the needs of students and are expected to be guided by The New Zealand Curriculum (Ministry of Education, 2007). However, some curriculum programmes and interventions adopt health policy and education and 'health practices' where particular lives are portrayed that are repeatedly being constructed as both healthy and desirable for all. Children in New Zealand schools primarily learn about the physical health of the body; its structure; its needs; and how to care and look after it, so as not to become ill or unwell. This type of knowledge, which relies on a medicalised understanding of health, is what Tasker (2004) and Culpan (2004, 2008), the principal writers of Health and Physical Education in the New Zealand Curriculum (Ministry of Education, 1999), would suggest is a biomedicalised view of health that is often embedded in traditional pedagogy. Shilling (2008) concurs and suggests knowledge about body management and 'health practices' in schools is framed against the backdrop of a normative and highly partial vision of *corporeal perfection*. Corporeal perfection refers to the 'acceptable ideal body' which is central to my study as the delivery of school knowledge cultivates this acceptability in children. Indeed, this health education (often in the form of an intervention) in primary schools is often time bound and to date, there has been little evidence that short term health interventions adopted as 'programmes' in schools have an impact on sustainable behavioural change (Graham, Appleton, Rush, McLennan, Reed, & Simmons, 2008). What is not examined enough is the resulting effect that these short term health interventions (ones that focus on a pathogenic perspective, see Chapter 2) can have on how children perceive their bodies.

As I discuss further in my literature chapter (Chapter 2), there is a dearth of research on long term effects of short-term health interventions in schools, and children have traditionally lacked voice about the policy and practices that affect them in education, hence the impetus for this study (Burrows & Wright, 2004; lisahunter, 2009; Penney &

Harris, 2004; Smith, 2007; Soto & Swadener, 2005). This thesis describes and analyses children's understanding of health and perceptions of their bodies and their selves through their experience of being involved in an intervention (Healthy Homework) and through their subsequent engagement in the formal and informal pedagogies of schooling. As explained in the preface, HH was an intervention that integrates a school curriculum and an eight week homework programme that aims to teach children to be active and eat well at home, with both children and parents/caregivers being encouraged to eat nutritious food and lead an active lifestyle.

My research was situated at Tuihana School and centred on one class of year three/four children (8-9 years old) (Room 22) who participated in the HH programme. More specifically, three selected children (Richie, Sarah and Tara) within this class, were my key participants. During this two year period the school focused on the health concepts *Being healthy* and *Being human*, using topics to integrate these within all subjects and classes. Further detail of the school and participants are provided in Chapter 3. Details of how the two health concepts were presented and explored both within and beyond the curriculum, appear in Chapter 4 where I set the scene for the discussion chapters.

My study adopted an ethnographic approach with the intent of learning and understanding the social and cultural phenomena of schooling and children's developing understandings of their health and their selves amidst this. As I discuss further in chapter three, ethnographic research was chosen because in education it enlightens the social worlds that contribute to understanding behaviour, values and meanings of children within their cultural context, whilst examining the connections to and with, the teaching and learning processes (Walford, 2007). In order to describe and analyse the discourses around body pedagogies and the perceived understandings by the children, I adopted the role of participant observer, becoming a 'teacher aide'[2] in the school classroom. Through this role and my immersion in Room 22 and Tuihana School culture, I explored how the HH programme and the whole school health concepts shaped children's understanding of their bodies and their perception of this in relation to being active and healthy.

---

[2] A 'teacher aide' is an adult who supports the teacher, focusing on children's learning in the classroom. This is different to a 'parent helper' who undertakes administration tasks in the classroom.

My research explored and attempted to give meaning to children's understandings and perceptions of health, their bodies and their selves. Central to such understandings are body pedagogies - referring to any conscious activity by people, organisations or the state that are designed to enhance individuals' understandings of their own and others' corporeality (Evans, Rich, Davies, & Allwood, 2008). In using the term 'body pedagogies', I acknowledge and emphasise that body pedagogies are socially and culturally situated in that they reflect the prevailing corporeal orientations and health-related concerns of a given time (Cliff & Wright, 2010). Chapter 2 further explores the concept of body pedagogies and research in health and physical education that has utilised it and that informed my study

Theoretical perspectives underpinning this study

Schools help shape and form young people's lives and children along with parents and teachers are as much stakeholders in what constitutes health and contributes to their wellbeing. Of the many perspectives on understanding bodies and health, it was the social theorist Basil Bernstein (1924-2000) and sociologist Chris Shilling that took my interest. Their work on addressing the social significance of schooling and their discussion about how schools mirror the social and cultural reproduction of society is still relevant today. I started with Shilling's (1993, 2004, 2008) theory and analysis of embodiment and body pedagogics, looking particularly at the objectification of the body in society. I considered these in light of Foucault's (1980, cited in Evans & Davies, 2004b) theories that address the relationship between power and knowledge, and how they are used as a form of social control through societal institutions. However it was Bernstein's insights into schooling and the complexities of classrooms and learning environments and pedagogic practice that provided the theoretical grounding for my study.

Bernstein's concepts recognise the complexities of classrooms and schools and focus on the classification and framing of pedagogic practice as a social context in which the body can be understood. Bernstein was interested in the social stratification of society and the socialising agents that were created in and through education. These social positions create "different modalities of communication differentially valued by the school, and differentially effective in it, because of the school's values, modes of practice and

relations with its different communities" (Bernstein, 1996, p. 91). As Bernstein (cited in Hay & Penney, 2013, p. 16) explained:

> Education can have a crucial role in creating tomorrow's optimism in the context of today's pessimism. But if it is to do this then we must have an analysis of social biases in education. These biases lie deep within the very structure of the education system's process of transmission and acquisition and their social assumptions (2000, p.xix).

It was this desire to understand and critically engage with the nature, place and influence of health education in the lives of children that drew me to use Bernstein's theoretical framework. His concepts of classification and framing (see Chapter 2) bring to the fore that the form and content of education practice both matter greatly in determining the life chances and identities of children. His articulation of inter-related message systems via which understandings and meanings are carried and conveyed, was also central to my framework. Shilling (2004, 2008) and Evans and Davies (2004b, 2004c) work on children's learning about their bodies and their selves engaged me as they are as much stakeholders in what constitutes health and therefore their voices are important. A further explanation of the theoretical framework used to underpin my study can be found in Chapter 2, section 4.

My epistemological perspective

In this study I adopt a post structural perspective where I try to make sense of the health discourses that are constituted as regimes of truth that have impacted on the identities of Room 22 students and their understandings of health, their bodies and their selves. Whilst I did not problemitise the systems of thought and organisation evident in the design and teaching of the HH programme or the Tuihana School's whole school health concepts, I used post-structural theory to help me analyse and understand the relationship between the embodied selves of the children and how these were socially constituted in relation to the discourses of obesity and healthism. This enabled me to interpret the visible relationships between ways children construct their sense of identity and the sets of social meaning and values circulating in society today (Wright 2004a). Gard and Wright (2005) and Tinning (2010) argue that prescribing *how* we should live our lives draws on ways in which self and society are constructed and underpinned by rules. These are usually embedded in a moral imperative that in leading 'good', 'healthy'

lifestyles, those who are fat, have ill health, or who do not 'choose' a so-called healthy lifestyle are then blamed for their own 'bad' choices. This is consistent with a medicalised view of health, and part of the process of power according to Foucauldian theory. It focuses on finding solutions (for example exercise and diet) to problems and is often how young people also come to understand themselves or others as 'healthy' (Wright, Burrows & Rich, 2012). Thus, my research explored how body pedagogies had been expressed and enacted on the children at Tuihana School in relation to 'health'.

As Chapter 3 explains, I focused on attempting to understand the social world of Richie, Sarah and Tara with subjective reality. For me to legitimately talk of multiple truths, I recognise that the knowledge I have gained is socially constructed and always personally experienced. It is from this perspective that I conducted my research and have constructed the themes (see Chapter 4) that frame my discussion of findings (Chapters 5-8). I anticipated that throughout my study I would ask more questions than I could answer, as the questions that I sought to explore (as stated in the thesis preface) reflected that my research arose from an interpretivist paradigm. At the outset of my study I acknowledged that it would be impossible to divorce myself as a researcher from the social world that I sought to engage with and understand from the perspective of others, namely Richie, Sarah and Tara as students in Room 22 at Tuihana School. I discuss this further later in this chapter and again in Chapter 3 (in the Fieldwork section) and finally I reflect on my positional experience in the concluding chapter, Chapter 9. The interpretation process is understood as never neutral, but rather, is a focus for constant reflection in the research process (Sparkes, 1992), and the writing of this thesis.

Healthism and obesity discourse: whose interests are being served?

Kirk (1992, 2006a) suggests when considering obesity and other dominant biomedical discourses that are restrictive and sometimes harmful, that unintended outcomes for learners can result. This can occur through not examining the context in which these are prevalent and through the uncritical ideological assumptions made by proponents of obesity prevention policy and practices. As Rich and Evans (2005) suggest, obesity and healthism discourses are interrelated. Obesity discourse is based on the assumption that overweight bodies are unhealthy and in need of weight loss (Campos,

2004; Gard, 2011; Gard & Wright, 2005). Healthism is a set of assumptions based on the belief that health is solely an individual responsibility. It includes the predominant concept that the body is a machine and is influenced only by physical factors (Kirk & Colquhoun, 1989). Healthism fails to recognise the social, political, historical, economic, environmental and cultural influences and effects on one's personal health (Lee & MacDonald, 2010).

Both discourses (obesity and healthism) individualise responsibility for one's own health (and body shape/size) and characterise the overweight or obese as lazy, self-indulgent and greedy. As Lee and Macdonald (2010) argue, it is therefore difficult to separate the discourses of obesity from healthism. Public predisposition and promotion around an 'obesity crisis' is justified within the healthism discourse as "individuals are deemed largely responsible for their own health and for making healthy choices" (Rich & Evans, 2005, p. 352). According to Evans et al. (2008), obesity discourses privilege body size, shape and weight "not only as a primary determinant but as a manifest index of wellbeing surpassing all antecedent and contingent dimensions of health" (p. 13). They suggest that the Body Mass Index (BMI), lauded by government ministers and obesity spokespeople, as a key to monitoring a population's health status as an insufficient means to monitor weight as symptomatic of current or potential 'health'. In particular, they state that "BMI is rather less good at determining what can be said about health, particularly children's health, than some would have us believe" (p.13). Gard (2011) suggests that BMI makes no concessions for things like bone density or muscularity. He notes that BMI classifications perpetuate biomedical perceptions for children and older people, and are culturally skewed. Similarly, he believes obesity is a scientific, political and cultural issue and that the science of obesity remains radically uncertain and that it is impossible to establish an objective 'truth' on which to base policy (Gard, 2011). He, along with other scholars, believes that politicians, journalists, commercial companies and researchers alike draw on such 'alarmist' notions in an attempt to implement societal change (Campos, 2005; Gard, 2011; Gard & Wright, 2005).

Earlier research undertaken by Burrows, Wright & Jungersen-Smith in 2002 found that the young people who took up a moralistic position adopting a healthism stance, suggested that bodies that do not conform to the slim ideal are "unworthy, undisciplined,

lazy, a couch potato" (Burrows et al. 2002, p. 46). It is interesting to note that over one decade later, many teachers continue to uncritically accept the dominant obesity and healthism discourses (Gard & Wright, 2009), despite findings by academic researchers such as Alfrey and Brown, (2013), Evans et al. (2008), Burrows et al. (2009), Cliff and Wright (2010), Gard (2009), McCuaig and Tinning (2010), Quennerstedt and Ohman, (2014) and Lee and Macdonald (2010) who challenge and call for teachers (such as health and physical educators) to examine their practices and curricula that reproduce social meanings for students in the form of such discourses.

Today, young people still, link body shape in an uncritical manner to health and fitness (Burrows et al. 2002; Lee & Macdonald, 2010; Wright & Burrows, 2004). The influence of the media in promulgating healthism discourse suggests that health can be achieved "unproblematically through individual effort and discipline, directed mainly at regulating the size and shape of the body" (Crawford, cited in Kirk & Colquhoun, 1989, p. 149). Lee and Macdonald (2010) provide empirical evidence of the durability of healthism in young people's perceptions of their own bodies and health. For the young women in Lee and Macdonald's study, school practices remained dominant in their understanding of health and fitness for up to two years after schooling. Such qualitative research offers compelling accounts of the enduring presence of school-based body pedagogies in young people's embodied consciousness (Cliff & Wright, 2010; Rich, 2010).

Health interventions in education settings

Health promoting interventions developed to legitimise perceived biomedical outcomes pertaining to 'being healthy' are becoming more popular in schools. However, health sector professionals, with the best intentions, are not always cognisant of the educational evidence base that advocates best practice in schools (Rowland & Jeffries, 2006). The rhetoric around biomedical health interventions which are often focused on short term outcomes is problematic for health practitioners, education professionals and children alike and therefore there is a need to try and broaden our understanding of health interventions with children, in an education setting (Burrows, 2010; Rowland & Jeffries, 2006; Soto & White, 2010). These interventions, such as the HH programme, often involve a health agency (or other interested group) providing a short term unit of work or sessions on particular topics within schools (Powell & Gard, 2014). The intention of such

an intervention is to impact on behaviours, influence thinking and contribute to the improvement of health related outcomes (usually biomedical) for the students. To date, there has been little evidence that short term health interventions adopted as programmes in schools have an impact on sustainable behavioural change (Graham et al. 2008). As Chapter 2 explains, the resulting effects that biomedical (specifically diet and exercise) health interventions can have on how children perceive their bodies and health, have remained largely unexplored and often unproblematised. Hence this study sought to extend critical research in the health and physical education field and contribute to the body of knowledge on the value of social and cultural constructs within a classroom learning environment, ideally exposing alternative approaches to considering the body and one's health.

The relevance of children's voice

A point of difference in my study is the move away from a quantitative data gathering study of predominantly physical evidence (biomedical) to the gathering of children's voice data about how they feel about their bodies (perfection - shape, weight, size) and what they share about what their bodies can do (competency and performance). Importantly, young people's voices are rarely heard in educational research even though they are important to the education process and directly affect it (MacPhail, Kirk & Ely, 2003). Children's involvement in social research can be valuable in informing policy and practice.

Recent international investigations on body pedagogies as they impact on children often result from discourse that has focused on conditions that contribute to illness and disease, such as obesity. Research suggests further investigation needs to be done on how students feel about themselves and their bodies with the focus on health and wellbeing, instead of interventions that use deficit models which only focus on preventing disease (Burrows, 2010: Cliff & Wright, 2010; Evans, Rich, Davies et al. 2008; Gard, 2008; Graham et al. 2008; Rich, 2011; Soto & White, 2010; Wright et al. 2012). Moreover, the recent levels of lay and professional concern using obesity discourse (from a biomedical ideology) that focus on children's health have disempowered children (Burrows & Wright, 2004; Gard, 2008; Nihiser, Lee, Wechsler, McKenna, Odom, Reinold, Thompson & Grummer-Strawn, 2007).

Fieldwork findings

As outlined in my findings in Chapters' 5-8, my fieldwork observations provided details of the contexts of classroom, play-ground and school life. Bernstein (2000) concedes that those who seek answers to difficult educational questions often prefer a top-down approach – one that begins with the large policy questions and builds down to an analysis of how the schools work to provide solutions or to constrain their formulation. In this study I went to the students with the intent of foregrounding their voices. As a participant observer I immersed myself in the social world of Richie, Sarah and Tara (see Chapter 3) whilst they were at school. I adopted the role of a 'teacher aide' one day per week, over a two year period. This type of ethnographic research enabled me to adopt an engaging, useful, public storytelling genre within my discussion chapters, to capture children's, teachers' and parents'/caregivers' voices on how young people perceive their bodies and their selves in relation to particular codes (perfection and performance) in body pedagogies.

A challenge of this study: assimilating into the social world of my students

"Whaea[3] Denise, you could be a teacher" (Tara, March, 2012).

"Whaea Denise is da bomb" (Richie, May, 2012).

These quotes came from two of my subjects Tara and Richie soon after my introduction into their classroom as a researcher within the role of a 'teacher aide'. Information about the specific tasks I undertook in this role can be found in Chapter 3, however these quotes demonstrate my valued position, from the students' perspective. I found it was not easy assimilating into their world in the classroom. I had to work hard at it in the first few months, but I was rewarded when Tara (early in my study) forgot that I was a researcher and thought of me as a 'teacher' helping out in the classroom. This acceptance demonstrated I was able to gain the children's trust and enabled me to witness first-hand through observation, the subjective reality of the lived experience (Walford, 2008).

---

[3] Whaea is a Māori term of endearment, meaning 'valued elder', sometimes used in schools as 'teacher', or 'mother/aunty-like'.

Burrows (2010) suggests that knowledge derived from the biomedical discourses that frame obesity talk may powerfully contour the positioning of young people as healthy and/or unhealthy. Other research tells us that there is a narrowness in thinking about the body and health that, despite accompanying rhetoric suggesting a commitment to the development of lifelong learning and inclusion in education, remains largely unquestioned and uncritically accepted (Penney & Harris, 2004). Thus, I was curious to investigate this thinking about the body and health, from children's perspective.

As indicated, my fieldwork was designed to further my understanding of the activities undertaken by children that inform their knowledge and understanding of their bodies, health and their selves. Shilling asks the question "how are we to understand whether and how trends and processes external to the individual actually exert an influence on people's views, feelings, dispositions and actions' (2010, p.155). To develop that understanding I needed to inculcate myself in my students' world within their school environment. The school environment is complex and dispositions of students cannot be simply understood. I found, as Wright, Burrows and Rich (2012) state in their research of primary schools in three different countries (UK, Australia and New Zealand), that it was hard to read educational body pedagogics as the social and cultural environment of the school is complex and multi-faceted. I needed to be able to differentiate whether the children's messages about health and their bodies were as a result of what teachers said and did and/or, from what students said and did. It was a challenge to make sense of my three students' embodied experience as they and the other classroom participants (including the teachers) did not know who my in-depth students were. Therefore, I was required to engage with the Room 22 class equally, so as not to create an obvious connection with my three students.

My role

As a doctoral researcher relatively new to the academic world I was excited to be able to research and investigate two areas that interested me, namely the body and young people in education. As a health and physical educator with a student centred philosophy, I was curious to find out whether the HH intervention enabled children to get a sense of

their bodies and their selves in terms of their health. I was equally thrilled when I approached the Principal of Tuihana School to find out that as well as the HH programme, the school would be undertaking a two year integrated focus on health education. In preparation for my research I read widely in order to understand the literature on body pedagogies and social theory. I undertook a practice study and found this beneficial as I was able to test out my research tools and observation skills before I started on my full study. During my research I continued to lecture and contribute as a staff member within the School of Sport and Recreation at AUT University. This contrasted significantly with the role I undertook at Tuihana School, that of a 'teacher aide', whilst conducting my research in Room 22. I went from initiating and leading a series of lectures teaching university students four days per week, to providing support on a nominal level, to both the teacher and students' whilst in their learning environment in the Room 22 classroom, one day per week. This meant I was required to put aside my position as a critical pedagogue and see and explore as Penney (2013) suggests 'the spaces between' the dominant structures and specialisations evident in education and more specifically in my case, a school classroom. In this dual role (teacher aide and researcher) I was able to inculcate myself into the world of my participants and the wider school, over time, becoming a member of their school community. As a result of this I was invited to school events and took on duties similar to those of staff. Adopting this type of ethnographic methodology enabled me to convey 'truths' as I interpreted them, through my findings as they arose. I was able to analyse my data to the theoretical framework (predominantly Bernsteinien) through classifying and framing the connections to the teaching and learning processes that enabled my students to understand their bodies and their selves.

Getting underway: sorting out the puzzle pieces

Tuihana School is a decile[4] three, multi-cultural school in Auckland, New Zealand. At the time of this research the school had approximately 150 students with a staff of eight teachers and four additional support and ancillary staff. The school facilities included classrooms, a library, a swimming pool, an office and reception building, plus a multi-purpose hall. The playground consisted of two concrete court areas, two adventure

---

[4] Decile ranking is used by the NZ Ministry of Education to determine the school community's socio-economic status. This then influences funding from the government. The lower the decile, the more government funding is available, since it is deemed that the local community would not be able to contribute as much money in areas like student fees and financial support (donations) for the school.

playgrounds (one for younger children and one for older children) and an expansive field area.

Walford (2008) suggests ethnography is a complex process that initially appears to be straightforward. The idea of 'hanging around' for two years, and writing about what has been seen and heard, rapidly becomes a far more complex process. The Principal and I discussed at length my research intention. I informed her of my subjectivity, suggesting that as a health and physical educator I would have some preconceptions and that I would be using my present understandings and beliefs, along with the new knowledge I would be gaining, to critically engage with my data. Her openness and genuine interest in the inquiry process was enough to convince me that my research could be useful for her school, as well as in academia. She affirmed that I would be supported in my study by her staff and the school community. This gave me confidence to then undertake a pilot/practice study (see Chapter 3) before returning to Tuihana to conduct my full study in 2012, when the HH programme started. Whilst HH was the catalyst for my interest in body pedagogies, my study always sought to go beyond this to help understand how young people construct particular social meanings that they are expected to display and achieve with their bodies, which in turn can impact upon their health and academic performance. Hence, my research question was:

"What are the children's perceptions and experiences of their bodies and their selves within the micro-culture of a school during and after a Healthy Homework (HH) intervention?"

The review of literature that follows reflects my understanding of the knowledge required to inform research addressing this question, as part of the puzzle of body pedagogies and children. Further detail about the different pieces that contribute to this research puzzle including the review of literature, the information about the participants, the school and my research methods, can be found in the following literature and methodology chapters.

Chapter 2. Literature review

Introduction: the Jigsaw 'big picture'

This chapter explores literature pertaining to health interventions and discourses of obesity and healthism in society, schools and classrooms. Insights from literature about factors that influence children's perceptions of themselves and in particular, how these may change as a result of 'learning to be healthy', are also considered. Attention is directed to the concept of body pedagogies as a foundation for understanding how young people learn about their bodies from a societal level, within classrooms and amidst school communities. Education policy and school practices are thus scrutinised within the frame of schools and classrooms conceptualised as 'totally pedagogised micro-societies' (Evans, Davies, Rich & Allwood, 2008). The focus on body pedagogies reflects the central aim of this study, which was to investigate children's understandings of health and their perceptions of their bodies and their selves as the result of a health intervention and a continued school focus on health. The concepts of health promotion and salutogenesis, biopower and biopedagogies are discussed in relation to children's learning about health. What are termed body perfection and performance codes (Evans & Davies, 2004c) are introduced as further tools to employ in critical inquiry concerned with how children come to understand their bodies and selves.

This chapter is divided into five distinct sections, each of which relates to parts of the puzzle as identified in my preface. The scene is complex, with multiple concepts and a range of issues considered to establish a background that enables us to make further sense of the myriad of interrelated and connected parts of the health and bodily knowledge puzzle that exists for children.

Section one, on the growing trend of health interventions in schools, sets the scene as a powerful opener for the reader to consider whether health interventions, with the best intentions, are doing more harm than good. Building on Chapter 1, this section captures key elements of the context that inspired this study. Literature on health policy and

practice is also considered, with the focus on how policy influences the types of intervention seen in schools.

In section two, the focus is on health and obesity discourses and particularly, their expression and legitimisation in education environments. Discussion of literature considers whether policy promulgates discourse based on social agency and trends. As this study is situated amidst a neo-liberal political and economic context, healthism is explored as a factor in the delivery of health messages in schools.

Section three provides an ecological perspective of health promotion in education settings. Pathogenic and salutogenic concepts are investigated as drivers to promoting particular cultures of 'health' in schools as institutions and communities. Finally, as interventions are frequently being prescribed as a means to address a growing trend of obesity, the rights and voice of children are brought to the fore as critical issues for health professionals, educators and researchers to consider.

Section four embeds the theory and concepts that underpin this study, centring on body pedagogies. It explores ontological perspectives relating to the body in society and the interrelationship of this within schooling. Drawing insight from Bernstein's (2000) and Evans, Rich, Davies et al.'s (2008) work, message systems that influence health outcomes for children in schools are also explored. This section seeks to provide a sound theoretical base for the examination of pedagogical practices within schools and classrooms, evident in findings presented in Chapters 5-8.

The final section of this review positions the issues and this study within a particular education setting, and in relation to the health and physical education learning area within the New Zealand school context. Examples of policy and interventions in the New Zealand context are examined and issues of alignment between interventions and principles underpinning the New Zealand Curriculum (Ministry of Education, 2007) are considered.

A growing trend of health intervention in schools

Since the 1990's, health promoting interventions developed to legitimise perceived biomedical outcomes pertaining to being 'healthy', have become increasingly prominent in schools both nationally and internationally (Burrows, Lee & Macdonald, 2010; Cooper, 2013; Duncan, McPhee, Schluter, Zinn, Smith & Schofield, 2011; Fairclough, Butcher & Stratton, 2008; Katz, 2009; McDermott, 2011; Reeve & Bell, 2009; Rush, Reed, McLennan, Coppinger, Simmons & Graham, 2012; Rich, 2010). Some examples include: Thrash yourself Thursday (Canada); Project Energize (NZ); HH (NZ); Eat well Be active (Australia); HOPsport (Australia); Jump Jam (NZ); Life Education (NZ); 5Plus a Day (NZ); 'Born to Move' (NZ & Australia). According to some education professionals, the rhetoric around biomedical health interventions, which are often focused on short term outcomes, is inherently problematic (Burrows & Wright, 2004; Evans, Davies & Rich, 2009; Kirk, 2004; Petrie, 2012; Petrie & lisahunter, 2011). Gard (2011), for example, highlights that school based obesity interventions (often biomedically based on food as well as physical activity) have a long and virtually unbroken record of failure in affecting children's body weight. A meta-analysis of studies undertaken in 2009 found that as far back as 1966, school-based physical activity interventions did not improve the body mass index (BMI) of children (Harris, Kuramoto, Schulzer & Retallack, cited in Gard, 2011). Two large and well-coordinated school intervention studies undertaken by Nader et al. (2009) and Caballero et al. (2003) both failed to make an impact on children's BMI (cited in Gard, 2011). Gard contends that "if the desired effect was not attained from these well-resourced programmes, led by experts in the field and with a built-in commitment for follow-up, what expectations should we hold for more piecemeal and less well-funded or well co-ordinated interventions?" (p. 84). Other systematic reviews on children's obesity related behaviours and body weight change (Breslin, Gossrau-Breen, McCay, Gilmore, MacDonald & Hanna, 2012; Katz, 2009; Safron, Cislak, Gaspar & Luszczynska, 2011) have, however, demonstrated that interventions that use a biomedical focus on exercise and nutrition can indeed have some effect on BMI. Yet, as Gard's (2011) work particularly emphasises, BMI is something that in itself needs to be critiqued.

School-based physical activity is one strategy to reduce childhood obesity and is used by policy makers both nationally and internationally (Cale & Harris, 2011; Kirk, 2006b; McCuaig & Hay, 2013; McDermott, 2011; Powell & Fitzpatrick, 2013). In parallel,

health professionals and educators continue to look to research to help broaden understanding of the impact of health interventions (including those with a biomedical focus) on children in an education setting (Cliff & Wright, 2010; De Pian, 2012; Fitzpatrick & Tinning, 2014; Rowling & Jeffreys, 2006; Svendsen, 2014).   See for example the work of Fairclough, Butcher and Stratton (2008), Erwin, Fedewa, Beighle, and Ahn (2012), Kilgour, Matthews, Christian and Shire (2012), Mohammadi, Rowling and Nutbeam (2010) and St Leger & Young (2009), in health promoting schools.

Today, and in particular since the early 2000's, biomedical discourses (such as prevention of obesity, injury and illness) have strongly influenced classroom and school cultures (Evans, Rich, Davies et al. 2008; Gard, 2004, 2008, 2011; Wright, 2009). Environments where children learn about their bodies and their selves are not free from the politics and policy of obesity discourse (Evans, Rich, Davies et al. 2008; Penney & Harris, 2004; Powell & Fitzpatrick, 2015; Rich, 2010a). Obesity discourses are either explicit or covertly hidden in interventions by well-meaning health agencies seeking to improve health related outcomes of a corporeal nature for students. In Australasian schools, Leow, Macdonald and McCuaig (2011) and Fitzpatrick and Tinning (2014) amongst others, suggest that such school interventions have been explicitly focused on children's body sizes and shapes. In Australia the *Eat Well Be Active* initiative and in New Zealand the *Project Energize* initiative, both have criteria that contribute to the success of the project by evaluating children's BMI (BMI is discussed in the Health and Obesity discourses section).

Recent international investigations on children's understanding of health knowledge, suggest further investigation needs to be done on the resulting long term effect that health interventions can have on how they feel about themselves and their bodies (Burrows, 2010; Cliff & Wright, 2010; Evans, Rich, Allwood et al. 2008; Gard, 2008; Graham et al, 2008; Quennerstedt, Burrows & Maivorsdotter, 2010). More particularly, there is a paucity of research that explicitly foregrounds the voices of young children exposed to health interventions. Little analysis of the impact of short term health interventions that reflect and express health imperatives has been conducted in New Zealand schools.

A number of research studies undertaken more recently in New Zealand have focused on primary aged children and policies and practices that influence 'being physically educated' and 'educated in health', which are concepts embedded in the philosophy of the health and physical education learning area within the New Zealand Curriculum (NZC, Ministry of Education, 2007) (Burrows, 2010; Burrows & Wright, 2004, 2007; Penney, Pope, lisahunter, Phillips & Dewar, 2013; Petrie, 2010; 2012; Petrie, Penney & Fellows, 2014; Pope, 2014; Powell & Fitzpatrick, 2015; Wright et al. 2012). However, in general, children have typically either not been involved in decision making, so they have not impacted on policies or interventions, or the outcomes of such policies and interventions have not been followed up to see if the intended influence on health behaviours has been sustained (Burrows, Wright & McCormack, 2009; Gard, 2008). Children have, therefore, been subjected to policy and practices that have not considered their participation rights (Burrows & Wright, 2004; Penney & Harris, 2004; Smith, 2007; Soto & Swadener, 2005).

Health sector professionals, with the best intentions, are not always cognisant of the educational evidence base that advocates best practice in schools (Gard, 2008; Rowling & Jeffreys, 2006). Furthermore, short term generic health interventions that offer a 'one-size-fits-all' approach may have some effect in changing behaviour patterns and bodily perceptions, but there is little evidence of sustainability over time (McDermott, 2011; Petrie, 2012; Powell & Fitzpatrick, 2015). Keshavarz, Nutbeam, Rowling and Khavarpour (2010) suggest that there needs to be an adaptive culture, one that responds to changing needs within the systems of a school, that adopts sustainable health promotion policies. In New Zealand, there is little evidence of a focus on sustainability, as interventions are often designed with a population health focus (specifically obesity concerns) and not an educative one. It is this unquestioned and uncritical acceptance of health interventions (focused on lifestyle diseases which obesity has a causal effect on) that schools and learners are often subjected to when they partake in a health intervention in their school.

Of note and pertinent to my study is research conducted in New Zealand, highlighting that health professionals who pursue interventions need to be cognisant of the effect of sustainable behavioural change, since learning activities in school environments

including classroom programmes, must meet the developmental and wellbeing needs of children (Tasker, 2004). This aligns with the Ministry of Education's (2007) emphasis that health education programmes should be designed to meet the needs of students and are expected to be guided by The New Zealand Curriculum (Ministry of Education, 2007). Yet, in New Zealand and internationally, health policy and some education and health practices continue to portray an ideal corporeal identity from a pathogenic biomedical perspective (that is, a certain weight, size and shape and free from illness and disease), and repeatedly construct these as both healthy and desirable for all (Evans, Rich, Davies et al. 2008; Fitzpatrick & Tinning, 2014). Rich (2010) argues that body pedagogies stem from this perception as well as increasing societal concerns for the health of children (and adults), and she argues that "learning about 'bodily ideals' is not confined to consumer culture, but is increasingly present in the policies, curricular and pedagogical practices of schools" (p. 148). According to Burrows and Wright (2004), this perspective on 'healthy lifestyles' is consistent with how young people also come to understand themselves or others as 'healthy'. More specifically, such uncritical thinking about the body and health encourages young people to construct and/or ascribe particular social meanings about their bodies, and in turn, this can impact upon emotional wellbeing. Lee and Macdonald's (2007) case study of rural teenage young women found that over a three year period at school, these young women viewed health and fitness as being important to control body shape and adhere to a stereotypical feminine appearance as ideal. This type of thinking can lead to body dysmorphia and as Azzarito (2009) suggests, draws attention to the socially constructed ideal of the female as being pretty, active, slender and ideally white. Evans, Rich, Davis et al.'s (2008) work prompts us to consider how such understandings are constructed and promoted across multiple sites of practice, inside and outside of schools (the body-society-school nexus – a significant concept underpinning my study to be discussed further in section four), and that this conscious or sub-conscious influence defines the significance, value and potential of the body in time, place and space (Shilling, 2004), which is the reality for children subjected to health interventions like HH in schools.

Schooling has not withstood society's influence on how the body is viewed, as children are subjected to a corporeal environment within schools today (Evans, Rich, Allwood et al. 2008; Evans, Rich, Davies et al. 2008; Fitzpatrick, 2011; Quennerstedt et al. 2010; Rich, 2010). Indeed, Bernstein (1986, cited in Kirk & Colquhoun, 1989) wanted

researchers to find out how institutions (in particular schools) articulate a variety of discourses through meaningful production and as selective agencies of reproduction. It is this construction and reproduction of social identities and cultural categories of embodiment that we see reflected in the name of 'health education' in schools today (Evans & Davies, 2012).

'Health' education in schools

Before 1984, school health (predominantly in Western countries) centred on the physical aspects such as hygiene practices, but with advances in health knowledge over the last century, new topics have appeared in school curricula (St Leger, 2004). As a result of these new topics, support materials for schools emanate from 'health' experts who see schools as the vehicle to improve a population's health related skills and knowledge and to change health behaviours that contribute to illness and disease. This biomedical pathogenic perspective focuses on illness and disease prevention. It emerged as a solution to the health issues identified with the instigation of the Ottawa Charter for Health Promotion[5] (WHO, 1986). This Charter had a major influence on reshaping school health across the world. As a result, health promotion became synonymous with health education and interventions were developed to legitimise perceived biomedical outcomes pertaining to being 'healthy' in schools (De Pain, 2012; Duncan et al. 2011; Mrkusic, 2012; McDermott, 2012; McPhee et al. 2010; Rush et al. 2012).

Leow et al. (2011) suggest that in the future there will only be more pressure on schools to function as health promotion sites, and that schools therefore need to better understand how to select, filter, adapt, take up or resist health promotion initiatives. This is especially evident in the learning area of health and physical education where it is arguably increasingly important for teachers to be discerning when considering external health programmes (Powell, 2015; Williams & Macdonald, 2015). The idea that schools can and should solve society's problems has become increasingly influential in recent years, to the point that the overloading of school curricula and the work of teachers is now an area of research in its own right (Gard, 2011). This is particularly evident with obesity

---

[5] The Ottawa Charter for Health Promotion (WHO, 1986) is the name of an agreement containing a series of actions among international organisations, national governments and local communities to achieve the goal of "Health for all" by the year 2000 and beyond through better health promotion.

researchers, who according to Gard, rely upon school physical education as a "viable childhood weight management strategy" (p.85).

Tinning (2014) reaffirms that health education in schools reflects wider notions of health, along with the wider politics of health in our societies. It is identified by others as a clear response to societal health concerns (Evans & Davies, 2004a; Harwood & Wright, 2009; McCuaig & Hay, 2014). Tinning also asserts that these health concerns begin with epidemiological evidence of physical and mental health trends and invariably distil (by the process Bernstein (2000) labelled recontextualisation) by recommendation of particular behaviours to enhance health. Penney, Petrie and Fellows (2015) point to the notion of the school as an ideal site to influence behaviours that have been shaped by curricula programmes and health interventions and that these programmes and interventions are more commonly under the guise of public health policy.

McDermott (2012) suggests curricular practices are central to ensuring that children adopt a 'routine' of making healthy choices. The HH intervention that was a focus in my study reinforces this. Evans et al. (2008) concur that governments and non-governmental agencies are re-conceiving schools as implementation sites for 'health' related initiatives. Based on the BMI research undertaken by a range of Canadian and North American researchers, Gard (2011) suggests that policy makers in health continue to promote school-based physical activity as a central component of the strategy to reduce childhood obesity. Gard believes this is too simplistic and stated as early as 2004 that there was a need to think beyond the biomedical mantra of 'energy in/energy out' as a rationale for a causal relationship between being overweight and inactivity. In contrast, systematic reviews on interventions to reduce children's weight and change shape by Katz (2009) and Safron et al. (2011) support the effectiveness of school-based interventions in weight and shape, concluding that the effectiveness is referred to in BMI change and that "systematic reviews indicated that active lifestyle protects youth from adiposity" (Safron et al. p.15). Interestingly, this latter review concludes that only one in three school-based interventions produced a significant BMI reduction and that the duration of the obesity-tackling programmes may matter. According to Safron et al. (2011), interventions lasting 3-24 months are likely to yield similar results at post-tests, but it is possible that longer interventions can be more effective.

In Australasia, Macdonald (2011) and Powell and Fitzpatrick (2013) comment on how easy it is for private providers to command a place in schools in the name of 'education', through the outsourcing of learning programmes. Macdonald (2011) discusses one such programme, HOPSports (a media company that produces and sells movement material to schools using their celebrity trainers) that uses the rationale that there is a 'health risk' in children's declining fitness levels. Powell and Fitzpatrick (2013) provide another example of a commercial enterprise producing exercise material (a DVD called JUMPJAM) for primary schools that "contains everything you need to teach and facilitate this fitness program" (p. 2). These two examples demonstrate that the neo-liberal agenda in education promoted by both the Australian and New Zealand governments, enables and arguably encourages schools, as consumers in the free market, to implement biomedical interventions. The school in my study also demonstrated this 'choice' to partake in the marketisation of education and more specifically, health education.

Biomedical health interventions that focus on nutrition and exercise

Research tells us that students often specify school as their main site of learning about health and wellbeing (Burrows, 2010; Cale & Harris, 2005; Evans et al. 2009; Sotto & White, 2010). However, knowledge-driven economies, social connectedness, technological revolutions, along with the development of communication systems and changes in production processes and work organisation, are just some of the factors that potentially alter not only *what* is taught, but *how* and *where* teaching occurs inside and outside of schools (Allen & Petrie, 2005; Burrows & Wright, 2004; Evans. Rich, Allwood et al. 2008; Kirk, 2004; Tinning, 2010). McDermott (2012) suggests that governments and non-government agencies are responsive to the global forces operating within neo-liberal societies, whereby curricular practices are considered central to ensuring that children adopt a 'routine' of making healthy choices, whether these be harmful or not.

School based health education has traditionally been framed within the rhetoric of risk and prevention (Leahy, 2009; Tasker, 1996, 2004). Tasker states that from an individualistic perspective, health education is seen as "the promotion and eventual adoption of particular health behaviours for the purpose of preventive health care" (2004, p. 205). Indeed health education that is 'outcomes' focused encourages the adoption of knowledge, attitude and skills that will contribute to making good decisions about one's

holistic health. The New Zealand Curriculum (NZC) (Ministry of Education, 2007) states:

> In health education, students develop their understanding of the factors that influence the health of individuals, groups and society: lifestyle, economic, social, cultural, political, and environmental factors. Students develop competencies for mental wellness, reproductive health and positive sexuality, and safety management, and they develop understandings of nutritional needs… (p. 23).

However, as Leahy (2009) states, the reality is that school health education has been called upon to respond to the biomedically inferred health crisis of obesity. She has observed a range of biopedagogical strategies being adopted in the name of health education in a number of different schools and programmes. Leahy (2009) along with Kilgour et al. (2012), Welch, McMahon and Wright (2012), Quennerstedt, Burrows and Maivorsdotter (2010), Powell and Fitzpatrick (2013), Webb, Quennerstedt and Ohman (2008) and Wright et al. (2012) through their research studies in schools, assert that physical health, body image, weight and fitness via the acquisition of knowledge, skills and attitudes, are still evident across many national and international health and physical education curriculum and syllabi. This is despite the known rhetoric that reiterates best practice through adopting holistic strengths-based philosophies of health and wellbeing (McCuaig et al. 2013; Pope, 2014; Wright et al. 2012).

Researchers in Australia and New Zealand highlight that the prevention of obesity in children has become one of the main rationales for physical education in primary schools in many Western countries (Wright & Burrows, 2004). Seghers, de Martaelaer and Cardon (2009) suggest it is no different in European countries as young people's health is a challenge for physical educators in schools. Commenting on policy statements on USA childhood obesity, Gard (2011) suggests that politics in general and school education in particular are littered with examples that are high on symbolic value, but low on resources to oversee the planning, implementation and evaluation of any anti-obesity interventions which are holistic, strengths-based and meet the needs of the children. Pope (2014) also contends that in New Zealand primary schools, despite the New Zealand Curriculum (NZC) (Ministry of Education, 2007) being a socially critical curriculum, professional development has been decentralised as part of the self-governing school mantra and thus, teachers are not enacting the intent and purpose of the learning area of health and physical education. He agreed with Petrie, Jones and McKim (2007) who

highlight that seven years after the release of the Health and Physical Education in the New Zealand Curriculum (HPEINZC) (Ministry of Education, 1999) statement, many teachers have limited knowledge of it or experience with it. Instead, what was practised in many school settings was well below the potential that the curriculum proposed.

Recontextualising biomedical health knowledge through policy

Wright (2009) suggests that in public health policy "the taken for granted relationship between weight and health, and its apparent costs to individuals and society, also provides the motivation and mechanisms for the recontextualization of biomedical knowledge in reports that can be used to both argue for the need for public education and provide the content for that education" (p.3). She calls for a recontextualisation of health knowledge, by moving away from the focus on biomedical pathogenic based policy to educative health policy. Furthermore, in a three country study (United Kingdom, New Zealand and Australia), Wright et al. (2012) report on schools that have policies enforced upon them by governments who want their children to be the least 'fattest' in the league tables. This demonstrates that schools today are still influenced by public health policy and a network of organisations and circulating knowledges about health and obesity, that may not be relevant to their students' learning needs (Powell & Gard, 2014; Rich, 2010).

An alternative consideration for recontextualisation is described by Robinson (2013) in a Technology Enterprise and Design (TED) podcast. He talks about the school as a site of learning and that the purpose of education is to acquire knowledge through exposure to a range of different elements, in order to create a curiosity and desire for learning. He believes that children with restless minds and bodies (far from being cultivated for their energy and curiosity) are ignored or even stigmatized, with terrible consequences (Robinson, 2013). He challenges the way we 'educate' our children. Like Wright (2012), he champions a radical rethink of our school systems, to cultivate creativity and acknowledge multiple types of intelligence. This is in contrast to the prescriptive policy emphasis of 'one-size-fits-all' programmes evident in school health interventions today. These types of programmes typically conform to public pressure and focus on physiological and biomedical health outcomes, rather than emphasising curricula purposes. As such they are lambasted by Harwood and Wright (2009), Leahy (2009), McDermott (2011), Rowling and Jeffreys (2006) and Powell and Fitzpatrick (2013). This is despite evidence that some interventions have provided positive physical health

outcomes such as those evaluated by Graham et al. (2008) and McPhee, Duncan, Schofield and Zinn (2010) and through the systematic reviews of research by Katz (2009) and Safron et al. (2011).

Health interventions directed towards schools and young people, are, therefore, highly contested. Considering how global health imperatives (specifically policy underpinned by obesity discourse) impact the lives of young people, Evans and Davies (2012), suggest that schools have to interrogate not only how policy (imperatives) are placed in context and enacted (as action and performance, consciously/knowingly, unconsciously/unknowingly) but how they are embodied, meaning how it affects and effects an individual's sense of being some-body in the social world, in time, place and space. If policy is promulgated by discourse based on social agency and trends, then obesity discourse is the prominent influencer, confirming the growing trend of interventions under the guise of 'health education' in schools today.

Health and obesity discourses – a complex environment

In this section health and obesity discourses are examined. The influences these discourses have in educational environments is considered, particularly in relation to the legitimate interventions adopted by schools in the name of 'health'. The literature considers whether policy promulgates discourse based on social agency and trends and this links to my findings in Chapter 6. Justification for undertaking health interventions within a neo-liberal political and economic context is discussed through considering embodiment and concepts such as healthism and 'the cult of the body' (Tinning, 2010), both of which are shown to be influential in my findings (see Chapter 6).

Obesity crisis and obesity discourse

Demonstrating that obesity remains a worldwide health concern, the World Health Organisation (WHO) defines obesity as "abnormal or excessive fat accumulation that presents a risk to health" (World Health Organisation, 2013, para 1). As such, obesity pervades national and international health policy agenda. It is driven primarily from a population health perspective grounded in literature that focuses on epidemiology, aetiology, measurement and cost. It suggests dire consequences for individuals and health systems if not addressed (Evans, Rich, Davies et al. 2008: Gard, 2011, Gard & Wright,

2005). In 1998, according to the WHO, populations were purportedly in the grip of a global 'obesity epidemic' and therefore obesity discourse then (and still today) defines how populations should think, act and 'read' the aetiology of illness and health (Evans, Rich, Allwood et al. 2008). The term 'epidemic', according to the behaviourist scientific community, envisages a world (that adopts modern 'Western' lifestyles) where there is an urgent and unprecedented global health crisis that needs to be addressed (Gard & Wright, 2005). This premise is based on repeated claims such as: physical activity levels are declining; food consumption is going up; televisions and computers are making children fat (Gard & Wright, 2005; Gard, 2011; Rush et al. 2012; Safron et al. 2011). Gard (2004) calls this focus on obesity in physical education in schools "the elephant in the room, or the bridge too far" (p.68) and states that of the thousands of papers published in the area related to physical activity and obesity, not one exists to support the claim that Western populations are less active than in the past. Instead, he states that scientific writers assumed it to be the case, thus suggesting that if general physical activity levels go down, obesity levels must go up.

Obesity has traditionally been viewed as a medical issue, however a number of researchers are calling for obesity to be addressed from a sociological perspective (Bromfield, 2009; Gard, 2011; Gard & Wright, 2005). Gard (2011) believes obesity is a scientific, political and cultural issue and that the science of obesity remains radically uncertain. He suggests that it is impossible to establish an objective 'truth' on which to base 'health' policy. He, along with other scholars, believes that politicians, journalists, commercial companies and researchers alike draw on such 'alarmist' notions in an attempt to implement societal change (Campos, 2004; Gard, 2011; Gard & Wright, 2005). The focus on obesity is heightened by the medical research community and as such the risks of obesity are exaggerated. The demonisation of fatness by scientists, doctors, politicians and journalists might not be particularly wise. It may damage wellbeing (the essence of holistic health), particularly in children who are susceptible to weight bias and the stigma attached to this (Bromfield, 2009). Bromfield highlights the importance of children's wellbeing within the discourse on obesity, reiterating the aim of my study, to find out how children come to understand their bodies and their selves during and after a predominantly biomedical health intervention.

Obesity discourse is a framework of thought, talk and action concerning the body, in which 'weight' is privileged not only as a primary determinant but as a manifest index of wellbeing surpassing all antecedent and contingent dimensions of 'health' (Gard & Wright, 2005). Included in this articulation of 'health' is diet, weight and exercise (Evans & Davies, 2012). In line with the focus of my study, the literature on obesity is primarily concerned with young people and schooling. Amidst repeated reports that we are in a global 'obesity' crisis (WHO, 1998), young people are still seen as a target to address this concern. For example, in 2006, the Prime Minister of New Zealand suggested that "…unless something changes, the current generation of young New Zealanders may very well be the first to die at a younger age than their parents…" (Clark, 2006, para.14). This type of alarmist statement reinforces the popular belief (supported by a range of media such as newspapers, magazines, television, radio and worldwide websites) that overweight bodies are unhealthy and in need of weight loss (Gard & Wright, 2005). However, in recent years, as mentioned, researchers have questioned the ways in which obesity and being overweight are socially constructed, resulting in this so-called epidemic being more complex than a simple medical issue (Bromfield, 2009; Gard, 2011; Rich, 2010). Biomedical obesity researchers frequently draw on particular obesity discourses to explain being overweight and obesity as simply an energy imbalance - the result of people eating too much energy-dense food and not doing enough physical activity. For example, one such obesity discourse, that of physical inactivity and poor nutrition, is presented as inextricably linked to the problem and is presented as both the main cause of, and solution to, obesity (Fitzpatrick, 2011). This was evident in the justification for the HH intervention that was followed in my study.

According to Evans, Rich, Davies et al. (2008), obesity discourses privilege body size, shape and weight "not only as a primary determinant but as a manifest index of wellbeing surpassing all antecedent and contingent dimensions of health" (p. 13). Obesity is usually measured by the Body Max Index (BMI). This measurement uses height and weight (weight divided by height squared) to determine whether an adult body is either underweight, normal, overweight or obese. BMI measurements are categorised purportedly according to 'risk' as 'under-weight' (BMI $\leq$ 18.50), 'normal' (BMI 18.50-24.99), 'over-weight' (BMI $\geq$ 25), and 'obese' (BMI $\geq$ 30) (WHO, 2012). It is to be noted that the BMI is insensitive to distinguishing muscle from fat or the location of fat in the body, and no differentiation is made for the complexity of how factors such as age, gender

and ethnicity interact with the relationship between body weight, body fat and health (Ross, 2005).

BMI

BMI throughout Western countries is lauded by government officials and obesity spokespeople as the key to monitoring populations' health status and obesity. BMI is considered to be an indispensable tool, and has been profoundly influential in persuading policy and interventions in health and physical activity in schools. Researchers associated with school health and physical education suggest that the BMI is an insufficient means to monitor weight as symptomatic of current or potential health (Evans, Rich, Davies et al, 2008; Gard, 2011; Gard & Wright, 2005; Powell & Fitzpatrick, 2015; Ross, 2005; Soto & White, 2010). Evans, Rich, Davies et al. (2008) state that "BMI is rather less good at determining what can be said about health, particularly children's health, than some would have us believe" (p.13). Gard and Wright (2005) suggest that BMI makes no concessions for classifications like bone density or muscularity and that BMI results are unhelpful for children and older people, and furthermore, are culturally skewed. Evans et al. (2004) concur that BMI can be thoroughly imprecise:

> … it (BMI) overestimates fatness in people who are muscular or athletic, does not register fat distribution, and is an extremely poor measure for children and adolescents. Nevertheless, it is widely accepted and used in the medical profession and by teachers in schools (p. 377).

The World Health Organisation in its Global Strategy on Diet, Physical Activity and Health states that when measuring weight and obesity: "It is difficult to develop one simple index for the measurement of overweight and obesity in children and adolescents because their bodies undergo a number of physiological changes as they grow" (WHO, 2013b, para.2). This statement is often ignored by health professionals and in particular by biomedical researchers who focus on school health interventions (Gard & Wright, 2005; Gard, 2011). Fitzpatrick (2011), amongst others (Burrows et al. 2009; Cale & Harris, 2011; De Pian, 2012; Gard, 2008; Evans, Rich, Davies et al. 2008), suggests that many teachers uncritically accept measurement tools such as BMI. She advocates for teachers to be critical consumers of the health and movement culture and to challenge 'body control' messages, and to apply a sociocultural context when considering their students. This is further seen as important in enabling teachers to free themselves from the traditional content driven curriculum of health education (Leahy et al. 2016), and the

pervasiveness of a biomedicalised agenda evident in popular and media commentaries on obesity and health (Fitzpatrick, 2011).

Obesity discourse and school programmes

The role of schools in promoting health and, more specifically, contributing through their curriculum programmes to tackling obesity, and producing a 'healthy nation', has been increasingly recognised in recent years (Bromfield, 2009; Burrows, 2010; Cale & Harris, 2013; De Pian, 2012; Evans, Rich, Davies et al. 2008; Keshavarz, et al. 2010; Kilgour et al. 2012). Gard and Wright (2005) suggest that children are a particular focus in neo-liberal times for attention on the part of government and non-government agencies:

> Experts of one kind or another regularly describe today's children as not only fatter than previous generations, but also less active, less athletically skilled, less interested in physical activity, less self-disciplined (and therefore more likely to choose the 'easy' or 'soft' option, be it with respect to physical activity or food) and more addicted to technology (p. 6).

Evans, Rich, Davies et al. (2008) contend that government and non-government agencies conceive schools as implementation sites for initiatives focused on childhood 'inactivity' and 'obesity'. The popular belief of some obesity discourses is accepted and perpetuated by teachers who do not apply a critical perspective, or do not adopt a sociocultural pedagogy when teaching health and physical education (Cliff, Wright & Clarke, 2009; Fitzpatrick, 2011; Gard, 2008; Kirk, 2004, 2006; Macdonald & Penney, 2009; Petrie, 2010, 2012; Quennerstedt et al. 2010; Tinning 2010; Webb et al. 2008). This acceptance by teachers of a discourse around inactivity and poor nutrition leading to obesity is an interesting point as my study also endeavoured to investigate.

Quennerstedt et al. (2010) make a case for a shift in health education practice away from teaching young people to be healthy (from a biomedicalised pathogenic perspective) to an understanding of the ways young people learn and 'do' health. From their study in Sweden and New Zealand, they argue for an approach to health education that takes as its starting point the learning that occurs in the lives of young people, reinforcing Gard's (2008) emphasis on child-centred pedagogies. The child-centred pedagogies include how children learn to make sense of themselves as healthy (or not) in the local and global contexts within which they live. Gosling et al. (2008) suggest that children's worlds are

not fragmented into the discrete topic areas of health strategies and that the medicalisation of childhood obesity obscures the influence of the wider determinants of health. Burrows and McCormack (2011) contend that health is, in some ways, regarded as a synonym for 'weight' and/or shape, as expressed in the testimonies of both students and teachers in a case study of a secondary school.   They state:

> In a context where obesity imperatives pervade popular and professional consciousness, the mandatory call to 'sport' could, conceivably, alienate more children from an understanding of their physicality as a source of pleasure and indeed make life more difficult for those who have little interest in sport (Burrows & McCormack, 2011, p. 127).

This suggestion is further reinforced in other studies where students themselves are recognising the biomedical relationship between physical activity and obesity (Cliff & Wright, 2010; Gosling, Stanistreet & Swami, 2008; Trout & Graber, 2009; Webb et al. 2008). As Lee and Macdonald (2010) suggest, this reflects that in our current society, many young people still uncritically link body shape to health and fitness. Their study provides empirical evidence of the durability of discourses on responsibility for one's health through being the right size and shape. In Lee and Macdonald's study of rural, young women in secondary education, school practices remained dominant in their understanding of health and fitness for up to two years after schooling. In addition, when these young women spoke of physical activity, health, fitness and their bodies, their physical appearance and their body shape became a corporeal metaphor for health.

Over two decades ago Kirk (1992), suggested that the unexamined ideological assumptions of obesity discourses can result in unintended outcomes for young people. Studies which focus on the voice of children and young people as they experience programmes intended to combat obesity all share similar messages – that it is too simplistic to expect sustained behavioural change from just 'doing more' and 'eating less' (McMahon, Penney & Dinan-Thompson, 2011; Lee & Macdonald, 2010; Pinhas et al. 2013). In this respect, teachers who support these programmes effectively legitimise messages forthcoming from politicians, health professionals, journalists, commercial companies and researchers that perpetuate 'alarmist' notions in an attempt to implement societal change (Gard, 2011). Knowledge derived from the biomedical discourses that frame obesity talk may powerfully contour the positioning of young people as healthy and/or unhealthy (Burrows, 2010). Other research tells us that there is a narrowness in

thinking amongst educators about the body and health, despite accompanying rhetoric suggesting a commitment to the development of lifelong learning and inclusion in education (Penney & Harris, 2004). Cliff and Wright (2010) suggest that tensions exist for teachers when applying a critical perspective such as a socio-ecological or sociocultural view within a curriculum, when discussing meanings about the body and young women's health. De Pian (2012) reiterates this in a United Kingdom (UK) primary school case study, describing the intended and unintended effects on the lives and bodies of young people as they negotiate 'health' across a range of social contexts. De Pain (2012) explains that the UK recently adopted an outcomes based model through a whole-school approach to combat the 'obesity epidemic', and agrees with Evans, Rich, Davies, et al. (2008) in saying that by prescribing specific (desirable) health behaviours to young people, particularly around diet and exercise, health imperatives have been adopted in schools. However, it is these prescriptive outcomes that Gard (2008) alludes to when he states that in educating children about health, it is the degree and extent to which rhetoric matches lived classroom experience, especially when content is taught in a teacher-centred way that has the most impact. My study sought to consider what health and bodily knowledge children attained through the health pedagogy evident in a school classroom, as my findings attest in Chapter 5.

Healthism discourse in schools

As indicated previously, Fitzpatrick (2011) argues for teachers to challenge traditional content driven curriculum and healthism discourses evident in many health 'education' materials. Many researchers (including Burrows et al. 2009; Gard, 2009; Fitzpatrick, 2011; Lee & Macdonald, 2010; Macdonald & Penney, 2009; Tinning, 2010) call for health and/or physical education teachers to critically examine their practices and the curriculum which reproduces social meanings for students in the form of such discourses.

As Evans, Rich, Davies et al. (2008) and Penney and Harris (2004) emphasise, the co-option of wider health concerns into health and education policies and their inclusion in pedagogical practice places young people under greater surveillance. In particular, they point to the need to challenge discourses of blame (on bad food, bad parenting) and responsibility. Some educational researchers argue that what is needed is to encourage young people to adopt a critical pedagogy when considering body corporeality; that is, to

transform thinking through disrupting and dissecting the values and social connotations of traditional norms of body size, weight and scale (Cliff & Wright, 2010; De Pain, 2012; Gard & Wright, 2001; Fitzpatrick, 2011; Rich, 2010, 2011). Tinning (2010) reiterates this when he states that "when learning in health and physical education is framed within the ideology of healthism, there is no recognition of the darker side of the cult of the body" (p. 178).

The 'cult of the body'

The 'cult of the body' as referred to by Tinning (2010) recognises that the physicality of the body is highlighted and manifested as the ultimate in performance and perfection. Shilling (1994, 2003) concurs when he suggests that the body has become a project to be worked on as part of a person's self-identity, resulting in the body becoming increasingly central as part of today's image conscious society. Thus the management and moulding of the body has become increasingly central to the presentation of self-image and, in addition, its commodification.

Bordo (1990) draws attention to another cult, that of 'slenderness' as a dominant desired body shape in contemporary Western cultures (particularly among women), and more recently noted in the 21st Century amongst teenage youth (girls and boys) and young men. McMahon and Penney's (2011) documented impact of the pedagogies adopted by a sport and the coaches within that sport, validates the concerns that Bordo and Tinning state about body management resulting in the increased incidence of eating disorders, over exercising and the widespread prevalence of anxiety about body shape. Giulianotti (2002) and Shilling (2003) also reinforce the emergence of these behaviours, recognising that there has been a massive rise of 'the body' in consumer culture, as a bearer of both symbolic value as well as having an exchange value.

Shilling (2010) maintains that the workplace and state interventions in health care (focusing on healthism) have done much to increase public and academic interest in embodiment over the past few decades, and that consumer culture has driven this interest, encouraging people through the media to conform to the idealised physical form. He states that the centring of the body in consumer culture is not entirely new, but that its scrutiny has become far more intense and less forgiving, and suggests that the range of

body maintenance techniques, regimes and services portrayed today all focus towards the pursuit of physical perfection, both in form and in function. Shilling (2010), along with Webb et al. (2008) and Cale and Harris (2013), asserts that an influence that has emerged in recent decades is the focus on health whereby central issues of bodily perfection, control and discipline (performance) are emphasised. Further discussion on bodily perfection and performance and the relationship with my study can be found in section four of this chapter.

Situating health from an ecological perspective

This section examines an ecological perspective of health 'education' and health promotion in relation to education and schooling. Importantly, it differentiates between health promotion as it sits within a population (society), and health promotion as it is enacted within a school environment. As health interventions are frequently being prescribed as a means to address a growing trend of obesity, the rights and voice of children are brought to the fore through considering recent studies in primary schools, both internationally and in New Zealand. Consideration is given to the biomedical pathogenic focus (often underpinning school health interventions) and salutogenic concepts (a dynamic strengths-based focus on more holistic health) evident in health education. In turn, how these are manifested as influencers on particular cultures of 'health' through the school curriculum is examined.

Biopower and biopedagogies

Biopedagogy describes the disciplinary regulative effects that obesity discourse has upon children as subjects, contributing to their sense of embodiment, and inferring that weight and health are interrelated. Embodiment from a poststructural perspective focuses on how one makes meaning of the relationship between the way an individual constructs their sense of physical (bodily) identity and the sets of social meaning and values circulating in society (Garrett, 2004; Wright, 2004). Harwood (2009) argues that the connection between biopower and biopedagogies, is related to the phenomenon of the 'obesity epidemic', and is a result of the state influencing school policy and practice:

> …as such, the rising concerns with obesity need to be understood as linked with biopower, and the practices promulgating health measures can be conceived as biopedagogies of this biopower (Harwood, 2009 p. 17).

Biopedagogy is derived from biopower and is used to describe contexts that tell us how to live, how to eat, how much to eat, how to move and how much to move. Harwood (2009) states that whilst it is usual for classrooms and health clinics to be the place where learning about obesity happens, these are only a small fraction of the spaces where pedagogies occur. She suggests that an interrogation of the pedagogical practices and effects of biopower is needed, since in our contemporary contexts some of these pedagogical practices work negatively to govern our bodies. These pedagogies contribute to demonstrating the effectiveness of the 'obesity epidemic' in influencing beliefs and behaviours. She believes that health and educational policies are very much tied to these practices, and recognises that in the spirit of Foucault, power can be both positive and negative. The concept of biopedagogies therefore, directs attention to relationships of power that influence the formation of the contemporary 'healthy' person (Harwood, 2009).

Leahy (2009) agrees and suggests that "school based health education can be understood as a governmental assemblage in and out of itself, with complex linkages and connections to other assemblages" (p. 173). She researched how biopedagogies do their governmental work as they come to life in classrooms, sometimes against the intention of the curriculum. She suggests they do their work to instil certain dispositions and practices. However, as Leahy (2009) found through her studies, some of these strategies evident in health programmes (along with other biomedical interventions) may be doing more harm than good since they are in contrast to the philosophy of Health and Physical Education in the New Zealand Curriculum (HPENZC) (Ministry of Education, 1999, 2007). This harm has unsuspecting recipients; that is, teachers and children. My study investigates the opportunity for one of these two types of recipients (children) to demonstrate their knowledge and understanding of health, their bodies and their selves.

The rights and voice of children

As indicated in Chapter 1, literature on the obesity discourse has similarly identified that children are often neither consulted nor considered when interventions are conducted on them (Evans, Rich, Allwood et al. 2008; Gard, 2011; Gard & Wright, 2005;

McMahon & Penney, 2011; Rich, 2010; Rich & Evans, 2005). Numerous studies using biomedical interventions to improve children's health have focused mainly on quantitative results from the biophysical sciences, and have not included a sociocultural or socio-ecological perspective (Graham et al. 2008; Katz, 2009; Safron et al. 2011). According to some researchers, this type of reporting of children's health information has the potential to disempower children (Burrows et al. 2009; De Pian, 2012; Gard, 2008; Reeve & Bell, 2009; Rich, 2010, 2011). However, others would argue that results can be used to empower them (Graham et al. 2008; Nihiser et al. 2009; Mrkusic, 2012). Indeed, Rush et al.'s (2012) study of Project Energize suggested that changes were being made as a result of their project and that schools had reported that there had been a change in the children's knowledge of healthy eating and physical activity, resulting in an endorsement of their intervention.

According to Smith (2007), participation rights of children are important within a societal context where adult authority and power is absolute. She states "children see themselves as social actors rather than just acted upon by the adult world, and as active agents rather than as vulnerable victims" (p. 151). Participation rights support a sense of belonging and inclusion, but more importantly they can teach children how they can bring about change and take health promoting action. MacPhail et al. (2003) reiterate that listening to the voice of young people can provide new insights and challenges that can contribute to more inclusive practices (which is promoted in the Health and Physical Education learning area of the NZC), whether it be participating in sport or recreation or on advice as to what interests and influences them. Whilst researchers in the area of health, sport and physical education continue to examine youths' construction and understanding of the body in relation to health and lifestyle issues, very little evidence is collected on how younger children perceive and understand their bodies and health (Burrows, 2010; MacNeill & Rail, 2010; Rich, 2010). Walford (2008) concurs and suggests that when undertaking qualitative research where multiple perspectives are considered "if we want to know more about children learning, it makes sense methodologically to investigate directly those who know best what it is like to be a child learning" (p. 12).

In Wright et al.'s (2012) study across three countries (United Kingdom, Australia and New Zealand), focusing on the impact of health imperatives in primary schools, the rights

of children and their voice were paramount. Wright et al.'s reason for undertaking this 2012 study (drawing interview data from 94 nine to eleven year olds) was to find out if context made a difference for children when talking about health and their bodies. Their results echoed earlier studies (Burrows & Wright, 2004; Burrows et al. 2002) where children understood health to be connected to eating well and doing enough physical activity/exercise. A point of difference in their study when compared with the earlier research, was that for children from working-class schools, anxiety was a key driver behind their understanding. These children were anxious and talking negatively about themselves and their bodies, because their circumstances (economic and political) did not always allow them to have control and choice over food and access to physical activity. In another study where children's voice was prominent, Azzarito (2009) investigated how dominant discourses about the body influence girls' and boys' construction of the ideal body. MacNeill and Rail's (2010) study concluded that contemporary dominant discourses of health and fitness actually strip young people's rights to make sense of their physicality and that this is exasperated by the infusion of biomedicalised knowledge into the media-rich lives of youth, as well as through the health classroom.

In New Zealand, Burrows and more recently other New Zealand and international researchers such as Fitzpatrick, Gard, McCormack, Ohman, Powell, Quennersted, Rich, Webb and Wright, have focused on specifically providing a voice for young children in their research, in order to understand how they construct meanings for health. In contrast, in an earlier study from Wright and Burrows (2004) in which they examined children's responses from a 1999 National Education Monitoring Project (NEMP) report about health, they speculated on where these children's responses came from. They concluded that the students were "well versed in healthism discourses that linked personal practices associated with the body – specifically eating and exercise, but also smoking, drinking and taking drugs – with 'health'" (p. 226). Subsequently Burrows, Wright and McCormack (2009) reviewed the same 'being healthy task' from the 2002 NEMP report, concluding that "eating, drinking and exercising as key ways to get healthy" (p. 164) were still favoured by students:

> …these results could be 'read' in two ways, firstly as evidence of health educators' success in imparting key health messages about good diet and plentiful exercise or secondly, as indicative of a worrisome trend toward embracing 'certain', 'simple' and they would argue 'prescriptive' answers to what is a tremendously complex and multi-faceted question – how does a person get healthy? (p.166)

Burrows et al.'s (2009) later research reaffirmed that children reiterated messages widely promulgated in popular and professional mediums and predominantly conceived of health as a corporeal matter, citing eating, exercise and hygiene practices as the most important health promoting behaviours. Research thus reveals that children understand their bodies in relation to the social and cultural contexts in which they are immersed. As discussed further in Chapter 3, my study therefore sought to engage with these contexts and with children's understandings of them.

Health Promotion in Schools

Health promoters traditionally adopt the definition of health provided by the World Health Organisation (WHO) in the Ottawa Charter as: *… a state of complete physical, mental and social well-being (sic) and not merely the absence of disease or infirmity* (WHO, 1986). In the Ottawa charter (WHO, 1986) schools are identified as an important setting for health promotion. Macdonald, Johnson and Leow (2014) acknowledge the complex interplay of terms evident in the health and education sectors pertaining to 'health'. In their research they used the terms public health, preventive health, health promotion and health education in the school curriculum (Health Education) and suggest that these are all various instantiations of pedagogical health work undertaken within and beyond schools. It is important to note that for the purpose of this study the term 'health promotion' used in a public health sense has a population focus on behaviour change, whereas the terms health education, health promotion in schools and Health Promoting Schools (HPS) used within education, has a focus on individuals developing knowledge and understanding of holistic health and the determinants of health as they impact on themselves and others. The concept of a Health Promoting School (HPS) emerged from a 'settings approach' to health promotion interventions (Tones, 1996, cited in St Leger, 2000). The WHO defines a 'setting' as having physical boundaries, a range of people with defined roles and an organisation. It is this 'settings approach' which influences the standardised approach to health education, creating an ecological environment which determines what is taught in the name of health in schools. HPS is a framework that provides a comprehensive strategic approach to promoting

school health (St Leger, 2000). Unlike just teaching a health education topic, the school-wide approach involves combining traditional classroom education with actions to improve the physical and social environment, school policies, and the relationship between school, home and local community in ways that promote health (Nutbeam, 2000; St Leger, 2000; St Leger & Nutbeam, 2000).

Lee (2009) suggests that the 'healthy setting' approach of an HPS can address the determinants of health, particularly the social, cultural and political aspects, and can assist organisations and institutions in creating a culture for health improvement. However, as Alfrey and Brown (2013) attest, unless health literacy is addressed, that is, the ability to selectively access and critically analyse information, then adopting action through a settings approach (ecological) to address health outcomes will not be feasible. They endorse Nutbeam's (2000) suggestion that health literacy enables empowerment in decision making and engagement with personal and social action, therefore it can influence the determinants of health.

In Australian and New Zealand schools, the school-wide approach to health promotion involves three interrelated areas, namely curriculum, school ethos and organisation, and school and community partnerships (Mohammadi et al. 2010; Nutbeam, 2000; Rowland & Jeffries, 2006; St Leger, 2000, 2001, 2004). To ensure that such holistic health promotion is viewed as a 'whole school approach', it needs to link with other components of the formal and informal curriculum (unlike the predominant biomedical topic approach to health education). Research demonstrates a causal relationship between educational outcomes and holistic health-related behaviours of children and adolescents (St Leger, 2000). With this particular focus, school health initiatives that adopt an HPS approach reinforce the core business of schools, that is, maximizing educational outcomes, as well as providing a solid foundation to build a rich health knowledge base and healthy living skills, which can be carried out within the usual processes of schooling (St Leger & Young, 2009). It also enables the development of school policies conducive to health and the provision of school health services beyond routine biomedical screening. Lee (2009) states that this approach to school health equips students with knowledge and skills by shifting health into a dynamic and political domain, so that the determinants of health (social, cultural, economic, political, historical) can be addressed. As children are

complex individuals and cannot be educated in an isolated manner without considering their needs (Soto & White, 2010), it is important that any health intervention be flexible enough to consider this.

However, as most schools still address health through a topic or specific subject approach, many classroom-based school health programmes achieve minimal health outcomes. The aligned educational outcomes, which are usually at the lower end of the learning continuum, e.g. factual recall of knowledge, often contain little relevance to student lives, thus, health enhancing behaviours are not always sustained (Keshavarz et al. 2010; Mohammadi et al. 2010). Keshavarz et al. (2010) state that it is a challenge to implement sustainable health promotion progammes in schools since schools are complex systems and as such find it challenging to produce change at multiple levels.

Pertinent to my study, Mohammadi et al. (2010) suggest that inconsistency in understanding of the concept by educational leaders and teachers is a reason for schools not adopting the HPS concept. St Leger (2000) argues that the numerous barriers such as resources, political issues, environmental contexts, administrative support and the training of teachers do impact on the adoption of an HPS framework. The drivers for HPS as suggested by St Leger (2000), reinforced more than a decade later by Macnab, Gagnon and Stewart (2014), still require leadership and vision from both the education and health sectors, along with the resourcing of teachers, to shape health programmes in schools. As discussed further in this chapter, in New Zealand, the learning area of health and physical education within the New Zealand Curriculum (Ministry of Education, 2007) provides a vision for schools through having health promotion as one of its underlying concepts. It encourages schools to consider adopting a holistic (salutogenic) approach using a health promoting process in order for students to make a positive contribution to their own wellbeing and that of their communities and environments.

Salutogenesis

Salutogenic health theory is based on the work of health sociologist Anton Antonovsky and is a departure from a pathogenic, mainly biomedical, view of health (Fitzpatrick & Tinning, 2014; McCuaig et al. 2013; Quennerstedt, 2008). Antonovsky (1996) suggests that public health promotion follows a pathogenic orientation which is a

medicalised paradigm. Antonovsky proposes that the concept of salutogenesis would be a more powerful guide for research and practice than the pathogenic orientation, and that all people are on a healthy/dis-ease continuum which can change at any given point of time. Adopting a salutogenic orientation as a basis for health promotion thus prompts practitioners to focus on the whole person's health and not just one aspect of disease prevention – a concept worthy of note for designers of health interventions. This thinking aligns with socio-critical research, which considers discourses like obesity to be a more complex societal problem than just the individual changing his or her physical body shape (Gard, 2011; Gard & Wright, 2005; Shilling, 1993). Underpinning Antonovsky's (1996) concept of salutogenesis is a sense of coherence (SOC) in which he suggests that using a strengths-based model of health promotion (using what works successfully for a person already in terms of lifestyle and behaviour change) will foster an individual's SOC and thus enable a move towards the healthier end of the health/dis-ease (sic) continuum.

Mittelmark and Bull (2013) state that despite emphasising the association of SOC to other positive aspects of wellbeing such as using strengths-based approaches, health promotion research is still too drawn to research with disease in the focus. They, along with others (McCuaig et al. 2013; Quennerstedt, 2008; Quennerstedt & Ohman, 2014), embrace the salutogenic model of health, and suggest that a shift is needed from the current primary focus on disease, disability and poor functioning, to a more balanced approach in which positive aspects of wellbeing can contribute to changing how health 'education' is viewed in schools. More recently the term salutogenesis has gained exposure in health education and health promotion in schools. Quennerstedt (2011) and McCuaig et al. (2013) suggest that a salutogenic model of health situates health as a dynamic 'process' upon which to build a strengths-based approach to wellbeing. They state that more often the promotion of health and education for, or about, health have more often than not been founded on a deficit or risk model.

Of significance to my study is that a salutogenic model of health aligns with the HPS philosophy and the underlying concepts (particularly health promotion and Hauora[6])

---

[6] Hauora is a Māori philosophy of health unique to Aotearoa/New Zealand. It comprises taha tinana, taha hinengaro, taha whanau and taha wairua, four dimensions of the whare tapawha model representing health.

which are part of the learning area of health and physical education within the New Zealand Curriculum (Ministry of Education, 2007). Hauora as a concept is "a view of health which accorded with contemporary Māori thinking" (Durie, 1994, pp.69-70). He acknowledged that the four dimensions of hauora (taha tinana, taha, hinengaro, taha whanau and taha wairua) were holistic and similar to the WHO's 1947 definition of well being (Durie, 1994, cited in Besley, 2003). Besley (2003) suggests the link between wellbeing and hauora is specific in the New Zealand Health and Physical Education curriculum (Ministry of Education, 1999).

The 'health curriculum agenda' and media influences

The positioning of health and physical education curricula in relation to contemporary agendas in and for education, is highlighted in the work of a number of educational researchers (see Kirk and Penney from the 1990's; more latterly Culpan in 2004 and 2008; Bailey in 2006; Evans and Penney in 2008, Macdonald in 2011, Penney and Jess in 2010; Tasker in 2004; and Tinning in 2009) who have long espoused the value of health and physical education and the potential contribution learning in it can make to our 21st Century society. Their challenge has been to espouse the potential values of social connectedness, knowledge of the body and an understanding of movement culture (all inherent within health and physical education practice) to the contemporary ecological environments within schooling, despite the neoliberal agendas of postmodern governments. Many of these education researchers consider national policy and curriculum issues that face the learning area of health and physical education over a number of years. Indeed, Tinning (2010) states that health and physical education has long been responsible for disciplining, regulating and shaping bodies. He and other researchers (Fitzpatrick & Tinning, 2014; Macdonald, 2011; Macdonald et al. 2008; Penney, 2013; Wrench & Garrett, 2014) address policy relationships and contemporary education policies and relate these to health and physical education curricula within the two decade period of neoliberal schooling reform in Australia and New Zealand. It is this neoliberal agenda that many educators and sociologists believe has contributed to fostering the concept of the 'obesity crisis' promulgated by scientists, researchers and the popular media these past decades (Gard & Wright, 2005; Macdonald & Penney, 2009). Kirk (2006a) suggests that "the careers of some researchers were being built on the belief that there exists an obesity crisis affecting young people" (p. 127). In the last two decades political agendas and large sums of money have been invested in interventions and healthism initiatives in order to combat this obesity crisis (Gard, 2011).

In recent years, there has been an increasing amount of media profile on the rhetoric that influences and impacts upon young people in respect of their bodies (Evans et al. 2009; Evans & Penney, 2008; Rich, 2010; Shilling, 2004, 2010). Azzarito (2009) contends that society today is a world of images, a world of bodily visibility through which cultural messages about the body are constantly produced and permeate individuals' lives, especially through popular culture and the mass media of fitness, health and sports. The school as a microsociety, often portrays these cultural messages, and school curricula often reinforce this rhetoric (Evans, Roy, Geiger, Werner & Burnett, 2008). As a consequence, the 'health' interventions which students are subjected to in schools are often responsible for containing hidden messages (De Pian, 2012; Kilgour et al. 2013; Penney & Harris, 2004; Petrie & lisahunter, 2011; Rowling & Jeffreys, 2006).

Whilst health interventions pertain to promote sound educational and health goals, often what is less evident is the *'hidden curriculum'*. Seddon, (1983, cited in Kirk, 1992) defines hidden curriculum as a form of learning for which we have some feeling, but for which we often find articulation difficult. Over two decades ago Kirk (1992) highlighted these hidden messages and how we interpret them and the impact such hidden messages has on learning in physical education (and more recently in health education). This hidden curriculum is "the grey area, those ambiguous moments that occur in all educational interaction, and of the multidimensionality of the human beings who engage in these processes" (Kirk, 1992, p. 35). In some of Kirk's recent work (2006, 2009), he exposes the restrictive and sometimes harmful unintended outcomes (the hidden curriculum) for learners that may result from the unexamined ideological assumptions of some of the dominant biomedical discourses (namely obesity) that affect one's health and claim to prevent lifestyle diseases.

Just as the term curriculum has become a focus for so much of the planning and evaluative activity that occurs in schools and other educational institutions, so the term hidden curriculum can provide an opportunity for teachers and learners to challenge the often negative risk averse biomedical health discourses through adopting conscious, positive, strengths-based learning activities as part of a salutogenic model as previously described (McCuaig et al. 2013; Quennerstedt & Ohman, 2014). The hidden curriculum that schools

are often subjected to in health and physical education is pervaded by obesity and healthism discourse. This reclassification is at the root of the biomedical obesity discourse and as well as being evident in the hidden curriculum within schools, it is promulgated in popular media today. The belief that our lives can be medicalised and politicalized through the reclassification of 'at risk' and 'unwell' states of being is recognised by Rich and Evans (2005), where being fat equates to risk, thus setting the scene for the acceptance of pathogenic perspectives and biomedical health interventions in schools.

Theoretical perspectives and key concepts for my research

This section identifies and further discusses theory and concepts that underpin this study, centring on body pedagogies. This theoretical foundation is critical for contextualising my study and the findings as discussed in Chapters 5-8. It also provides the prime point of reference for my concluding chapter, Chapter 9. As explained in Chapter 1, the work of Basil Bernstein (1924-2000), Chris Shilling, and of John Evans, Brian Davies and others in the Health and Physical Education field, was used to establish a framework to shape my inquiry, research approach and analysis. As stated in my introductory chapter, the social significance of schooling and the multiple realities evident in classrooms and learning environments contribute to the complexity faced by young people today, in understanding their bodies and selves. Reflecting this view, I used concepts from Bernstein (1996, 2000) as the pillars for my study. I recognised their potential to extrapolate evidence of how power, knowledge and control are conveyed and carried by message systems in a school to reproduce social contexts in which cultural re/production takes place. Below I explain further the message systems and the significant yet often overlooked social processes that they relate to. To reflect particularly my focus on children's bodies, I then examine Shilling's concept of the 'body-society-school nexus' (Shilling, 2010) aligning it to what Evans and Davies (2004c) consider to be evident in a school, that is a Totally Pedagogised Micro Society (TPMS). Finally, as an outcome of this, the concept of body pedagogies will be explored using Bernstein's modalities of performance and perfection, as this is the articulation of how the children in my study see their bodies and their selves.

Theoretical frameworks

To extend Bernstein's legacy and application in Health and Physical Education I sought out Evans and Davies (2004a) and others' work on body pedagogies and Hay and Penney's (2013) work on assessment in Physical Education, which reinforced to me the complexities of policy and practice on schooling and learning environments and the effect this can have on its recipients, in this case, children. Following a similar line to Evans and Davies (2004c), I chose not to use a Foucauldian framework, reflecting the view that the strength of a Bersteinien framework is that in contrast to Foucault, he directed attention overtly to the systematic analysis of the common denominator of all discourses, that is, education and the modalities of its transmission. Hence, my attention was on the processes of transmission in the form of a "pedagogical palette" (Evans & Davies, 2004c, p. 211) and the effect this has on how body pedagogies are articulated by children. Following Hay and Penney (2013), my work sought to extend Bernstein's legacy, and I echo their justification for the choice:

> In response to the possible reaction 'why Bernstein?' we share Moore's (2011) view that arguably one of the most significant features of Bernstein's work is "its power to generate so much energy in thinking and research across the world" (p.xv). As Moore (2011: xv) articulated, Bernstein's legacy lies in the fact that his work "provides so many places *within which* to work, but, also, so many tools *with which* to work. Bernstein's theory "works" because it can be *put to work* by so many others". For us it is also vital that any such endeavours are in tune with Bernstein's underlying desire, to open up debate about matters within and beyond education as they relate to social inequality and justice and in so doing, also extend that debate to prospective 'better futures' for physical education and society (p.16).

As a researcher and lecturer who adopts a critical pedagogy to challenge assumptions and interpret the social realities of the world, I focused on 'putting to work' Bernstein's theories and considering these amidst my findings, as discussed in Chapters 5-8. A post-structuralism perspective was the umbrella in the design of this thesis. From a post-structuralist perspective, body pedagogies are socially and culturally situated in that they reflect the prevailing corporeal orientations and health-related concerns within a given time, and as such I endeavoured to make sense of the children's understandings and meanings of their bodies and selves within the social construct of the classroom and school. I searched for meanings and did not want to divorce myself from this lived reality, therefore everything discovered was subjected to my lived experience as well as theirs.

I, like Hay and Penney (2013) and others, was in tune with Bernstein's underlying desire to debate on matters on and beyond education as they relate to social inequality and justice. I acknowledge that the body, identity and health are socially constructed domains and I wanted to see if children could make sense of their selves and their bodies as a result of learning in health education. This knowledge is, according to Bernstein (2000), never equal. The distribution of power and principles of control are relayed through the adoption of pedagogical practice. Bernstein suggests this pedagogical device can limit and influence meaning, thus controlling not only what is learned, but the messages inherent in that learning (classification) and the contexts (framing) in which the learning takes place. He points out that power and control are embedded in each other, such that they cannot be considered independently of one another. In schools, he suggests power relations create, reproduce and legitimise boundaries between different categories of groups, gender, class, race and even discourse. Control, as demonstrated in schools primarily by teachers, (but also by children) establishes legitimate forms of communication appropriate to the different categories. Control, he states, "carries the boundary relations of power and socialises individuals into these relationships" (Bernstein, 2000, p.5). It is this concept of knowledge, power and control that underpins my study, exposing findings related to the body pedagogies of children through cultural imperatives and obesity and healthism discourse, all of which are relayed through the message systems of curriculum, pedagogy and assessment. Outcomes from using this theoretical framework are discussed in relation to significant findings in the concluding chapter of this thesis.

The totally pedagogised society

Evans and Davies (2012) suggest that in schooling, the information about health is not just information; instead, meanings, values and role modelling evident through performance and perfection codes occur in the classroom and wider school environment. Therefore, schools, school leaders and teachers and students are not free from values (Begley, 1999); instead, they create part of the embodied consciousness and are underpinned by pedagogic modalities that exist in classrooms and school environments today. However, as Evans and Davies (2004a) reiterate, it is not just schools and teachers who should be responsible as catalysts for societal and educational change. When considering the inculcation of societal values and influences, Bernstein's (2000) definition of pedagogy creates a framework for thinking about the relationship between cultural values and those that are reinforced in schools:

> Pedagogy refers to a process whereby somebody(s) acquires new forms
> or develops existing forms of conduct, knowledge, practice and criteria
> from somebody(s) or something deemed to be an appropriate provider
> and evaluator – appropriate either from the point of view of the acquirer
> or by some other body(s) or both. (p.78)

Bernstein (2000) describes an emergent 'totally pedagogised society' in which a vast array of sites of socialisation have become pedagogical sites, generated by discursive principles of lifelong learning, global information networks, pervasive state-sponsored credentialism, self-improvement and an obsession with training. The concept of a 'pedagogised society' that is consumed with evaluating, monitoring, measuring and surveying the body (Evans, Rich, Davies et al. 2008; Gard, 2008; Gard & Wright, 2005) is evident in a number of countries including New Zealand. In most instances weight and height are seen as primary indices of the 'health' of young persons (Cooper, 2013; Duncan et al. 2011; Evans, Rich, Allwood et al. 2008; Kira, 2009; Rush et al. 2012).

It is in this social practice and settings that health discourses such as healthism and obesity are promulgated, and therefore schools, as micro-societies, are subjected to its influence. Thus, schools have become, as Evans and Davies (2004) and Evans, et al. (2008a) suggest, 'totally pedagogised micro-societies' (TPMS) since they are expected to prescribe specific (desirable) behaviours to young people. Giroux (2004) concurs and informs us that:

> Pedagogy is not simply about the social construction of knowledge,
> values and experiences; it is also a performative practice embodied in
> the lived interactions among education, audience, texts and institutional
> formations. Pedagogy, at its best, implies that learning take place across
> a spectrum of social practice and settings. (p. 61, cited in Rich, 2011)

The relentless and inescapable nature of pedagogical activity that is evident in schools is a result of national and global socio-economic trends which are endorsing and nurturing particular corporeal orientations in order to create the 'perfect' future citizen (Evans, Rich, Davies et al. 2008). This 'perfect' future citizen in the workplace, according to Evans, Rich, Davies et al. (2008) has a body orientation that is the correct size, shape and appearance and embodies 'the face' of the company, thus contributing a particular form of cultural capital. The contribution schools make to this cultural capital, often through the message systems of curriculum, pedagogy and assessment, is reinforced through corporeal perfection or performance codes transferred from social bases outside formal

education or within formal education such as health and physical education. Evans et al. (2008b) concur, as they describe linkages with power over individuals and populations through control and authority from a network of relationships which occur in schools, organisations and society, all of which contribute to biopower and the resulting biopedagogies described earlier in this chapter.

Schools and education, by their very nature (responding to new knowledge), reinforce performance and perfection codes through recontextualising policy initiatives. In their earlier work, Evans and Davies (2004c) suggest that 'the body' has been regulated in schools through being underpinned by the pedagogic palette of performance, competency and perfection modes. They state that these pedagogic modes characterise the emerging TPS, visible in new contemporary Western situations devoted to body-centred concerns within wider discourses of 'trainability' and 'health'. De Pain (2012) concurs and suggests that in the United Kingdom, schools are becoming TPMS, as health education has now become everyone's concern. Evans, et al. (2008a,), along with Rich (2010), support Bernstein's (2000) view that schools are becoming TPS's in which concern for the shape and 'health' of 'the body' is no longer the preserve only of those subjects or areas of the curriculum historically concerned with body issues, such as health education, physical education or personal and social education. "It is now everyone's concern, everywhere, in classrooms, playgrounds, dining halls and corridors" (Evans, Rich, Davies et al. 2008, p. 17).

The body-society nexus

The social construction of the body and the links between educating students about the body have been explored by the sociologist Chris Shilling. Shilling (1993) posits that since the early 1990's the body has emerged as an individual project underpinned by two propositions. The first proposition is that the body is malleable and able to respond to technical knowledge and expertise that will alter the shape and look. The second is that there is a growing awareness of the body as an unfinished project that can be pursued to some kind of resolution according to the lifestyle choices people make. This second proposition aligns with Bernstein's implication that social control pedagogies focus on "protecting and preserving the unfinished body by reconfiguring body, mind and soul through intervention, which is everyone's concern" (Evans & Davies, 2004c, p. 211). These propositions conform to the notion that the body is socially constructed and as such

succumb to a forms of control and power. Interestingly, Shilling (1993), when examining the concept of corporeality, describes how the body and the bodily or physical capital invested in it, also play key roles in the production of social inequalities. Within the school environment such inequalities are produced through school health, physical education and sport and contribute to the process of understanding the body as a corporeal entity and therefore not one of 'embodiment' where a more holistic concept is adopted. This is examined further in this chapter within the concept of the school being a 'totally pedagogised micro society' (TPMS) (Evans, Rich, Davies et al. 2008), reflecting the impact the discourses of corporeality, obesity and healthism have on a school community.

As schools are micro-cultures of society, they represent a site where the production and reproduction of social and cultural norms occurs. Bernstein (2000) suggests:

> Schools become the regulator of everyday experience which encapsulates the knowledge, values and ideals of society into a form of socialisation, characterised by endless learning and trainability (p.81).

In Kirk's (1990, 1992, 2004) view, this schooling system and in particular the areas of health, physical education and sport promulgate the production of corporeal entity and the physical capital invested in it. The sooner young bodies are able to be manipulated so as to conform to expected societal norms, the sooner they can be more useful in society (Evans & Davies, 2004a, 2012; Gard, 2008; Gard & Wright, 2005; Kirk, 2004; McCuaig & Tinning, 2010). Kirk further explains that it is likely that the body will be relegated to a physical object that can be dominated and objectified until it conforms, (namely to meet particular social and economic ends) if school practices (HPE and sport) continue to focus on the corporeal nature of the body (2006a). He reinforces Bernstein's concept that practices of corporeal regulation and normalisation of the body have come about as a result of surveillance and capitalism (the need to have a workforce that is physically strong and healthy) and that such practices have been occurring since the mid 1800's in schools in both Australia and westernised countries (2004). Schooling can thus be seen as reflecting and active in (re)producing society's expectations about the body, with children subjected to a corporeal environment within schools today (Burrows & Wright, 2004; Powell & Fitzpatrick, 2015).

In recent years, Shilling (2010) has concluded that body pedagogics at a societal level privilege embodiment. Other researchers challenge the policy and practice of objectifying the body and argue that it has disconnection from the social reality of modern life (Burrows & McCormack, 2008; Evans, Rich, Allwood et al. 2008; Evans et al. 2009; Gard & Wright, 2005; Garrett, 2004; Oliver & Lalik, 2004; Powell & Fitzpatrick, 2013). Body-centred corporeality focuses on *relations of* the body and *with the* self, and in so doing, does not embrace embodiment as conceptualised within the social, psychological and behavioural sciences (Evans & Davies, 2004c; Kirk 2004; Tinning, 2009). This concept of corporeality is reinforced by governments, business and the popular media. Most of this popularist hype about the body is formulated into narrow 'body centred', corporeal ways of thinking. To some extent the part schools and educational institutions play in considering the social (re)construction of the body has been much overlooked by researchers who focus on obesity discourse, and instead it is the corporeal 'ideal' that many have focused on.

The body-society-school nexus

A number of social theorists have contributed to the field of the sociology of the body and more specifically, explored the notion of educating bodies, and the role that schooling plays in this process within societies (Evans & Davies, 2012; Shilling, 2004). As my study is placed in a school setting, the intersection of societal influences on the body is critical to my research. In his earlier work Shilling (1993) drew on Bourdieu's notion of habitus to explore the links between the social construction of the body and educational practices. This notion of habitus in relation to the body is a form of cultural capital that holds and communicates status and power. The body 'ideal' within obesity discourse, according to Fitzpatrick (2011) is one that is slim and not overweight or obese, thus implying a high cultural capital. This focus on the centrality of the body within social existentialism (reiterating its capital) is reinforced by another social theorist Emile Durkheim (1961) and given a critical appreciation through the writings of Bernstein as he discusses the accounts of the 'schooled body' (Shilling, 2004). Shilling (cited in Evans & Davies, 2004a) draws on the work of Durkheim and Bernstein when considering the significant accounts of the schooled body including the concept that the body is a *multidimensional medium* for the constitution of society fostered through the health policies and practices that are evident in schools. Bernstein's work sought to expose the complexities of schooling and the social reproduction-production inherent in it (1996, 2000). His work provided a systematic analysis of codes, pedagogic discourse and

practice, and their relationship to symbolic control and identity in a social class system. From the 1970's onwards, he developed an increasingly sophisticated model for understanding how the classification and framing rules of education have been reproduced from society and in turn reflect a social consciousness (Cause, 2001). It is this classification and framing that form the ontological foundation for my study as I sought to interpret the messages and context within which body pedagogies occurred.

Evans and Davies (2004a, p. 8) cite Bernstein's (2000) educational discourse and pedagogy when considering this 'schooled body':

> A school metaphorically holds up a mirror in which an image is reflected. There may be several images, positive and negative. A school's ideology may be seen as a construction in a mirror through which images are reflected. The question is: who recognises themselves as of value? What other images are excluded by the dominant image of value so that some students are unable to recognise themselves? In the same way, we can ask about the acoustic of the school. Whose voice is heard? Who is speaking? Who is hailed by this voice? For whom is it familiar? (Bernstein, 2000, p.xxi)

The understanding of the relationship between the body and society and the specific contribution that schooling is able to make to this process is discussed through my findings and in my concluding chapter. Of most interest to my study was that Bernstein (according to Evans & Davies, 2004c), suggests there was an emergence of a 'pedagogic palette' in the latter half of the 20th Century which emerged from a combination of state intervention in recontextualising curricula from both a behaviourist perspective and a health-based lifestyle perspective, where both converged to include *performance* and *perfection* (competency) codes. In both these codes, the body is seen as in deficit, unfinished or at risk and therefore in need of rescue from conditions over which individuals or populations have increasingly less control (Evans & Davies, 2004c). In my study I situate children's understanding of their bodies within the school setting, although I accept that the home and social environment also contribute to their body knowledge and that education like health is a "public institution, central to the production and reproduction of distributive justice" something Evans and Davies (2004a, p. 10) draw from Bernstein's work.

Health, bodies, values and micro-cultures in learning environments

Students develop values within the culture of the school through contradictory and paradoxical practices (Bernstein, 2000). These practices are often a reflection of external factors and sometimes do not reflect their own or even the school's value system, hence the paradox. External global market forces and pedagogies are becoming more market-orientated, yet traditional social hierarchies, social values, rituals and practices are being retained, creating oppositional discourses within the school culture (Cause, 2010). Such messages can be confusing for young people. An example might be that it is perceived that the body may need 'correction' (to attain the ideal) and therefore this could be provided through students partaking in a 'healthy' intervention that has a pathogenic (meaning free from illness or disease) biomedical focus. This form of social control challenges any shared value system, with Bernstein proposing that dominant value systems in a school can interfere with and not support student learning (1975). These value systems are evident in the range of programmes offered to schools in curriculum areas, not only in health and physical education but other subjects as well, in order to enhance the wellbeing of students (Petrie, 2012; Powell & Fitzpatrick, 2015; Rowling & Jeffreys, 2006). Davies and Evans (2004b) concur that the type of value based programmes offered in schools aligns with Bernstein's modalities or codes, which are directly related to the interests of the economy (a tenet of neoliberalism). The focus is directed to outside school experience and work and lifestyle generally, with the perspective on the future in respect of what could or is to be achieved, if one develops the 'right' embodied capacities (Evans & Davies, 2004c).

Evans and Davies (2004b) discuss Bernstein's modalities of performance and competency (calling them perfection and performance codes) found within schooling. These codes suggest the focus is on the body being *imperfect* (whether through circumstances of one's class and poverty, or self-neglect), *unfinished* and to be ameliorated through physical therapy (circuit training, fitness through sport and a better diet), *threatened* (by the risks of modernity/lifestyles of food, overeating, inactivity) and therefore in need of care and being *changed* (Evans & Davies, 2004c, p. 214). This change process is often the outcome desired by health policies that focus on health promotion across populations implying a health problem (such as obesity) can be fixed by a solution (such as exercise and diet). As previously stated many health promotion interventions in schools are adopted from public health policy and focus on corrective

intervention through improving the body through diet, fitness and exercise (solutions). The prevalence of these interventions has also resulted in Shilling (2010) reiterating the use of the term 'body pedagogics' to expose the overlap of the development in consumer culture, work and health that has resulted in the body being objectified. (Further exploration of this is discussed later in this section). Consequently the influence of societal expectations is seen not only on individuals, but schools, institutions and communities, hence the importance of the body-society-school nexus as previously discussed.

Shilling (2004, 2010) posits (following Bernstein) that perfection codes and their modalities are socially stratified and contribute to the contradictory demands placed on young people today. His recent work discusses the influence of the physical 'ideals' and whether these have bearing on the education of bodies (2010). Shilling's earlier research (cited in Evans & Davies, 2004a) suggests that schooling has historically been implicated in 'civilising' the bodies of children. He reflects on interventions that manipulate young bodies to conform to a norm, and suggests that the reason for capturing children and youth with early intervention may be that they may be more useful (as they are healthy and well) in society. His work remains highly pertinent to critical research in school settings, and provided an important point of reference for my study, especially as New Zealand schooling is situated within a neoliberal environment (this environment is discussed later in this chapter).

Critical to my study was Bernstein's (1996, 2000) code theory (transforming knowledge into pedagogic communication which is relayed in the form of competency (perfection) and performance codes) and the influence on school culture. Cause (2010) reiterates the importance of these codes and cites Bernstein in her work when she reinforces how his theory can illuminate how a school can act as a strong independent force in shaping students' identity and essentially, their view of the world:

What the school does, its rituals, its ceremonies, its authority relations, its stratification, its procedures for learning, its incentives, rewards and punishments, its very image of conduct, character and manner, can modify or change the pupil's role as this has been initially shaped by the family. *Thus the number of pupils initially involved in a particular role can be modified or changed by the school itself.* (Bernstein, 1975, pp. 48-49 original emphasis included cited in Cause, 2010)

Bernstein like Bourdieu (cited in Cause, 2010), proposes that education is the primary social classifier in society, allowing access for all to knowledge. Bourdieu's theory on the reproduction of difference proposed that the culture of the school is set by the dominant culture or class in society and as such, he refers to the educational system as an 'institutional classifier' and that cultural classes within the culture of a school basically mirror the classes within broader society. Bourdieu aligns with Bernstein in that he suggests that just as society favours groups, institutions and individuals with economic capital, so do schools favour the dominant cultural group within that organisation, hence the notion that social, physical and cultural capital can arise from a school community (Bourdieu 1974, cited in Cause, 2010). As my study is situated in a school, consideration of the dominant culture of the classroom and school community was essential. This is discussed in relation to Bernstein's framework of cultural discourses and pedagogic practices in my findings in Chapter 5 and in the concluding chapter, Chapter 9.

Student centred modalities: perfection and performance codes

The term 'code' is used (after Bernstein) by Evans and Davies (2004b, 2012) when describing the pedagogic modalities used to explore how the distribution of power and principles of control in society are translated and communicated in schools. Evans and Davies (2004b) use Bernstein's modalities to describe how pedagogic discourse can also contribute to and express body perfection and performance codes. According to Bernstein (1996, 2000), this pedagogic communication is produced through value modalities such as *performance* and *competency*. Bernstein recognised that the culture of the school and the process of social control relayed messages that are reproduced and recontextualised through the learning environment. Performance modalities are based on 'different from' or what sets them apart, whereas competency (perfection) modalities are predicated on 'similar to' or what people have in common (Evans & Davies, 2004c). It is these codes - performance and perfection - that I used to analyse children's understanding and perceptions of their bodies and their selves, as described in my discussion (Chapter 8). Evans and Davies (cited in Rich, 2012) stated that these codes

often reflect middle class, neoliberal and gendered cultural orientations and value positions. These value orientations privilege some children and disadvantage others. Kirk (1992) attested to this using the example of physical fitness (from a scientific functionalist perspective) as an example of a performance modality, and educational gymnastics (from an individual needs based movement perspective) as an example of a competency modality, enabling both to come together within a health-based physical education curriculum. My concluding chapter discusses other examples found in the data that demonstrate how social hierarchies, order and control are found through the performance and perfection codes in children.

Evans, Rich, Davies et al. (2008) provide examples of performance codes that emphasise the corporeal disposition or orientation of the body to the embodied self, e.g. the media imagery and obesity discourse that find their way into the sociocultural fabric of schools. They state that these images construct and legitimise particular body images and forms of "body work" (p. 94). Young people also obsess and strive to adopt the concept of bodily perfection –trying to fit the 'norm' of what they perceive to be the ideal body as studies by Burrows (2010) and McMahon and Penney (2010) demonstrated. In Australia and New Zealand, Hay (2009) suggests that performance models incorporate more than results or products, involving process as well. It is this examination of process that can expose the hidden curriculum (what is often not taught, but learned incidentally or covertly), thus challenging the traditional production model.

There is consensus in the literature telling us that performance and perfection codes are transparent within school culture when messages around health and wellbeing are incorporated into a curriculum, and in particular when knowledge about body management in schools is framed against the backdrop of a normative and highly partial vision of corporeal perfection (Burrows et al. 2009; Evans, et al. 2008; Gard, 2008; Gard & Wright, 2005; Penney & Harris, 2004; Tinning, 2010). School culture and environments, as portrayed in my study, are indeed places where these types of health discourses are promulgated and where pedagogic modalities can express body perfection and performance codes.

Message systems in schools

Within education are social biases which include the structures and practices that mirror and relate to the social practices outside of schools. Within education systems curriculum, pedagogy and assessment work together to construct and determine *what* is learned, *how* the content is learned and *when* certain subject content is learned [emphasis added] (Bernstein, 2000; Evans & Davis, 2004a; Hay & Penney, 2013; Penney et al. 2009). In addition, within the school environment, surveillance, monitoring and assessment systems reinforce the emphasis on difference, enabling both performance and perfection codes, as described by Evans and Davies (2004c) above, to be fostered.

Health intervention programmes use these message systems to influence a child's learning environment (Burrows, 2010; Burrows & Wright, 2004; Burrows et al. 2009; De Pian, 2012; Gard, 2008; Reeve & Bell, 2009; Rich, 2010, 2011). However, is the nature of the relay (pedagogy) that is as important as the content held within it as pedagogic practices constitute the social contexts through which cultural production and reproduction take place (Bernstein, 2000; Evans & Davies, 2004b). In Bernstein's view, a school culture is value based, and it is the interrelationship of both the traditional social hierarchy and the global market forces (being either complementary or paradoxical) that influences what is learned through curriculum and pedagogy (2000). However, according to Holroyd (cited in Evans & Davies, 2004a) schools are only one of the influences alongside peers, parents, family, popular culture, religion, leisure and employment that act upon young lives. These like other agencies and health interventions impact on the process of identity formation, socialisation cultural reproduction and control. Governments also demonstrate a pathogenic interest in the health of young people, through developing policy and evaluating interventions funded by them. For example, interventions such as *Mission-On*[7]– a New Zealand cross-ministry set of initiatives to combat youth obesity - and the *Life Activity Project*[8]– an Australian Research Council

---

[7] Mission-On was a $67 million package of 10 initiatives designed to explicitly target the eating and exercise dispositions of 0-24 year olds from 2006-2008

[8] Life Activity Project was an Australian Research Council funded research project over 7 years. It was a longitudinal study involving 8 secondary schools in three eastern states and focused on the role of physical activity and related values associated with health as these contributed to the choices, the self-perceptions and embodiments of young people.

longitudinal study investigating the place and meaning of physical activity in the lives of young people - used monitoring to evaluate whether health programmes (most with a biomedical pathogenic focus) had impacted on the health of children and young people. A substantial part of both evaluations included data from monitoring activity and body weight and size, reinforcing the role agencies have in appropriating and selectively privileging knowledge which is then recontextualised through curriculum, pedagogy and assessment systems.

It is this transmission of knowledge through the practices or pedagogy associated with this type of body surveillance that can potentially provide mixed messages to young people. Bernstein (2000) suggests that the *relay* of messages concerning curriculum, pedagogy and assessment influences how knowledge can be constructed and impacts on what children actually learn. This is either manifested overtly as in the practice of some biomedical health interventions undertaken in schools, or as Evans, Rich, Davies et al. (2008) state "tacitly acquired through the invisible pedagogy that characterises new middle class family interactions" (p.80).

Body Pedagogies and Body Pedagogics

Many sociologists and educators are reinforcing the contribution that body pedagogies make to the growing framework on obesity and healthism discourse, some of which could be harmful to growing bodies and minds. Evans and Davies (2004b, 2004c) and Evans, Rich, Davies et al. (2008) make a useful distinction between the body pedagogics of a society in general and the body pedagogies evident in school-based education. It is this latter term that my study focused on, as there is a society/school connect it is predominantly the school environment where children come to learn about and understand their bodies through health programmes and interventions. The term 'body pedagogies' is used to encompass this corporeal understanding. According to Shilling (2005, 2007) body pedagogies produce embodied subjectivities that are essentially corporeal orientations to oneself and others. Rich (2010) suggests that body pedagogies can articulate a focus on how people understand their bodies in a myriad of both formal and informal environments. If body pedagogies refer to any conscious activity taken by people, organisations or the state that are designed to enhance individuals' understandings of their own and others' corporeality, then this practice will enable those exposed to it to construct particular social meanings (Evans, Rich, Davies et

al. 2008). It is these meanings and identity that can create tensions for young people (Bernstein, 2000; Burrows et al. 2002). Hence, health discourse and body pedagogies within a microsociety such as a school, are often interrelated and can be a source for research (as in my study) to understanding how these can affect the lives of young children.

Body pedagogics (Shilling, 2005, 2007) is the means through which a culture sees to transmit its main embodied techniques, dispositions and beliefs. Agencies (including well-meaning ones) that deliver health interventions in schools do so knowing the power that their economic capital can bring to influence that community (Powell & Fitzpatrick, 2015). This is not surprising as Shilling (2010) reiterates that the body in consumer culture is seen as an *object* and that *individual responsibility* for the body is promoted. He asserts that public health promotion and education use a form of health promotion whereby the body is *monitored and controlled* through privileging lifestyle choices, that is, those who smoke, drink heavily and are overweight face higher health premiums from insurance companies. Finally, he states that there are significant complementarities that exist between normative bodies in the spheres of consumption, waged work and health care that are associated with the promotion of a particular form of *physical capital* (2010).

Bernstein (2000) maintains that the message systems of curriculum, pedagogy and assessment through their pedagogic transmission influence what is learned and understood by children in schools. Indeed policies that influence school curriculum and the pedagogic practice of teachers all have a social impact on classroom and school culture. These can be manifested both overtly and covertly in how children exhibit body pedagogies through performance and perfection codes. It is the understanding and interpretation of these exhibited in my study, that contributes further to the field of body pedagogies.

Contextualising the issues and the inquiry

This last section focuses on literature related to health and physical education within the New Zealand context, as my study is situated in one multi-cultural New Zealand primary school. It is therefore pertinent that examples of policy, practices and

interventions related to New Zealand are considered and issues of alignment between these and the principles underpinning the New Zealand Curriculum (NZC) (Ministry of Education, 2007) are examined. Comparisons are made with other research studies internationally and nationally in terms of embodied policies and practices, as health interventions and school health and physical education programmes are often prophesised as the panacea for addressing obesity concerns (Burrows & McCormack, 2011; De Pian, 2012; Fitzpatrick, 2011; Gard & Wright, 2009; McCuaig et al. 2013). Attention is directed to the influence of governments in setting education policy within a neoliberal agenda. Of importance to my study is the philosophy and pedagogy inherent in the learning area of health and physical education in the New Zealand Curriculum (Ministry of Education, 2007), as this is the guiding document for schools. As discussed in the previous section, school culture and pedagogy are juxtaposed. However, as the HH intervention is situated in a primary school environment, pedagogical practice is considered within the context of health and physical education, as this provides a basis for my study to consider the perspectives and experiences children have of their bodies and their selves, during and after a health intervention.

Educating 'bodies': policy and practice

Policy in education plays a critical role and is conceptualised as a social and political process (Penney, 2013). A number of policies, programmes and pedagogic modalities in the name of 'health' are evident in schools both internationally and in New Zealand today. Concepts like *daily fitness* (a concept where children do a period of moderate to vigorous physical activity each day) and health interventions such as *Thrash yourself Thursday* (a Canadian programme of moderate to vigorous physical activity one day per week) are examples that are promoted in schools, are often controlled by outside agencies, and are taught by teachers (Macdonald, 2011; McDermott, 2012; Powell & Fitzpatrick, 2015). These programme examples and the pedagogy that supports them often pursue a corporeal and individualistic concept of health, in which body shape and fatness play a central role (Quennerstedt et al. 2010). They contribute to a curriculum where corporeality is privileged and school policy is set, in the name of health and physical education.

Working within a neoliberal political agenda, as found in Australian and New Zealand education systems since the 1980's, Macdonald and Penney's (2000) research on policy

challenged people to think critically and consider the implications of competition, individualism and individual responsibility and the implication this has on how curriculum is designed. They determined that policy was influenced by a neo-liberal perspective where people were seen as economic entrepreneurs and where schools were seen as institutions that were capable of producing these. In turn, this neoliberal ideology supported by a government's health, education and social policies can contribute to self-managing, healthy or high performing citizens who can add economic value to their country. Macdonald and Penney suggested that if these values are promoted through school curricula, then in health and physical education programmes we are likely to see an emphasis on the promotion of health-related fitness, maintenance of a 'normal' body mass index (BMI), a balanced diet, and social-emotional skills that equip students to effectively handle competition, teamwork and wellbeing (2000). They believe the onus would be upon individuals being skilled to take responsibility for their own predominantly physical, but also social and emotional health. This can result in school programmes adopting a healthism perspective, as discussed earlier in this chapter.

If schools are a TPMS (that is, sites for endless learning and trainability), as suggested by Evans et al. (2008a), then it is not surprising that they are sites where behaviour and cultural change can take place. Evans and Davies (2004) believe that the policies and discourses "driven by the interests of business and the economy and informed by the bio-sciences and psychological theories and practices" (p. 40) are dominant in schools through sport and the physical activity field (cited in Lee & Macdonald, 2010). Indeed, Pope (2014) suggests that New Zealand education is preoccupied with managerialism and what can be produced and measured as part of the neoliberal reform undertaken by successive governments over two decades. He maintains that this preoccupation with measurement and surveillance allows health policy and biomedical health interventions some licence to invade the education space. In the United Kingdom, Rich (2010) and Cale and Harris (2011) concur that health policy and obesity discourses are prominent in schools and, as a result, young people's conceptions of their own bodies and health influence their daily life, within the school environment and beyond. As a result educators and social researchers internationally are widening their understanding of the 'knowledge of the body' and how this is produced, transmitted and received, in and through the educational policies and practices of schools (Evans & Penney, 2008). Hence

the relevance of my study's contribution to research on children's understanding of their bodies and their selves.

In New Zealand, the types of health policies and practices in schools are often based on biomedical evidence and a conviction that certain facts about obesity and accompanying ill health (a deficit model where risk, illness and disease is to be avoided) contribute to serious health problems and therefore warrant an intervention (Gard & Wright, 2005; McCuaig et al. 2013). Rich (2010) suggests that in the United Kingdom, the health policies and interventions focused on reducing obesity that collect 'body data' (direct measurement and monitoring parts of the body such as one's waist), conform to the quasi-medical surveillance techniques undertaken by governments, health agencies, schools, parents and indeed young people themselves. As mentioned in the section on obesity discourses earlier in this chapter, biomedical health interventions are often instigated in order to evaluate the relationship between weight, size, exercise and health, and use scientific measurement to gather physical data on the body (Fairclough, Butcher & Stratton, 2008; Graham at al. 2008; Katz, 2009; Kira, 2009; Safron et al. 2011). These biomedical health interventions and evaluation studies are often reciprocal, justifying the need for each other (Graham et al. 2008; Maddison et al. 2010; McPhee et al. 2010; Mrkusic, 2012; Rush, 2012). It is this transmission of knowledge initiated by policy and demonstrated through practices associated with body data surveillance that can potentially provide mixed messages to young people, influencing how they construct bodily knowledge and what they learn about health.

As previously stated, schools have a particular micro-culture that not only learners and teachers have to understand, but also other professionals that implement health interventions. However, the reality is that health interventions (often biomedical and pathogenic) in schools often focus on topics and contexts that can produce evidence of knowledge gained over a short period of time and which in turn, can have an immediate impact on behaviour change (Cooper, 2013; Graham et al. 2008; McDermott, 2011; Powell & Fitzpatrick, 2015; Wright et al. 2012). This impact is often measured by the teacher within the vicinity of the classroom, reinforcing that for children most learning occurs in constructed lessons (Sandford & Rich, 2006). Whilst Tasker (2004) suggests that the teacher is often the best source for pedagogical content knowledge, other research

reminds us that pedagogically, lessons constructed with a perspective that uses deficit or risk models of health, are often not able to sustain behaviour change and sometimes result in unintended outcomes for learners (Fitzpatrick & Tinning, 2014; Gard & Leahy, 2009; Quennerstedt & Ohman, 2014; McCuaig et al. 2013).

New Zealand education policy and health and physical education

I consider New Zealand education policy in relation to the body because, historically, the notion of bodily performance and 'health' has been in New Zealand schools since the early 20th Century. In preparation for war, a physical training regime based on military drill and prescribed from a manual was in place in Australian and New Zealand schools from 1911-1931 (Kirk 2004). Teachers were required to strictly adhere to the training programmes in these manuals, which left no room for initiative or expression on the part of either pupils or teachers. These highly codified and institutionalised attempts to normalise and regulate children's bodies (from a corporeal perspective) resulted in the physical outcomes being that of compliant youth with productive bodies (Kirk, 2004). However what was often overlooked was the sociological significance of corporeal power, subjecting this form of physical training (both appropriate and inappropriate) on young, productive working-class bodies. These working-class bodies were characterised as being strong, muscular and free from injury and illness in order to contribute to society's workforce, a tenet that aligns today with the neoliberal agenda (Macdonald et al. 2008) of successive New Zealand governments. For example, in New Zealand, until 1999, the physical education syllabi produced by the Department of Education (in 1975 and 1987) were dominated by a focus on skills and knowledge about the physical self. A change occurred with the development of the New Zealand Health and Physical Education Statement in the New Zealand Curriculum (HPEINZC) (Ministry of Education, 1999), with the inclusion of a focus on the sociological significance of health.

Education policy was brought into the spotlight in ways that had not occurred before when in 1984, under a New Zealand Labour led government, a new-right (neoliberal) ideology attempted to advance the economy through undergoing a period of radical economic reforms in the private and public sectors.   These reforms that dominated New Zealand schooling during this time and up until 2000, had their origins in a rapidly changing global economy and were a result of the major economic problems faced by the country (Culpan,

2004; Pope, 2014). The historical background to this education reform is important as it aligns with the New Zealand government's neoliberal agenda that has legitimised health interventions in schools and informed my study. Neoliberalism enacts doctrines and philosophies in order to achieve economic and social agendas through developing citizens with rights, responsibilities, obligations and expectations for health and education that will in turn contribute to the nation's wellbeing and wealth (Macdonald & Penney, 2009).

Continuing this reform of policy and practice, the new curriculum learning area of Health and Physical Education (HPE) was developed in the latter part of the 20th Century to combine the subjects of health education, physical education and aspects of home economics (Culpan, 1996/7, 2004; Tasker, 2004). Culpan and Tasker (the writers of HPEINZC) undertook a significant departure from previous Department of Education syllabi (namely Health Education in 1985 and Physical Education in 1987) that had been dominated by concepts such as medicalised disease prevention, caring for the body, a focus on developing motor and movement skills and being responsible for one's physical, social and emotional health. Instead, they adopted a holistic orientation of wellbeing that embraced the physical, mental, social, emotional and spiritual dimensions of health. This was conceptualised as hauora (Besley, 2003; Kohere, 2003) and contributed along with three other underlying concepts (socio-ecological perspective[9], health promotion[10] and attitudes and values[11]) to the learning area of health and physical education within the NZC (Ministry of Education, 1999, 2007). Burrows and Wright (2004) describe this perspective evident in HPEINZC (Ministry of Education, 1999):

---

[9] A socio-ecological perspective is described in HPEINZC is having a view of the social and environmental factors that affect health and wellbeing (Ministry of Education, 1999).
[10] Health promotion is described in HPEINZC as a process that helps to create supportive physical and emotional environments in classrooms, whole schools, communities and society (Ministry of Education, 1999).
[11] Attitudes and values as described in HPEINZC should be promoted through HPE learning programmes: positive and responsible attitude to their own holistic wellbeing (Hauora); respect for the rights of other people; care and concern for people in their community and environment and a sense of social justice (Ministry of Education, 1999).

> The writers were influenced significantly by the work of Australian and British physical education writers who had begun to draw on critical theory to articulate the contested nature of traditional physical education subject matter and teaching practices. [They] … incorporated tenets of this socially critical theorising into their writing of the new health and physical education curriculum. While physical skill and biophysical knowledge about the human body were still emphasised in the new curriculum, sociological, cultural and psychological knowledge was alluded to as crucial in the attainment of a holistic understanding of health and physical education. (p. 195)

Currently the NZC (Ministry of Education, 2007) expects learners in all subjects to use opportunities to develop five competencies in social contexts. Students demonstrate these competencies by adopting and adapting practices that they see used and valued by those closest to them and make these practices part of their own identity and expertise. The competency 'thinking' is most useful when young people and schools are faced with considering issues and other agendas, particularly those issues that require young people to think deeper and wider, for example, about their bodies or health practices - two areas pertinent to my study. To meet this outcome, students can reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions (Ministry of Education, 2007). This 'thinking' and interpretation of covert meanings contribute to an understanding of discourses (for example, obesity and healthism). Further examples of children 'thinking' about health and their bodies, can be found in my findings in Chapters 5-8.

The learning area of Health and Physical Education in The New Zealand Curriculum

In 2007, the Ministry of Education mandated a revised curriculum for all learning areas in schools. This curriculum provides the vision, principles and values underpinning education and guides the learning in eight learning areas, from the early years through to tertiary level. Whilst the learning area of health and physical education is restricted to two pages in the document itself, the tenets and underpinning philosophy, along with the majority of achievement objectives from HPEINZC are still evident today. Penney and Harris (2004) are highly supportive of HPEINZC's form and content and note that "a broader view of health, as multi-dimensional but also socially constructed and culturally specific is maintained in the detail of the HPE achievement objectives" (p. 103). Culpan believes HPEINZC provides a futuristic voice as ultimately it set out to:

- Provide a broader vision for Physical Education where the culture of movement can be seen as a valued and legitimate educative practice;

- Encourage the development of moralistic practices for Physical Education by making use of the critical and humanistic dimensions of learning;

- Provide alternative visions about what school Physical Education could be, what it might mean to be physically educated and what knowledge, skills, attitudes, and values are needed to achieve this in a holistic manner;

- Capture the potential of Physical Education by providing a socio-ecological value orientation and anchoring it in social critique that acknowledges the inter-relatedness of science, social, moral and ethical dimensions;

- Engender debate and discussion on possible alternative pedagogies;

- Debate and discuss hidden curriculum discourse such as healthism, competition, elitism, body construction, sport and bi-culturalism; and

- Integrate an acknowledgement of both national and international cultural orientations and practices (2008, p.53).

Tinning argues that HPEINZC was "trying to do too much" (2009, p. 9). He reflected on this again after the publication of the NZC (Ministry of Education, 2007) and concluded that there were five claims that were problematic for implementation. These were:

- the ability to deliver on outcomes – there are 118 achievement objectives and does physical education really have the ability to influence lifetime participation in physical activity?;

- the anxiety around 'the body' and the ineffectiveness in helping young people gain some measure of analytic distance from the problematic aspects of the 'cult of the body';

- the ability to critically think and develop effective decision making skills around the dilemmas related to issues such as diet and exercise;

- privileging the biophysical and scientific aspects of the body and marginalising the embodied, kinaesthetic, sensuous and aesthetic pleasures of the experience of movement; and

- making physical education (excluding senior physical education) more like other academic subjects

Despite these predicted problems the intention is still for learners to develop a critical perspective through teachers providing learning programmes guided by the HPE achievement objectives in the NZC. Health and physical education programmes in schools should have an emphasis on sociocultural and critical orientations, with the focus on wide social and political contexts pertaining to wellbeing (Fitzpatrick, 2011). A sociocultural perspective unique to Aotearoa/New Zealand is that of kaupapa Māori. Savage, Macfarlane, Macfarlane, Fickel and Te Hemi (2014) suggest this strengths-based behavioural approach centering on Māori interests, has the potential to transform educational success, not only for Māori but for other children as well. It encompasses a Māori worldview and enables Māori children to identify with culture and engage in positive behaviours. Bishop and Glynn (1999) maintain that through adopting cultural and social policies and perspectives the "monocultural, assimilationist ideologies" (p.102) upheld through curriculum programmes could be avoided, thus facilitating power sharing in classrooms. Petrie and lisahunter (2011) suggest the perceived problems identified by Tinning (2009) could be alleviated by teachers adopting a socio-critical and sociocultural perspective by understanding the philosophy (including the underlying concepts) and intent of HPE. This is crucial for teachers, as the intention is for learners in health and physical education to demonstrate knowledge and skills in order to consider a range of discourses (such as obesity and healthism), that impact on health and wellbeing.

Adopting a critical pedagogy in Health and Physical Education

The NZC (Ministry of Education, 2007) health and physical education learning area encourages teachers to adopt a pedagogy where students are empowered to critique and ask questions about health and physical activity within society and to locate themselves in their community (Culpan & Bruce, 2007). Thus, HPE has been described as a postmodern curriculum, aiming to produce young adults who are able to participate responsibly, reflectively and actively in their communities, in order to create healthy environments (Tasker, 2007, Ovens & Cassidy, 2009). Through using a critical pedagogy (which researchers encourage teachers of HPE to use) in their teaching programmes, teachers and learners can challenge taken for granted assumptions about the body and society, making learning in health and physical education relevant for young people today (Culpan & Bruce, 2007; Dyson, Gordon & Cowan, 2011; Pringle & Pringle, 2012). However, as previous studies have shown in New Zealand primary schools, and despite the intention of the NZC, it is unrealistic to expect generalist primary teachers to have

subject speciality across all eight learning areas of the NZC (Dyson et al. 2011; Penney, Pope, lisahunter, Phillips & Dewar, 2013).

As alluded to at the beginning of this chapter, educating about 'health' and health 'education' are different concepts. The former is usually the concept most understood by generalist primary school teachers, as simplistic health messages (such as obesity discourses) that are promoted in society and by health professionals (who often adopt a biomedicalised, pathogenic perspective) can influence their understanding (Petrie et al. 2014). Researchers (such as Brooks & DinanThompson, 2013; Petrie, Burrows, Cosgriff, Keown, Naera, Diggan and Devcich, 2013; Petrie, Penney & Fellows, 2014; and Fitzpatrick & Tinning, 2014) suggest that more work needs to be done in professional development for primary school teachers in this subject area. Unsurprisingly, a convenient alternative for primary schools (and teachers) has been to adopt interventions by outside agencies. In New Zealand and Australia these interventions (in the name of health and physical education) are becoming more widespread in primary schools (Penney et al. 2015; Powell & Gard, 2014; Williams & Macdonald, 2015) and may end up doing more harm than good as they do not always focus on sustainable behaviour change.

New Zealand primary schools and health interventions

In this final section, I provide examples of two New Zealand government supported health interventions that have informed school HPE policy and practice, as they have influenced (and possibly enabled justification for) the HH intervention, a focus of my study. One New Zealand public health campaign that had a direct impact on school policy and programmes almost a decade ago, was *Mission-On*. In 2006, the Labour government instigated a cross Ministry initiative (Sport & Recreation, Education, Health and Youth Affairs) which targeted young people from birth to age 24. *Mission-On* was launched by the Prime Minister as a campaign to 'fight obesity' (Clark, 2006). It consisted of a range of initiatives to help children and young people make healthy choices about what they ate, and to be more physically active. The justification for this initiative was provided by the Prime Minister, Helen Clark:

> …it's getting harder to be healthy. Children and young people in New Zealand live in an environment that offers them a huge number of options for sedentary leisure activities; there are increased barriers to physical activities; and a greater availability of energy-dense foods (Clark, 2006, para 10).

Mission-On ceased to exist after a change in government post election in 2009, however preliminary research was completed. In the preliminary evaluation of physical activity behaviours, data results indicated that there were differences between the objective (accelerometer) measures and subjective measures (self-reporting data) of physical activity (Maddison et al. 2010). The quantitative results, which were easiest to report on, showed measures from accelerometer-derived time for light activity was greater than that measured in a self-report. In addition, accelerometer-derived time in moderate and vigorous activity was generally lower than that for the self-report. Interestingly, in the students' self-reports, television viewing constituted the main sedentary pastime for both school and non-school days. As this was the first substantive study of its kind in New Zealand providing both subjective and objective measures of physical activity and sedentary behaviours in children and adolescents, it set a precedent for future policy. This precedent has influenced the development of other health interventions in primary schools, namely HH and Project Energize.

Project Energize is a through-school nutrition and activity programme that has been operating primary schools in the Waikato region of New Zealand since the pilot study in 2005. It was initiated by the Waikato District Health Board to improve nutrition and physical activity outcomes and to reduce adiposity among 5 to 10 year old students in a through-school health initiative. According to Graham et al. (2008) who undertook mixed method evaluation of the first two year cohort, the potential benefits of children undertaking this intervention were: increased ability to participate; improved body composition; improved dental health and improvements in a range of associated health measures. Whilst there was a generic programme framework, schools were able to individualise aspects of the programme to suit their needs. Each school undertaking the programme has a staff member (usually a classroom teacher) from the project team assigned to them to act as a change agent called an 'Energizer'. These 'Energizers' support the programme by taking classroom activities with teachers and evening sessions for parents. In their randomised study, Graham et al. (2008) stated that the evaluation

outcome measures they looked for were a change in practice and a change in nutrition and activity, with the primary end point being body composition (which included height and weight, girth, upper arm circumference measures, BMI, BMI Z score, percentage overweight and obese, percentage body fat and fat-free mass). It is interesting to note that all physical baseline measurements were obtained by registered public health nurses (a contrast to the HH intervention which used research assistants), reinforcing the medicalised focus of the intervention. Whilst the researchers accept that the reliability of BMI was problematic due to the relationship between fat-free mass, height and percentage body fat (as these changed over childhood), they still reported on it as part of their programme evaluation, again reinforcing the physical results and the biomedical aspect of the study (Graham et al. 2008). Pringle and Pringle (2012) suggest that this intervention is supported by many teachers, as physical activity promotion schemes are aligned with the general aims of physical education. However, in contrast, Macdonald et al. (2008) caution teachers about external activity promotion schemes. They suggest that they compete with curriculum health and physical education and pose a threat to the role that physical education plays within schools. Anecdotal evidence from some teachers involved in the Project Energize schools attest to this.

The impetus for HH may have come from the previously described interventions such as Mission-On and Project Energize. Both of these interventions demonstrated the importance of aligning their programmes with the NZC in order to get support and buy-in from schools. Subsequently, the HH intervention followed their direction and aligned learning outcomes for each of the topics over the eight week programme with achievement objectives from the learning area of HPE within the NZC. The intention of the HH programme was to complement and not compete for curriculum time, as was stated by Duncan et al.'s (2011) report in their pilot study. This pilot study evaluation produced some interesting results and thereby was a contributing factor in the proposal to the Health Research Council to develop a full study across 18 schools throughout Auckland and Otago in 2011. The evaluation considered the daily physical activity of students and their consumption of fruits, vegetables, unhealthy foods and drinks over four days after undergoing a classroom and homework based programme on healthy eating and physical activity. They used a range of research methods (including biomedical surveillance measures and questionnaire data) to conclude that compulsory health-related homework appeared to be an effective approach for increasing physical activity and

improving vegetable and unhealthy food consumption in primary aged children. The HH full study followed a similar evaluation procedure.

Whilst most interventions focus on children in the school setting, the HH intervention aimed to develop and test an applied homework programme that required children to be active and eat well at home as well as school. The homework tasks were set to include family and whanau[12], hence an opportunity to influence the wider school community was intended. It is suggested that children are less active and have greater access to energy-dense foods outside of school, therefore the HH intervention had classroom based lessons as well as tasks to complete for homework (Duncan et al. 2011). In contrast, Williams and Hannon's (2013) United States study concluded that physical education teachers (as different from generalist primary school teachers) have the ability to influence and increase physical activity within and outside of class, specifically through the use of homework. Their strategies specified that whilst homework was rare in classrooms in the United States, implementing homework into a physical education curriculum could bring credibility and validation to physical education, as well as helping students to meet their six national standards (National Association for Sport and Physical Education, 2004, cited in Williams & Hannon, 2013). Despite this research focusing on schools in the United States, there are some clear parallels with the intent and purpose of HH. Both interventions promoted lifelong physical activity and good nutrition amongst children and family members through mutual encouragement, with parents engaged in the homework tasks with their children, and the children in turn relying on parents to help them complete homework and assignments from their student manuals (Duncan et al. 2011). One major point of difference between the United States and New Zealand studies is that the HH programme applied tenents of a pathogenic, biomedical health promotion model, despite the rhetoric being to create effective and sustainable programmes that encourage young people to lead healthy, active lives. The HH intervention used the efficacy of a compulsory homework programme for increasing physical activity and healthy eating in children, through a combination of in-class teaching, a homework schedule and rewards (a coloured wristband), which encouraged children and parental participation and family/whanau involvement. As part of the evaluation, HH used surveillance measures

---

[12] Whanau is a Māori term for family (including extended family)

to test BMI (weighting and measuring) and pedometers for recording physical activity, whereas in the Williams and Hannon (2013) intervention, the students were given a list of strategies for homework projects (most of which were written tasks) and the researchers used self-reporting (questionnaires) for information on increased physical activity levels.

The focus on the home environment (as adopted by the HH intervention) was developed as a result of analysing previous family oriented studies that were successfully implemented through a school environment (Duncan et al. 2011). Whilst the full HH intervention study results are still being analysed, the HH pilot study results of 97 children (57 intervention and 40 control) indicated that there were positive effects on the daily step counts (using pedometers) of both boys and girls. They noted that the proportion of children achieving step count targets directly related to the prevention of excess body fat, increased from 8.6% to 31.3% in the intervention group, whereas children in the control group only increased from 14.3% to 16.7%. Duncan et al. (2011) state that only two other behaviours showed significantly different pre-post changes in the self-reporting findings between intervention and control participants. Participants stated (through self-reporting data) that on weekends, vegetable consumption increased by 0.83 servings per day and unhealthy food consumption decreased by 0.56 servings per day as a result of programme participation. According to Duncan et al. (2011), the HH pilot study resulted in approximately 25% more physical activity each day in both boys and girls, and was effective at encouraging activity on both weekdays and weekends. Despite the small sample size, as expected in a pilot study, the results also suggest that compulsory health-related homework could offer multiple benefits for children, as their vegetable consumption was higher and unhealthy food consumption was reduced. To date, the evaluation of the HH intervention (full study) is still in progress, however the findings from my study could provide complementary information, enabling a wider understanding of school and homework based health education.

Summary

This chapter discussed the discourses of obesity and healthism literature and considered the influences these have had on education policy and practice. The literature supporting the inclusion of biomedical health interventions to address these discourses

was examined and evidence of biopower through the use of biopedagies exposed, substantiating the need for my study to contribute to this body of research. The concept of body pedagogies was explored and the themes that influence how young people learn about their bodies both from a societal level and within the classroom and school community were examined in relation to my study. Examples from sociology and education literature were used as evidence of practice, along with the examination of models of health promotion, including salutogenic approaches to health education policy and practice. The interplay of messages systems such as curriculum, pedagogy and assessment that constitute the structure and processes of school knowledge, transmission and practice, were investigated. School culture was examined in respect to how it can foster biopower and biopedagogies. I discussed the intent of health and physical education, describing how a socio-critical perspective along with the philosophy and underlying concepts of HPE within the NZC are relevant for considering how and what children learn. Finally, information on New Zealand government supported health interventions, the HH intervention and the subsequent results of the HH pilot study were shared, as this provides a background to the intent and purpose of my study. The chapters to follow will reflect on my findings of children's perceptions of their bodies and health and their experiences as a result of the HH intervention and the continued whole school health focus, thereby enabling my research question to be discussed.

Chapter 3. Methodology

Introduction

This chapter is divided into four main sections starting with my research question and the epistemology underpinning my research. I believe there is no objective reality divorced from people. This study therefore focuses on understanding the social world of children and their subjective realities in relation to their body and their selves. After discussing this stance I provide a rationale for adopting an ethnographic methodology and in particular explore why this methodology was suited to my inquiry in a school environment. The third section of this chapter considers the research approach and the design and methods adopted. I describe the ethical considerations undertaken and the processes utilised to gather the data. The research tools that helped develop my thematic framework are shared in the fourth section as I discuss how these were applied to analyse my findings. Finally I summarise the chapter, justifying it from an ontological perspective.

My research question

As explained in Chapter 1 the research question at the centre of this study was "*What are the children's perceptions and experiences of their bodies and their selves within the micro-culture of a school during and after a Healthy Homework (HH) intervention?*" The purpose was to determine how primary school students understood and felt about their bodies and their selves as a result of participating in a health intervention programme and the ongoing teaching and learning about health in curriculum, through Tuihana's whole school concepts of *Being healthy* and *Being human.* I chose an ethnographic methodology because it was the form of qualitative social research where an interpretive perspective could be adopted as an inquiry into non-quantifiable features of social life (Bryman, 2004; Carspecken, 1996; Hammersley & Atkinson, 1983; Walford, 2007).

Positioning my study

My research arises from an interpretivist paradigm. Grix (2010) highlights the importance of recognising and understanding that individuals have different views of what constitutes social reality (different ontological assumptions) and different ways of gathering knowledge (different epistemological assumptions). Accordingly I accept that there are multiple truths amidst efforts to understand children's lived experiences (Crang & Cook, 2007; Sparkes, 2007). My study took a qualitative approach that draws on relativism. Crotty (1998) suggests that the relativist position establishes multiple constructions of reality which suited my study, as a school environment has its own social climate and cultural ecology. A school community includes students, teachers, parents and other associated stakeholders within an educative environment. As a researcher I was immersed in the environment, observing participants as part of their social world over a two year period. I attempted to understand the perspectives of my participants, (Bryman, 2004), and through adopting a subjective epistemological stance I endeavoured to search for truths and meanings from their perspectives, interpreting and articulating these in relation to body pedagogies.

Mason, along with Grix (2010) and Crotty (1998) suggests that epistemology embodies a certain way of understanding what it means to know. In this study, the focus was creating meaning and sense out of the knowledge gained from my participants (Richie, Sarah and Tara). Engaging with their worlds involved me observing, participating and interacting with them in order to understand how they view their bodies and their selves (body pedagogies) through exposure to a health intervention and the ongoing School's health topics taught over two years. My intention was to provide ways of seeing things through the children's lenses of their world at school, and to understand the culture embedded within their body pedagogies, knowing from an ontological perspective that I was very much part of their lived world. The consolidation of my personal and ethnographic self along with my conscious awareness of situating myself in the real world of my participants, enabled me to use an interpretive perspective in order to make social and cultural critique. However, to make ontological sense of this, I had to connect it to my 'lived experience'. Further explanation of this experience and reflexive discussion about it can be found in the following sections and in Chapters 1 and 9. I constructed meaning through constantly revising my data and aligning it with what I knew from the literature as a researcher and as a health and physical educator. At times I had to challenge

my own assumptions and beliefs and from a socio-critical perspective, I had to make sense of the data through questioning the stated 'truths' (Bryman, 2004; Crotty, 1998). To reiterate, the knowledge in this research is viewed as indeterminate and often as the result of an interplay of subject and object, as evident in my discussion (Chapters 5-8) – a feature of postmodern thought.

The *Seventh Moment* of qualitative inquiry

Operating in what Denzin (2001b) terms the *Seventh Moment*, my methods of inquiry were concerned to some degree with the 'what is' and the ways it can be shown. The *Seventh Moment* is a term used in qualitative inquiry and situated in the 21st Century to describe the trend that opens doors on new ways of studying and looking at human behaviour, attitudes and conditions (Denzin, 2001b; Denzin & Lincoln, 2000). The *Seventh Moment* is a period of "ferment and explosion" (Denzin & Lincoln, 2000, p. 2), that is "defined by breaks from the past, a focus on previously silent voices, and a concern with moral discourse, with critical conversations about democracy race, gender, class, nation, freedom, and community". (Denzin & Lincoln, 2000, p. 1048). In essence, Denzin (2001b) suggests the *Seventh Moment* is about scholars helping populations to find their own cultural homes. He suggests researchers must qualify (make clear) their own value positions, including the so-called objective facts (ontology) and ideological assumptions (epistemology) attached to that position.

I focused on the *Seventh Moment* and post-modern forms of thought (Denzin & Lincoln, 2000) and used a subjectivist epistemology to clarify meaning and describe my understanding of the students' world, their classroom and their school culture through their social actions and through inculcating myself in their world. However, as in any research, one cannot escape the reality that the researcher is an instrument that filters data through their own paradigms. In the postmodern realm, my research focused on methods which are sensitive to the different ways social reality can be constructed (Bryman, 2004) and meanings made. I also acknowledge that it was impossible to divorce myself from the ongoing construction of my experience of the social world. I needed to recognise and explore the social construction of bodies, and interpret my participants' perspectives. The processes (tools) I used over time, enabled me to understand this social world from the perspective of others – in this case the students (Richie, Sarah and Tara) – as they were

also the 'instruments' in the interpretation process, which is never neutral, but rather, is a focus for constant reflection in the research process (Sparkes, 1992).

My research process – interpretive and ethnographic

My research study can be regarded as an interpretive inquiry, where I considered past genres (traditional, modern and structural) used in qualitative social research, with the present (postmodern) and the future (*Seventh Moment*). In qualitative research interpretivism focuses on the understanding of the social world through an examination of that world by its participants (Bryman, 2004; Denzin & Lincoln, 2005). Denzin and Lincoln (2000) suggest that this will enable the researcher to make themselves visible in the text – which was inculcated from a participant observer's perspective embedded in the world of my participants in their classroom and school. The principle of engagement by the researcher contains two elements: human connection with participants, and an investment of time. There is an assumption that, as the researcher becomes a more familiar presence; participants are less likely to behave uncharacteristically. The idea is that participants 'perform' less, and, as trust builds, reveal more details of their lives (Walford, 2007). This was evident within my study as my role became less of an 'observer' and more as a 'classroom participant', albeit as a teacher aide in the school. Priessle and Grant (2004) suggest that any evidence gathered during research is never separable from a researcher's self and is inextricably linked to the perspective of the research – *who* is only an instrument of data collection. In addition, self is always present in the *Seventh Moment* (Denzin & Lincoln, 2000). As an educator with thirty years experience, I had to ensure I maintained some relativity as I was also a research instrument and as such, filtered the findings through my own paradigm, using an interpretive lens to uncover multiple truths. Subjectivism suited my study as I could not separate my reality from those of my students. This created constant reflection as I sought to explain the meaning and use of body pedagogies, from Richie, Sarah and Tara's perspective as social actors in their learning environment. I used participant observation as a means of gathering in-depth data which enabled me to focus on their actions, in order to better understand individual behaviour.

The interpretive perspective enabled me to describe my observations, my personal constructs, the negotiated meanings and definitions of situations – all related to understanding how children make sense of their bodies in relation to health and wellbeing.

As Denzin explains, 'final interpretive theory is multi-voiced and dialogical. It builds on native interpretations and in fact simply articulates what is implicitly in those interpretations' (Denzin, 1989, cited in Vidich & Lyman, 1994 p. 42). Walford (2008) concurs by suggesting that including multiple perspectives will enable researchers to know more about children learning. He states "if we want to know more about children learning, it makes sense methodologically to investigate directly those who know best what it is like to be a child learning" (2008, p. 12). In my study the children's perspective of their bodies and health was paramount, but I was also cognisant of the influence of teacher pedagogy, curriculum, school and classroom culture and the influence of the home. All of which contributed to the analysis of my findings.

Connecting my 'lived experience' and challenging my assumptions

In embarking upon this research I was aware that at many points (starting with the formulation of my ideas for the study) my personal experiences, beliefs and assumptions would be influential. As Crotty (1998) suggests we cannot avoid embedded assumptions in connecting human knowledge and realities to what we encounter in our world. My realities include my family, my upbringing, my development from a child to an adult, my work and leisure activities and my life experiences. As an educator, I accepted that my perspective comes from my passion for pedagogy, for health and physical education and for enhancing my understanding of factors that influence wellbeing.

Ericksen (cited in Pope, 2006) stated that in education interpretivism enables a constructivist orientation to knowledge and a strong attention to a participant's sense of self. I had to achieve a compromise between the ideal self-as-researcher and an acceptable and possible self – one who constructs responsibly and appropriately to my participants in the school environment (Ball, 1990). The risk, uncertainty and discomfort I experienced as a novice researcher in the early parts of my study confirmed this as I grappled with the complexities of ethnographic theory, epistemology and ontology. I needed to realise, justify and maintain a researcher's perspective, engaging with my participants and establishing a 'rapport' within my classroom community whilst conducting an interpretive perspective during my fieldwork. Pope (2006) suggests the interpretive researcher is an "excavator – they adopt methods to get inside the way others see the world" (p. 22). Further information about my role as an interpretive researcher

conducting an ethnographic study is discussed below and reflected on in my conclusion in Chapter 9.

Methodology

The methodology I adopted for my study was ethnography. Ethnographic research looks to explore and appreciate the complex nature of social life, and focus on both what people say and what people might do. It enables the researcher to adopt an interpretive paradigm (Emmerson, Fretz & Shaw, 2001). This classic social research model was developed primarily by anthropologists to document ways of life around the world presumed to be changing rapidly under the pressures of colonization and Westernisation (Noas, 1940; Malinowski, 1922, cited in Priessle & Grant, 2004). These researchers took a visible role in a community or culture for an extended period of time and wrote a contextualised account attempting to portray the culture from the perspectives of its participants (Priessle & Grant, 2004; Sands, 2002). It is from this tenant of social research that ethnography has evolved. Ball (1990) suggests that the choice of ethnography as a methodology not only implies engagement of the researcher in the world under study; it also implies a commitment to a search for meaning, a realisation of preconceptions, and an orientation to discovery. In my study I was keen to discover how children perceived their bodies and their selves from their experience of a health intervention and subsequently, from a continued focus on health topics taught across the whole school.

Ethnography and interpretive research

In education, Walford (2007) suggests ethnographic research can help to understand the teaching and learning processes and the social worlds that contribute to understanding behaviour, values and meanings of given individuals within their cultural context. Learning is therefore an active process of constructing knowledge. From a constructivist perspective which is predominant in teaching and learning in New Zealand schools, students are guided to construct knowledge through social interactions. According to Rovegno and Dolly (2006), knowledge is not only socially constructed but arises within particular cultures and reflects the shared understandings of that culture. It is this opportunity to engage in the learning process within an education setting that I, as an ethnographer, was most interested in. Understanding values, considering social control hierarchies, dominant health discourses and pedagogic practices using Bernstein's theoretical framework on schooling was intriguing to me. I was also interested in the social and cultural reproduction of discourses in which young people (in particular

children) make sense of their social world are deemed significant, particularly in relation to individual construction of embodied identities (Sandford & Rich, 2006). However, I appreciate that Rose (cited in Crang & Cook, 2007) states that the difficulty of interpretation is that researchers can never truly understand others' and even their own motivations.

Ethnography and the learning environment are closely aligned as emphasis is put on understanding the perceptions and cultures of the people and organisations studied – a key strength of the ethnographic paradigm. Although not usually acknowledged, learning involves a process of theory development (curriculum) and testing (assessment) which is closely aligned with the processes made explicit throughout my study. This inquiry method adopts reflective processes, all aimed at continual improvement for the researcher as well as opportunity to make sense of the data gathered. Walford (1997) states that ethnographers move within social worlds, and that to understand the behaviour, values and meanings of any given individual (or group), they must take account of their cultural context. In this respect, ethnography balances attention on the sometimes minute everyday detail of individual lives with wider social structures. Schools and other learning contexts have a particular micro-culture which all the learners and teachers have to understand, therefore my undertaking an ethnographical research project in a school over an extended period of time, enabled micro-cultures to emerge and to be examined. This gradual enculturation process that ethnography entailed, enabled elements of the Tuihana School culture to be identified in a way unlikely arise from other research methods. By living through that process of getting to know the culture, as an ethnographer, I was able to understand the tacit knowledge of those who inhabited the culture, that is, the students, teachers and community of Tuihana School (Crotty, 1998; Walford, 2007). This was certainly the case in this study, as I spent one day per week for two years, in Room 22 with my subjects, embedding myself in their cultural environment and experiencing their school community climate.

Doing ethnographic research as an interpretive researcher

One of the strengths of ethnography was flexibility of the research process (Bryman, 2008). This flexibility which included having informal conversations, actively observing, having interaction with my participants, but most importantly being able to build a relationship of trust with my subjects (Richie, Sarah and Tara) was a determinant

in why I chose to undertake ethnographic research. In ethnography, a researcher is an active instrument in the research process through the gathering and analysing of data and by the very nature of observing their subjects (Bryman, 2004; Pole & Morrison, 2003).

In terms of building knowledge, ethnographers have a constant commitment to modify hypotheses and theories in the light of further data. This was evident in my research study as I coded data and developed themes as they emerged (see later in data analysis section). Walford (2007) suggests that the ethnographer's sense of what needs to be looked at and reported on may change, and initial explanations of what is going on may be supplanted by ones which seem to fit better. Such an approach is consistent with emergent design, another distinguishing feature of ethnography. This suited my interpretive perspective as I approached data collection with divergent beliefs about the nature of reality, making sense of them through constructing the student voice and actions with my own understanding and reflexivity. As an interpretive researcher I engaged with the *hows* and *whats* of social reality. This helped me to understand the social and cultural conditions of both the classroom and school (Pope, 2006). Undertaking this type of ethnographic study enabled me to be a participant observer and engage in informal conversations that could provide further insight and clarification on themes and lived experiences identified during my research (Bryman, 2008).

During the two years of my data collection I attempted to immerse myself in my study in order to understand the complexities and culture of the social world of Richie, Sarah and Tara (and other Room 22 participants) and their school community. Establishing and understanding my role in the research process, was therefore essential. In order to immerse myself in the children's world (namely their classroom, Room 22) I undertook the role of a 'teacher aide' for a two-year period. A teacher aide is a person who spends time in a classroom assisting the teacher to support children's learning at school. They assist teachers in a classroom by working with students on a one-to-one basis, or in groups. Teacher aides can be paid or unpaid positions and contribute to the life at school.

According to Careers New Zealand[13] (2014) teacher aides may do some or all of the following:

- work with students one-to-one, and in small groups, following a programme prepared by the teacher
- help with extra activities, such as physical exercise or physiotherapy
- meet with teachers and parents to discuss students' progress
- help teachers plan lessons for students with special educational needs
- give medication to students who need it
- assist with personal care for a student, such as toileting or eating (www.careers.govt.nz/jobs/education/teacher-aide/)

In both my pilot study (see the section below in my methodological framework) and full study I undertook all of these tasks, responding to teacher and student needs on a daily basis, whilst also conducting observation and research on children's understanding of body pedagogies. I chose to take on this responsibility as I deemed it easier to assimilate into the classroom and children's world if I was an active participant, rather than a passive researcher (Hammersley & Atkinson, 1983; Walford, 2007). As a teacher aide I was able to immerse myself within the classroom and school on a regular basis for an extended period of time, observing behaviour, listening to what was said in conversations, asking questions and interacting with my participants in their learning environment (Bryman, 2004). Acting as a teacher aide, it was relatively easy to gain the trust and acceptance of the class and teacher, as I was a regular participant in school and classroom life. At times I assisted the teacher undertaking duties within the learning environment of the classroom. I tried to follow the principle of engagement as described by Walford (2007), that is, two elements: human connection with participants, and an investment of time. It was always the case, however, in the classroom I had an overt dual role. The participants were aware that I was a researcher as well as undertaking tasks that were typical of a teacher aide. Over time the students and teachers treated me as an accepted member of the school and classroom, sometimes forgetting that my primary role was to undertake research. Inevitably, the dual role presented opportunities but also practical dilemmas for collecting data. As a teacher aide I could observe children playing in the break times and interact with them easily. The outdoor open environment was not conducive to recording field notes but it was a setting that was rich with data pertinent to my study. I frequently

---

[13] Careers New Zealand is a Crown entity established under the Education Act 1989 whose primary goal is to provide a careers system which effectively connects education and training with employment. It is governed by a board that reports to the Minister of Education.

talked into a recording device or made notes about my observations after being with the children in the break times or during the classroom time or after school.

A number of qualitative researchers (Denzin & Lincoln, 2000; Hammersley & Atkinson, 1983; Sanchez-Jankowski, 2002; Pole & Morrison, 2003; Walford, 2008) discuss the role of the researcher and the use of the researcher as an instrument in the research process. In my study, I use the term 'I' and 'my', as I was the research instrument and therefore this use of first person, is consistent with researching first-hand experience (Pole & Morrison, 2003). Bryman (2004) cautions that sometimes the ethnographer can lose their sense of being a researcher and become wrapped up in the world view of the people they are studying. This "going native" as Bryman (2004, p. 302) suggests is the result of prolonged immersion in the lives of the people they study, and this coupled with the commitment to seeing the social world through their eyes can be a risk. I was aware of this and used my supervisory structure for support when I felt I was in danger of losing my position as researcher, to avoid falling in to the trap of not being able to develop a social scientific angle on my collection and analysis of data. However, this was difficult at times as I participated weekly in the life of Tuihana School for two years. I looked upon the three participants (Richie, Sarah and Tara) as 'my students' and the Room 22 class as 'my class'. I was continually making decisions as to whether I should be an active or passive participant, as there were contexts which participation was unavoidable or where I felt a compulsion to join in. One example of this was in the daily fitness activities that I was invited to join by the teacher, or the morning karakia[14], where I chose to participate as one of the class. My experiences aligned with Bryman's (2004) observation that sometimes ethnographers may feel they have no choice in getting involved because a failure to participate actively might indicate to members of the social setting a lack of commitment and lead to a loss of credibility.

Coffey (2002) discusses the ethnographer revealing oneself within the text. Coffey notes that there are a range of examples of those engaged in ethnographic or qualitative research

---

[14] Karakia is a Māori term used to invoke spiritual guidance and protection. Karakia are generally used to increase the spiritual goodwill of a gathering, so as to increase the likelihood of a favourable outcome.

who have reflected upon and wrote themselves into research texts and representations. Coffey discusses differing degrees of authorship and the positionality of the self within both the research and representational processes. Whilst in the school I frequently had my note book present and took down notes openly when situations arose, sometimes positioning myself in the conversation within the text. Initially this activity was curious to my participants, but as time went on I became an 'insider' in the classroom and that meant I was afforded a great deal of trust by the students and therefore taking field notes did not arouse any suspicions or concerns (Bryman, 2004).

Cultural context and embodied learning

Of particular interest in school ethnography is the potential clash of cultures exhibited, in the context that a child inhabits outside school (in family or peer groups) and the context within the school to which the child is expected to conform and perform. My study gathered data from within a learning environment to capture how children felt about their bodies (shape, weight, size) and what they shared about or exhibited what their bodies could do (participate and perform). I was able to explore how young people in an education setting learn in, about and through their engagements with popular physical culture. Sandford and Rich (2006) suggest that the centrality of the body to this process necessitates that learning is understood as an inherently embodied practice, one that is written into the body through the inculcation of values regarding appropriate behaviour, comportment and action. They suggest that embodied learning is defined through contemporary culture and this culture happens outside as well as inside of the school. This setting allowed me to explore the nature of children's embodied learning and gain an understanding of their selves. More about this can be found in my discussion chapters (see Chapters 5-8).

From research approach to research design

Research design as a framework for the collection and analysis of data (Bryman, 2004), starts with a research strategy. An important feature of qualitative design in ethnography for education is that it is emergent and methods may alter during the course of the research process (Pole & Morrison, 2003). However, Miles and Huberman (1994) suggest that there is a clear-cut case for pre-structured designs, conceding that emergent designs 'might' make 'good sense' when experienced researchers have plenty of time and are exploring exotic cultures, understudied phenomena, and complex social phenomena. My design followed a more 'pre-structured' design as I was less experienced. I did not

try to capture the extended text (narrative inquiry) as a story told by insiders (my participants) using their words and perspectives only. Instead I used my background as an educator to interpret their words and actions (interpretive inquiry). Hammersley and Atkinson (1995) agree that the ethnographer cannot truly write from the insiders' words and actions as the subjects cannot always remain unaffected by the researcher's presence.

I undertook firstly a pilot study testing out a range of methods to collect data and then a full study where I collected data using these tools. I engaged with learning that was happening on a weekly and term basis and exposed myself to a range of environments, including the classroom, playground and wider school. I soon recognised that learning is not confined to the classroom, lessons or homework, hence I planned to observe and make meaning from the interactions, comments and my observations of what learning was taking place with the class participants whilst they were in other learning environments (as described in the contexts above) and around the school. The home and school environment was influential and I considered this an integral part of my study as I collected my data.

The knowledge holders - the participants within the *Seventh Moment*

In Denzin and Lincoln's (2000) terms I had to remind myself to focus on working within the *seventh moment* of interpretive inquiry. That is, adopting methods that break from the past tradition (adult centred objectivity and scientific quantifiable data gathering) and focusing on methods that would enable previously silent voices – that of children - to be heard. Adopting strategies and techniques as part of my fieldwork such as participant observation, conversational discussions, interviews and textual analysis enabled me to use their voice and build interpretations of the interactions and understandings of their world, from their perspective (Sanchez-Jankowski, 2002).   I was then able to interpret the data gathered and analyse it in relation to my research question using a range of methods. Methods are techniques or procedures used to gather and analyse data related to research questions (Crotty, 1998). In my study the methods adopted were: participant observation; textual analysis; interviews and field notes. These are defined and expanded upon later in this chapter.

The 'pilot study'

Delamont (cited in Walford, 2008) suggests that novice researchers are often very unclear about what they should be looking at, what sort of looking or watching becomes 'observation' and how to judge whether or not they are doing it 'right'. Therefore as a novice ethnographic researcher, it was important to conduct a pilot study to develop and practice these skills. It was necessary to practise using my research instruments and observation, conversational discussions and note taking skills. I was reliant on myself to develop field notes, use technology such as recording devices and iphone cameras to capture student work and to learn how to assimilate into a classroom and school setting. Ethnographic fieldwork relies primarily on the engagement of the self, and that engagement can only be learned enactively (Ball, 1990).

I undertook the pilot study in week five in term four of the New Zealand school year (21 November 2011), prior to starting the full research project. This school was a multi-cultural school and had a similar decile rating to my research school (Tuihana). I spent several days a week in this school as a teacher aide, testing my observational skills and fieldwork tools and practising my observation protocol leading up to the end of the school year. This enabled me to fine tune my intended methods and refine my practice as an ethnographic researcher through engaging in conversations with the teacher and parent/caregivers and recording informal conversations with all class participants. I also used this time to write a journal and test out my instruments, namely voice recording devices and field notebooks. I was able to openly use a notebook for writing field notes whilst in the classroom or around the school, as well as practice using my iphone as a recording device. When working with students in groups I was able to discuss aspects of the HH programme and get their ideas and opinions on anything of interest. Of note was my attempt at interviewing children. This is discussed further in my concluding chapter when I reflect on my positional experience as a researcher. The pilot study enabled me to also explore the triangulation and trustworthiness of my data and investigate the possibility of including the parents/caregivers of my participants, in the full study. As a result of this, I was confident that the data collecting methods and instruments I was using would be useful for my full study. Further information about these processes can be found in the research methods section of this chapter. Ethical approval (see below) was sort before the onset of the study and full consent and assent were undertaken before any data was collected in both my pilot and full study schools.

Ethics and practical access

Central to my research in both the pilot (practice) and full study was the ability for me to observe the children in action during the school day (both within timetabled classes and during free time), and within their school's social and cultural communities. In order to undertake observation I needed ethical approval of my study. Gaining assent and consent as Bryman (2004) notes is vital for any social research project. Ethical guidelines and procedures from organisations and institutions offer assistance to researchers and I used the ethical guidelines from my institution, Auckland University of Technology. Full ethical approval was gained from the Auckland University of Technology Ethics Committee (AUTEC) on 14 November 2011. Ethical approval from all children, parents/caregivers and participants within the classroom and learning environment was gained at the outset, for both the pilot and my full research study. A copy of all information and assent and consent documents for my full study can be found in Appendix A.

Ethical approval from participants

Ethnographic research can sometimes expose unequal power relations (Crang & Cook, 2007) and as my participants were children under 16 years of age I was conscious that there were no misconceptions about the nature of my study. I took care to clarify that my work was not an evaluation of the HH intervention and that it was pursuing a focus on children in their environment. An information document explaining my study was designed and varied slightly depending on the recipients (Principal, teachers, parent/care givers, students) (see Appendix A). My participants were informed fully about the purpose, methods and intended possible use of my research, what their participation in the research entailed and what risks, if any, were involved. I reiterated about the confidentiality of information supplied by my participants and the respect for anonymity (Braun & Clarke, 2013; Bryman, 2004; Crang & Cook, 2007). I ensured that I had adapted the language in my documents for the different participants – teachers, principal, parents/caregivers and students. Accompanying each information document was either a consent or assent form. As the students were under 16 years of age they signed an assent form, and their parents/caregivers signed a consent form. During my study I had to continue to seek approval from any new participants. This resulted in repeating the process of informing new participants of my study and providing them with forms for assent and or consent throughout both 2012 and 2013. Some interesting issues I encountered were:

- it was difficult to get all parent/caregiver forms back within a timely manner

- some students whilst they gave assent, their parent/caregiver had not returned their consent form, therefore they were not included in my study

- only one student did not give assent initially (circled 'maybe') but within three weeks she had asked if she could change her form to 'yes'

- new students joined the class and my role needed to be explained to them before they were provided with information and assent and consent forms

- over the two year period of my study, my class had four different teachers, each of whom had to be informed of my study and give consent

The School and participants

As explained in Chapter 1 the school where my research was undertaken was one of ten schools in the Auckland region taking part in the HH intervention. After discussion with the HH project leader and the principal investigator, it was agreed that Tuihana Primary School (one of the ten schools) could be used for my study. Tuihana School is a state-funded coeducational primary school in Auckland, New Zealand and is situated in a low-to-moderate socio-economic area. Tuihana School children identified with the following ethnicities: New Zealand European (pakeha) 23%, Māori (indigenous) 33%, Samoan (12%), Tongan (7%), Filipino (4%), with the remainder identifying with various other European (15%) Pasific/Asian (6%) nations. The school roll consisted of approximately 150 children (Education Review Office report, 2014). The Education Review Office (ERO) report on the school during the years of my study stated that:

> The school provides an inclusive learning environment where children engage through trusting and respectful relationships with each other and with teachers. Student wellbeing, progress and achievement are at the centre of all school decision-making. The school's strong connection to its community enriches school processes and systems (Education Review Office report, 2014, para. 1).

The participants in my study were a class of year three/four children, aged seven to nine years old from Room 22. From the class of 20 in my first year of study, all students gave their own assent, and 19 gained parental/care giver permission to be involved in the research. In my second year of study, a further eight students gave their own assent and of those students six gained parental/care giver permission to be involved in the research.

My fieldwork primarily involved observing and conducting informal conversations with the participating students. Within this group I selected three of these children to be the participants for my in-depth study. The full study involved gathering data on these three students during the eight week HH health intervention programme and up to a further two years post intervention. The participants in my study have pseudonyms. To distinguish the teachers at Tuihana School, the Room 22 teachers were either called Matua or Whaea (Māori names for teacher or Mother/Aunty-like). These were:

- Matua Manu, a third year teacher of Māori descent. Teaching was a second career to Manu, having worked in industry prior to his completing a teaching diploma three years earlier. Manu's kaupapa enabled a Māori dimension to envelop the culture of Room 22. He espoused this through his tikanga, Māori language and actions in the classroom and wider school. Matua Manu was a father of two primary aged children. He taught Room 22 for the whole of the 2012 year. He enjoyed playing the guitar and was interested in sport. Matua Manu left at the end of 2012 to take up a teaching position at another local school.

- Whaea Katie was a Pakeha/NZ teacher of ten years' experience who had recently returned from travelling overseas. She was a single person with a holistic interest in health and the environment. She was a vegan and against animal cruelty. Whaea Katie was a spiritual person who practised meditation and yoga and shared this with her students. Whaea Katie left at the end of term two, 2013 as she felt the demands of teaching did not enable her to pursue the other dimensions in her life.

- Whaea Marie was the Deputy Principal of the school and job-shared the position of Room 22 teacher with Whaea Donna (the Assistant Principal), when Whaea Katie left at the end of term two, 2013. Whaea Marie was a teacher of twenty five plus years' experience and came from a family of educators. She was in her second year of post graduate study. Whaea Marie was a NZ/European teacher committed to encouraging her students to excel and adopted a structured traditional pedagogy in the classroom. Her seniority within the school was recognised by students, staff and parents.

- Whaea Donna was of Samoan descent and had recently been appointed to the Assistant Principal's position. She was an experienced teacher who adopted a student centred pedagogy, aligned with strict cultural practices. She was a mother of two primary aged children whose husband was an academic. She stated that she valued research informed education practice. Whaea Donna was respected member of staff.

- The Principal was a committed and strategic leader of Tuihana School. She was of Pacific Island and NZ/European descent had a student centred philosophy which was embedded in the culture of the school. She encouraged her staff to put learning at the centre of their pedagogy and role modelled this. The positive ERO reports of 2011 and 2014 are testimony to her leadership. The Principal was an approachable and caring person. She had an open door policy for parents, students, staff and others. She was committed to on-going professional learning and valued that through demonstrating her own and others research pursuits. Her office was often full of students at break and lunchtimes, enjoying playing ukuleles, using computers or tablets or playing with board games.

The other teachers in the school were referred to as Teacher LL or Teacher LB (pseudonyms). These teachers each taught a year 5/6 class and were involved in the HH

programme. Their interview and conversational data also contributed to my discussion chapters.

My three participants were chosen using purposeful sampling (as outlined in the next section). They were:

- Richie was boy of Samoan and NZ/European descent and the eldest of three boys in his family. He was an enthusiastic rugby league player and an active participant in most sports. He was large for his age and often other people mistook him for being older than his years. He was a sensitive boy, who was often not confident of his academic ability and looked for reassurance and support in this area. Richie was involved in weekend sport, encouraged by his parents who were members of sports clubs themselves.
- Sarah, a girl of Māori, Samoan and NZ/European descent was an only child, living with her father and paternal grandparents. She stayed with her mother one night per week and on alternative weekends. Her grandparents were her caregivers and the stable entity in her life. My discussion chapters (Chapters 5-8) refer to Sarah's parent, which in fact was her grandmother, as she was her legal guardian. Sarah loved animals and birds and shared her passion of these openly. She was an enthusiastic class member who was always keen to contribute to class discussions and activities.
- Tara, a girl of Cook Island and Māori descent was the eldest of two girls in her family. She had a shy disposition initially until she felt confident with others. She enjoyed participating in class activities and loved swimming and playing with her friends. Tara had supportive parents who encouraged her engagement in school and community activities. Tara left Tuihana School at the end of 2012 as her family shifted to Wellington to live.

I gathered in-depth data about Richie, Sarah and Tara's experiences related to body pedagogies and their perceptions about health and bodies, over time and beyond school. However, whilst only three students were studied in an in-depth way, the remaining participating class members (Room 22) also contributed informally to my study through their interactions with my three selected students (the in-depth participants).

Purposeful sampling

I gathered data from the whole class but in particular, in-depth data from three students in one class of year three/four children (Room 22) whose ages are 7-8 years old. I selected these three students through purposeful sampling. Patton (1990) suggests there could be as many as sixteen different types of purposeful sampling. When considering what particular type of sampling I was going to undertake, I had to consider the purpose of my study, the resources (namely the children) available, my research question and the constraints I was faced with. The latter was necessary as I was expecting to be engaged with my three subjects for two years – an extended period of time in terms of ethnographic

research. After reading other ethnographers' work and discussion with my supervisors, I decided that three children within a class of approximately 20 participants would provide sufficient data for my study. I applied criterion sampling (Patton, 1990) where I had a set of prioritised criteria. The criteria can be found in Appendix B. To select students, I picked all the cases that met the criteria, until I had reduced it to six students who filled all criteria descriptors. I then employed random purposeful sampling (Patton, 1990), whereby I asked my supervisor and a colleague to select three subjects randomly from the six presented to them. Richie, Sarah and Tara were thus selected as in-depth participants (one boy and two girls). At the end of the first year, one of my in-depth participants (Tara) left the school and by this stage it was agreed with my supervisors that I would have sufficient data and opportunity to collect enough data in the second year, to continue with the remaining in-depth participants (Richie and Sarah).

Fieldwork

My fieldwork was situated to reflect the interpretive intent of the study. As such it involved multivoiced texts, cultural criticism, socially constructed discourse and reflexive forms of fieldwork analysis (Denzin & Lincoln, 2000; Walford, 2007). I also adopted a poststructural perspective, with the intention to make visible the relationships between the ways my subjects constructed their sense of identity and the sets of social meaning and values circulating in society (Wright, 2004). I sought to find out what the participants thought was going on, what they were doing, why they did it, how they did it, and what was 'normal' and 'odd' for them – all within the context of the school environment. The methods adopted in my fieldwork were primarily participant observation, textual analysis, informal conversations, interviews and field notes. These will be discussed in more detail as follows.

Observing and participating in the observation

Observation in educational settings according to Delamont (cited in Walford, 2008) can be problematic as the research can become over-familiar and boredom can set in. As I had been a teacher, a facilitator of professional development for teachers and a senior lecturer, I knew it would be hard to 'see' new things from those that were familiar to me. As an educational researcher I was aware that it may have been easy for me to rush to judgement because of my background. However, it is also difficult not to judge (Delamont, cited in Walford, 2008). As observation requires adopting a systematic process that has some consistency to it, I considered the development of a 'system' that

worked for me when I undertook my pilot study in another school (see Appendix C for observation protocol). Elements from this 'system' then became *my* system and consequently this system was transferred in to the field work practices I undertook in my full study. My system was to record observations and quotes of my subjects, including any discussion associated with my inquiry question. I recorded voice on my iphone, as well as taking photographs of student work, and material on the whiteboard and classroom walls. I also wrote notes to myself in my notebook, which I would follow up on during the data analysis phase. At times, I was a frustrated and bored ethnographic researcher as Delamont suggests (cited in Walford, 2008). This occurred infrequently and usually only if I was unable to document any data related to my study and research question.

Over the two year period of time I was able to gain the children's trust. I passively conducted observations on the whole class during the school day and in particular – watching what interaction occurred with Richie, Sarah and Tara, listening to what was said, asking questions –collecting whatever data was available to throw light on the issues that were the focus of my research. I stayed with them in their learning environment during the school day. Generally this was in their classroom, but if the class moved to the library, hall or outside, then I accompanied them. When observing, I had my notebook with me to take field notes. I watched, I had conversations with the participants and I made notes to myself, all the time testing what I was learning with what I already knew. I followed up on researching where the gaps were in my knowledge and how this interacted with my prior lived experience and my personal assumptions. This all contributed to my ongoing understanding of their world.

Participant observation involves "establishing a place in some natural setting on a relatively long-term basis in order to investigate, experience and represent the social life and social processes that occur in that setting" (Emerson et al. 2001, p.352). In this case, it was the learning environment of the student participants. Gold (1958) proposed four participant observation roles: the complete participant, the participant as observer, the observer as participant, and the complete observer. I found myself working back and forth throughout my data collection along a continuum of roles, straddling the participant/observer, observer/participant nexus until I finally realised I was predominantly in the 'participant as observer' role, seeking to get a real sense of the

socially constructed nature of reality through understanding children's sense of identity (with respect to body pedagogies) against the sets of social meaning and values evident both in the school and beyond. Hammersley and Atkinson (1983) suggest that the social world cannot be studied without being part of it, and as 'Whaea Denise' I was very much part of the world of my participants whilst at school. As a consequence I have been able to create conclusions and summaries in relation to children's actions and interpretations that were being derived through situations in their classroom and school.

Participant observers according to Crang and Cook (2007) have to get on with the people they are working with in a personal, everyday sense. I was able to gain the trust of the class by being interested and involved in their daily life within their classroom, playground and school. I made myself available to help students and the teacher with a range of tasks and activities. The following are some examples: reading to the whole class during library time; sitting alongside students and helping them with individual work; joining in learning activities when asked by the teacher; answering student questions and giving feedback on work; classroom maintenance (tidying noticeboards, lost property etc); tidying student books and cutting and gluing worksheets. I also undertook staff lunchtime duties which ranged from swimming pool supervision to playground duty, as often as I could. This enabled me to assimilate into the wider life of the school, gain trust and acceptance from other staff and immerse myself in the co-curricular activities of students as I wandered around the school during the morning break and lunchtimes. As a result of this involvement in the weekly life of the school, I was accepted as a contributing member of the school and as such was invited to a range of school functions throughout the two years. This acceptance enabled me to observe the ways in which events developed or the ways in which the different elements of the school's social system (values, beliefs, behaviour) developed and interconnected with my participants and what my focus was, over time.

Informal conversations

One of the strengths of ethnographic research is the flexibility of the research process which enables not only participant observation, but informal conversations that can provide further insight and clarification on themes and lived experiences identified during the study (Bryman, 2008). I conducted a number of informal conversations over the course of two years. These ranged from one-on-one focused conversations with my three

participants, to informal conversations which could involve my participants as well as a number of other members of the class (Room 22) and wider school.

I also collected data from any participant conversations I thought relevant to my research question and study. These were captured either through field notes or by using a voice recorder. Bryman (2008) suggests these informal conversations are probably the most widely employed method in qualitative research as they are seen as a way of accessing, uncovering and exploring the meanings that underpin people's lives, behaviours and feelings. Informal conversations took place at a variety of times and when opportune (Braun & Clarke, 2013). In my conversations with the participants (children, parents/caregivers, teacher/s and Principal) I adopted a range of approaches from semi-structured, non-directional and informal questions, depending on the environment and situation, thus demonstrating an understanding of the meaning of field work within a social setting such as a school (Crang & Cook, 2007; Walford, 2008). Sometimes the conversations took place at the end of the school day (parents and teachers) or during break and lunchtimes (student participants). I was able to ask questions, listening and taking notes of language and considering the bodily conduct of my participants, that is gestures, movement and actions, all of which contributed to their story and our conversation (Sanchez-Jankowski, 2002).

Semi-structured interviews

Hammersley (1990) suggests ethnographic interviews are open-ended, designed to explore the perspectives of the people concerned. I prepared a sample of semi-structured interview questions (see Appendix D) for the principal and teachers of Tuihana School, plus the parents/caregivers of the participants in the study, in preparation for my interview. I was keen to provoke thoughts on the HH intervention, along with reactions and responses as to how the School's focus on 'health' impacted my participants. As a qualitative researcher, I chose semi-structured interviews (Braun & Clarke, 2013) as I wanted to be able to vary the sequence of questions and keep them fairly general, thus enabling me the latitude to ask further questions in response to any significant replies. I conducted all interviews at the school as going to the home of Richie, Sarah or Tara would reveal to them (and others) that they were the in-depth participants in my study. I asked the Principal whether she advised visiting the parents in their home or at school. She advised to use the school environment as it was considered a neutral place. She first

initiated the contact with my participants' parents/caregivers and when I approached them they agreed and said they preferred to undertake the interview at school. Richie's parents were not approached, a decision made at the time by the Principal, as one of his parents was out of New Zealand.

The teachers interviewed also found it convenient for me to conduct interviews with them on the school premises. During these interviews I prepared a list of questions but allowed scope for the participants to raise issues that I had not anticipated. I predominantly used open questions with additional 'probing' which reflected the flexibility of ethnography, however, at times a combination of questioning approaches were used in order to gather the required data (Braun & Clarke, 2013; Crang & Cook, 2007). Roulston (2010) highlighted the value of open questions for semi-structured interviews, often preceding follow-up questions or 'probing' to gain clarification or explore themes further. Crang and Cook (2007) when considering ethnographic interviewing suggests procedures need to be considered when using the interview as a means to understanding social reality. He suggests the qualitative interview is more than a 'friendly conversation' and that the purpose of the interview should be to gain some insight about the human condition and that through the subjective experiences of both the participant and researcher greater insight can be gained. I considered this and tried to link aspects of a personal story to the issues they were describing. In the initial research design I had hoped to interview my three participant's teacher and parents/care givers each term, however I soon realised that I needed to establish myself as a trusted member of the school community before I could ask anyone for an interview. Therefore over the course of the two years I used interviews as a research method only periodically. Instead, I concentrated on engaging in informal conversations with my participants, teachers and parents/care givers whenever the opportunity arose.

Textual information

I also collected and analysed documents relevant to the study (Braun & Clarke, 2013; Bryman, 2004; Williams, 2002). Documents from teacher- and student-produced work related to the children's understanding of body pedagogies were collected and texts analysed. School newsletters and policy documents were also considered for their contribution towards answering my research question. Policy documents included information on Tuihana's website and other websites such as the Education Review

Office (ERO). All textual information was uploaded into a NVivo software programme in preparation for data analysis. Further information about the use of software technology will be discussed in the analysis section in this chapter.

Texts specifically used and generated in the context of fieldwork were:

- policy documents contributing to the HH project
- school and teacher documents e.g. newsletters
- student and teacher produced work
- HH teacher and student manuals
- researcher's diaries (observations –visual and audio, reflections, field notes, analytic memos)
- transcriptions of informal conversations and semi-structured interviews with parents/caregivers, students, Room 22 teachers, the Principal and other teachers of the HH programme

Capturing field notes

It is recognised (Denzin & Lincoln, 2000, Hammersley & Atkinson, 1995; Pole & Morrison, 2003; Sparkes, 1992; Walford, 2008) that field notes and journals are an obvious and longstanding form of including the self in the products of qualitative research. Field journals and diaries provide textual, through often private space for the recording of research experiences, feelings and emotions (Coffey, 2002). In my study, I was able, through the use of a journal (notebook), to gather observed data and personal reflections whilst in the field (my classroom and school). As field notes and journals are the building blocks of qualitative research, I spent time each week during and after the HH intervention and for a further two years developing a thick record of detailed observational notes as part of my primary record (Pole & Morrison, 2003). I was able to take notes openly because I was unobtrusive and selected appropriate times to make notes in my journal (Crang & Cook, 2007). For example, I would have my journal with me and write in it, whilst in the classroom or around the school. Other times I would write notes on a bench outside whilst watching playground activity. If students approached me and asked what I was doing I would always respond honestly and explain my role as a researcher. At times during classroom note taking if the students were curious, I would ask if they wanted to view my notes as I felt this demonstrated trust and openness. At no time did any students take me up on this, therefore demonstrating the high trust model I had nurtured and attained with the class. It may not have mattered if my participants had viewed these notes as these were personal, autobiographical narratives on my observations of the students, in their classroom and wider school environment.

Crang and Cook (2007) contend that note-taking, from months of fieldwork, can amount to tens, or hundreds, or thousands of words. This was certainly the case in my study, and as I was writing openly within my environment, I had adopted a brevity of words and used short-hand codes. Sands (2002) observes that field notes remain the principal method for recording what the 'fieldworker' sees and experiences and translates these representations, images and words into a record that can be accessed and, once refined, understood by others. I captured and represented what was observed as raw notes (more or less as events happen and as I experienced them) for my primary record, rather than follow a prescriptive way of writing.   I then transferred these raw field notes into more comprehensive word processed documents when I had more time. I had them dated each week and collated these into monthly documents. These word documents contributed to my data set which I exported into a softwave application (NVivo) during the analysis period.

Another part of my field note taking was the capturing of visual images of documents, pictures or texts. I was able to take photographs of student and teacher work within the classroom. These ranged from individual student work, to collective class work. Student work was found in my participants' school books, on the classroom walls, on the whiteboards and on the smart board. Teacher instigated work (through directed teaching) pertinent to my study was found usually on the smart board.   Crang and Cook (2007) claim that all acts of recording take place in social, economic and cultural contexts therefore these factual depictions are not free from researcher bias. I determined what to capture and I always asked permission before taking any photographs. There was no instance of children or the teacher/s refusing my requests. I was conscious that I would not capture any real images of my participants as I did not want to suggest that their image (body image) was of importance to me or for my study. Instead I was looking for any representation that contributed in some way to illustrate the children's understandings of body corporeality either through performance or perfection codes, thus contributing to investigating my research question.

Using technology

During my study as I was a regular participant in the learning environment of the class, I was familiar with the technology that was used by both the students and teachers.

Therefore I used a range of technological instruments that were familiar to them in order to not draw attention to myself or what I was doing. These were an ipod, smart phone, and digital recorder to observe and record information.

Using tools such as these are acceptable today as classrooms use technology to write notes, take visual and digital recordings, and to log and analyse material for future use (Lim, Ripley & O'Steen, 2009; Numer & Spencer, 2015;). I used audio recordings for participant comments and observations, and used visual recordings for student and teacher produced work. I also digitally recorded my thoughts on any incidents, events and related interactions that my three subjects had either with myself, their peers, teachers and others in the school learning environment. I reiterate that I was conscious that at no stage did I want to capture images of the students themselves, as I had decided that visual images may influence discussion and understanding of their bodies and their selves, within the wider realm of body pedagogies.

One challenge I faced was in the management of the vast amount of textual data I had acquired. I therefore used a computer to assist with the following:

- writing up or transcribing field notes
- editing field notes
- specific software for storing and coding my data (NVivo) where I attached key words or nodes to segments of text and made them available for inspection
- specific software (Inspiration) to help develop a visual thematic framework storage: I kept my text in organised folders in several places for security (external hard drive, an internet dropbox in the cloud and on my laptop)

Summary

This chapter described the epistemology underpinning my research that is subjectivism and the interpretive perspective embedded in this. I provided a rationale for adopting an ethnographic methodology and stated why this methodology is particularly relevant for the education environment. Using this methodology, I explored and attempted to appreciate the complex nature of social life and messages (both overt and hidden) of my participants, focusing on both what they said and what they did in relation to their exposure to a health intervention and in relation to my theoretical framework (after Bernstein) and body pedagogies (Emmerson, et al. 2001).   In education,

ethnographic research can help to understand the teaching and learning processes and the social worlds that contribute to understanding behaviour, values and meanings of given individuals within their cultural context (Bernstein, 2000; Walford, 2007). My methods and field work demonstrated my understanding of this.

Information was provided about the research approach and design, my role as a teacher aide and the methods I adopted whilst undertaking my research in order to obtain my data set. Finally I described the processes required in order to make sense of the data gathered and the application of research tools that helped develop the thematic framework and categorised my raw data into codes (nodes and sub nodes). I finish this chapter with describing how I used these themes and codes to write up my discussion (writing through codes) that explored and interpreted my participants' experience, including a construction of their knowledge, attitudes and behaviours as they engaged in learning about their bodies and their selves as a result of a health intervention and the School's whole school health concepts. The next five chapters provide discussion from my analysis of the collected data set.

Analysis of Data

In ethnography the analysis of data is not a distinct stage of the research. Instead, it begins in the pre-fieldwork phase and continues into the process of writing reports, articles and books, and in my case, my thesis (Walford, 2007). To analyse the data collected I reviewed the evolution of my ideas, reflecting on what learning was occurring and why, why certain questions were asked or not asked, and why data was generated in a particular way. Throughout the data analysis process, my thinking was informed by my Bernsteinien framework introduced in Chapter 1 and previously discussed in Chapter 2, and the social issues that his work calls for researchers to be cognisant of. In saying this is it important to also acknowledge that in ethnographic research data analysis is recognised as occurring throughout the project, not just at the concluding stage, thus my analysis started as I began my study and at regular intervals during my data collection (Walford, 2007). The ethnographic process according to Hammersley and Atkinson (1995) and the analysis of the research are an interaction between the researcher and the outside world, therefore there is an interaction between data collection and data analysis that has to be sustained. Miles and Huberman (1994, cited in Pole & Morrison, 2003)

suggest interpretation is part of the ethnographer's work in educational settings. Crang and Cook (2007) believe there needs to be a sense of balance between creative and structured processes, including checks on the researcher's interpretations and yet also room to develop ideas when undertaking systematic data construction and analysis. Thus, it is an iterative process in which ideas are used to make sense of data, and data is used to change our ideas (Hammersley & Atkinson, 1995).

One important consideration for me was that as an ethnographic researcher I was immersed in a social setting for a lengthy period of time. Whilst this enabled me to collect rich data from within the school world of my participants, it also proved a challenge as the sheer quantity (volume) of data collected was in textual form and needed making sense of. Hammersley and Atkinson (1995) suggest ideas are emergent from one's experience in the field, and from one's preliminary analytic reflections on the data. This was certainly the case in my study as I had to process and analyse the data, and consider the themes that emerged as time progressed and align it with my theoretical framework, over the two years of my data collection phase.

I collected a range of data using the methods previously described which contributed to my research findings. Bryman (2008) believes research findings can inject a sense of process by seeing social life in terms of streams of interdependent events and elements. With this in mind, I used this data to undertake a thematic analysis, focusing on what I observed and heard. I also used conversational analysis where I focused on how things were said. I focused on the language stated by my participants as well as the way the language was used or inferred, including gestures and visual demonstrations of meaning.

I was aware that my work needed to represent my participants and also contain some legitimation from an interpretivist paradigm (Bryman, 2004). I looked for meaning according to my understanding of the participants' world. I considered my research question, the literature underpinning this and my raw data (collected as field notes). To reinforce what was discussed earlier, informed by Bernstein's work and other applications of it in HPE (see Chapter 2), I focused on four concepts: the exposure of cultural reproduction-production through classification and framing; the influence of societal

discourse (obesity and healthism); the transmission of messages in schooling via the message systems of curriculum, pedagogy and assessment, and lastly the perfection and performance codes evident in children. I developed a thematic framework using these concepts and initiated conversational and textual analysis from my field notes, using coding. Hammersley and Atkinson (1995) explain that in ethnographic coding there is no requirement that items of data be assigned to one and only one category, or that there be explicit rules for assigning them.

Organising the data

I used two software programmes to assist with organising my data coding and with the thematic development NVivo[15] and Inspiration[16]. These programmes enabled me to visually portray my findings and to shape up a framework. In the software programme NVivo, I assigned my data to categories called nodes and sub-nodes, sometimes assigning the data to more than one of these. These nodes formed the basis for my analysis. Analysing data, as Walford (2007) suggests, was where one has to create a balance between suspending preconceptions and using one's present understandings and beliefs to enquire intelligently of the data.

I was systematic and rigorous (through reading over my several times and transcribing my journal notes before uploading into NVivo) with my analysis which was very much grounded in the language of my participants. I was aware of relativism. I was confident that the knowledge I had gained from my data was 'true' as I had experienced and interpreted it (Pole & Lampard, 2002, cited in Pole & Morrison, 2003). This was due to the size of my qualitative data and that as a participant observer over a long period of time, I had an ongoing relationship with it. Through the data collected, I was able to consider processes and interpret the actions of my subjects, in order to better understand their behaviour. Braun and Clarke (2013) suggest that analytical work starts with establishing themes and coding data and then progresses into deep analytic interpretive work in order to make sense of and interpret the patterns identified.

---

[15] NVivo is a software programme that assists the researcher when undertaking an analysis of qualitative data (Bazeley, 2007).
[16] Inspiration is a software application that enables the user to use mapping to visualise and develop ideas, understand and retain concepts whilst planning and organising written work.

The data collected from my research enabled categories and themes to emerge informing my sociological interests and guided the development of a conceptual schema (as discussed above) for consideration. I was cognisant that I needed to keep my schema as close as possible to the 'words' and meanings of the research participants as well as personal to me – a tenant of postmodernism (Miles & Huberman, 1994, cited in Pole & Morrison, 2003). It is from this foundation that I was able to develop further the coding 'nodes', thus developing a framework from which to tell an engaging, useful story about how children made sense of the multiple and complex influences that impacted upon how they understood their bodies and their selves. Content analysis of my data enabled me to develop qualitative descriptors and consider the following questions suggested by Dey (1993, cited in Pole and Morrison, 2003) Who? What? When? Where? Why? In addition I was also concerned with the settings, definitions, processes, events, and strategies adopted by my participants and teacher, and the relationships my participants had with others. "What if?" became a familiar concept for me as I read, re-read, labelled and coded data. I was required to categorise this data and move backwards and forwards through it. This is considered a dialectic process between category and data, something I found iterative as qualitative descriptions can often not be finite and in the true sense of interpretive inquiry (Pole & Morrison, 2003). Data analysis ceased only after the write up phase of my thesis, when the discussion chapters had been completed, as during this writing up phase concepts and multiple truths had continued to emerge and needed to be made sense of, with the literature, my theoretical framework and collected data.

Thematic framework

According to Pole and Morrison (2003) ethnography usually includes the generation of concepts and/or theories, therefore developing a thematic framework for analysing my data proved to be a useful tool as it helped to make sense of a number of diverse themes and to consider the findings in relation to my coding and interpretive assumptions. Miles and Huberman (1994) suggest all ethnographers share an interest in bringing order to the data they collect by looking for patterns, categories, descriptive units and themes. This moves ethnographic analysis beyond descriptions of people, events and phenomena based on insiders' perspectives, to the ways in which researchers make sense of the information they collect and transform, through analysis into findings. I used my understanding of literature on body pedagogies and school based health interventions to drive my research design and process, but allowed a journey of discovery as I uncovered my participants' voices in the data collected and the analysis of this.

The thematic framework focused on a central theme of 'HH and body pedagogies' which my research question was based around, and was informed by my theoretical perspectives aligned to Bernstein's concepts of social theory in schooling. Within these themes I looked for evidence to align to the bigger picture of a Bernsteinien perspective of inequities within the classroom and children's learning and bringing to the fore issues that are grounded in an interest in social justice and equity in schooling and society. Included in the thematic framework were a number of sub-themes. These were the themes that reoccurred from the literature and the subsequent findings in my raw data that pertained to my research question. These themes also influenced my coding and sub coding, which when entered in to the NVivo programme became nodes and sub nodes. I used diagrams and flow charts when I looked for emerging patterns and ideas, all the time configuring my data and weaving this in to my framework. My framework took the shape of a number of modes - description, matrix, table and tree diagram. I initially developed a matrix diagram of my emerging themes, found in Appendix E. As part of this emerging thematic framework I used the software programme Inspiration to pictorially display these. I then developed this matrix into distinct themes as the analysis of my data deepened. The final descriptive thematic diagram can be found in the introduction to my discussion chapters in Chapter 4 (see Figure 1).

Using a qualitative software programme for analysis

The NVivo software programme enabled me to store and sort the qualitative data and use quantitative information, informing occurrence and the number of similar responses gathered, as the research evolved. Data was transcribed and or transferred into Word documents by me for the ongoing analysis, identification and refinement of the terms and emergent themes.

I used the NVivo software programme to assist with the following:

- storage: text, visual and aural recordings
- coding: attaching key words or nodes to segments of text and making them available for inspection
- search and retrieval: locating relevant segments of the text and accessing them to use for thesis writing purposes
- analyses: occurrence of frequency or location of words and phrases

Learning how to use qualitative software can be time consuming, something Pole and Morrison (2003) warn ethnographers about. As I had previously used NUD*IST software

(an earlier version of NVivo), I was able to quickly come up to speed on learning how to use this package. In addition, they also argue that 'computerised' ethnographic analysis has the potential to lose some of its connections to humanistic ethnography. I was certainly aware of this in analysing my data as I was focused in the postmodern realm where the importance of multiple voices and perspectives was paramount in order to find out what body pedagogies existed for my participants in their world within the school setting. Therefore I tried to capture the essence of what my subjects and their participating class members were doing and saying, hence some of my terms, nodes and sub nodes copied language they used for example, the node 'bad food' (see Appendix F).

Coding Trees – a heuristic representation

In NVivo, codes are referred to as nodes. From my matrix of emerging themes (Appendix E), I was able to configure the nodes and sub nodes and develop a descriptive structure. Over the period of data analysis, this structure was refined as a tree diagram and is now included in the introduction to my discussion chapters (see Figure 1 in Chapter 4). Coding is the starting point for most forms of qualitative data analysis and in my study it involved generating an index of terms that helped me to interpret and theorise in relation to my data themes (Bryman, 2008). This structure then shaped the discussion chapters, each focusing on one theme aligned to my theoretical perspectives (after Bernstein), emerging from my data. The discussion chapters focused on:

- the exposure of cultural reproduction-production through classification and framing; (Chapter 5)
- the influence of societal discourse (obesity and healthism) (Chapter 6)
- the transmission of messages in schooling via the message systems of curriculum, pedagogy and assessment (Chapter 7)
- the perfection and performance codes evident in children (Chapter 8)

Field notes and the collected data were assigned to subsequent nodes (originally obtained from my literature review) or themes as they emerged, culminating in alignment within the thematic framework. Bryman (2008) suggests that coding can sometimes create fragmentation and a decontextualisation of text. In my study I was aware of this from the outset and therefore the use of the NVivo software programme was employed to help address this.

Crang and Cook (2007) suggest writing through codes (nodes) is dialogic. When considering my data, I chose this dialogic to analyse and write up my discussion as I was able to construct some understanding from the codes and sub codes using my knowledge from literature as well as the knowledge I interpreted as demonstrated by my participants. I developed node headings and used sub-nodes to organise my data using the NVivo software. Specifically, I created a node tree and coded the relevant nodes according to content. I was expecting to create new free nodes as the themes emerged as well as sub-nodes in response to data gathered. This occurred throughout both my data collection and analysis phases. The sub-nodes were then allocated to a parent node in order to provide a data set for analysis. From the node and sub-nodes (see Appendix F) I was able to develop hypotheses about the linkages to my themes and I then referred back to my data for confirmation of these. This data set then was included in the four themes and ten sub themes and provided headings for my discussion chapter.

Conversation Analysis

As a result of being a participant observer, I was able to observe or be part of informal conversations. Notes or recordings taken from these conversations were transcribed into text documents for uploading into NVivo. These conversations were then reviewed and contributed to 'conversation analysis' a process that Bryman (2004), calls "a fine-grained analysis of talk as it occurs in interaction in naturally occurring situations" (p. 365).

In many instances conversation analysis begins with the researcher noticing something significant in or striking about the way a speaker says something (Bryman, 2008). An example of this and one that was often apparent in my experience with my participants was first noticed by Harvey Sacks (1974, cited in Bryman, 2008 p. 365) was when children often began a question by saying "You know what Dad (or whoever)?" when among adults. This occurrence was evident in my data as my participants would often want to insinuate themselves in conversations as legitimate participants and be able to inaugurate sequences of the talk, often starting with "You know what Whaea Denise?" and I would respond with "What?", thus allowing them to initiate or input into the conversation.

Bryman (2004), states that "conversation analysis takes from ethnomethodology a concern with the production of social order through and in the course of social interaction, but takes conversation as the basic form through which that social order is achieved" (p. 365). This type of analysis of conversation is specifically concerned with the index of words and the context that they are grounded in, however, it can sometimes miss the social context in which it occurs. I was aware of this when considering my data and made an effort to ensure I used a wider context - the immediately preceding talk, the culture of the group and the action setting in which the conversation occurred, to align with the values, beliefs and typical modes of behaviour in my participants' classroom.

Textual analysis

My field notes, interview transcriptions, 'factual' reports, school and teacher documents, and student and teacher produced work were interpreted and reinterpreted according to textual conventions and representations. Atkinson (1992) suggests all ethnographic reading and writing about in the field, are textual productions. He proposes that the 'field' of observation is the outcome of a series of transactions engaged by the ethnographer, firstly through their gaze, secondly through his or her ability to construct a-text-of-the-field and lastly through the reader's reconstructing and recontextualising interpretation (Atkinson, 1992 cited in Pole and Morrison, 2003). I translated my field notes into text using what Hammersley and Atkinson (1995, cited in Pole & Morrison, 2003 p. 90) describe as "a narrative construction of everyday life". I used a descriptive account using quotes, conversations and interview notes to evoke a range of understanding about 'what is going on' for my participants. For the other data sources such as school newsletters, children's work and teaching materials, I was able to consider these and gain some understanding which contributed to my interpretation of the children's experience of their bodies through learning in and from a health intervention and other ongoing health topics.

Discourse analysis

Discourse according to Bryman (2004) is not simply a neutral device for imparting meaning. Following this tenant I was able to take both a relativist and a constructionist approach to analysing my data. As there is no one version of discourse analysis, I preferred Potter's (1997, cited in Bryman, 2004) definition: "discourse analysis emphasises the way versions of the world, of society, events and inner psychological worlds are produced in discourse" (p.370). I was able to be true to my participants'

voices, as after spending time with them. This allowed me to see how they construct meaning from their world. From an interpretive perspective, and through the lens of my Bernsteinien framework, I considered the reality of the data and its relationship and interaction with my participants' social setting. This then enabled me to assign it to a specific node or sub node and order it under a theme or sub theme.

During analysis, I tried to draw on conversation analytic insights into the ways in which interaction is realised in and through talk, in interaction. It was important not to speculate but to discern from the sequences being analysed the relevance to my research focus. As a participant observer I was able to interpret the sequences of talk recorded, and along with my field notes, used these to understand and construe meaning from the discourses evident in my data.

Writing through codes

Crang and Cook (2007) suggest that when writing through codes the research is always dialogic. Four themes emerged from my data (see the introduction to my discussion chapters, Chapter 4) and the discussion entailed within these was co-constructed from my interpretation of this and from my participants' understanding of their bodies and their selves. I analysed the data and configured them into a whole, in the way that told a story. Connelly and Clandinin (1990) state that field records collected through participant observation in a shared practical setting is one of the primary tools of narrative inquiry work. My discussion chapters described evidence of children's experiences of their bodies through my interpretation of their everyday social world at school. I constructed my discussion from structured and unstructured dialogues and observation of my participants' actions and compared these to literature and my theoretical perspective before analysing their meanings, relating these to my themes and ultimately my research question.

The dialogue ranged from being explicit statements and actions which required little interpretation, to more complex concepts which required subjective interpretation. This subjective interpretation was constructed from my understanding from within the data. This, in itself, required me to create a logical argument under the themes identified and through my participants' voices, construct a story that worked as a whole. It should be

reiterated here that as a researcher in my participants' world at Tuihana school, I was able to observe, look for and interpret messages that aligned with my own understanding of their language and actions, as well as with the literature pertaining to Bernstein's concepts that were adopted and pursued in this study and to body pedagogies. I used their language as quotes providing evidence to describe, compare and relate arguments from individuals weaving them into sections and sub-sections of the whole narrative. I was concerned with providing a sense of the whole when I was writing my up my discussion chapters and for the reader to get a sense of this, and not read it as cause and effect. Thus, each theme was discussed within a chapter but pertaining to the whole. Connelly and Clandinin (1990) suggest that this is a difficult task for the writer as it presents a dilemma in the writing because of the need to include concrete experiential detail. However, in my discussion chapters (Chapters 5-8) I have provided a detailed and reflexive ethnographic account of the fieldwork in which the voices and understandings of the children can be heard.

Summary

This chapter described the epistemology underpinning my research that is subjectivism and the interpretive perspective embedded in this. I provided a rationale for adopting an ethnographic methodology and provided the rational for why this methodology is particularly relevant for the education environment. Using this methodology, I explored and attempted to appreciate the complex nature of social life and messages (both overt and hidden) of my participants, focusing on both what they said and what they did in relation to their exposure to a health intervention and in relation to my theoretical framework (after Bernstein) and body pedagogies (Evans & Davies, 2004a, 2004b, 2004c). In education, ethnographic research can help to understand the teaching and learning processes and the social worlds that contribute to understanding behaviour, values and meanings of given individuals within their cultural context (Bernstein, 2000; Walford, 2007). My methods and field work demonstrated my understanding of this.

Information was provided about the research approach and design, my role as a teacher aide and the methods I adopted whilst undertaking my research in order to obtain my data set. Finally I described the processes required in order to make sense of the data gathered and the application of research tools that helped develop the thematic framework and categorised my raw data into codes (nodes and sub nodes). I finish this chapter with

describing how I used these themes and codes to write up my discussion (writing through codes) that explored and interpreted my participants' experience, including a construction of their knowledge, attitudes and behaviours as they engaged in learning about their bodies and their selves as a result of a health intervention and the School's whole school health concepts. The next five chapters provide discussion from my analysis of the collected data set.

Chapter 4. Setting the scene for discussion

Introduction

 The next five chapters are a representation of my interpretation of the data collected over two years at Tuihana School, relating to discourses, body pedagogies and the understandings associated with the body, health and self, that participants in Room 22 displayed and conveyed. My analysis addressed the notions of 'performance codes' and 'perfection codes' (Evans & Davies, 2004c) and themes associated with discourse on the body (obesity and healthism) along with the message systems (curriculum, pedagogy and assessment, Bernstein, 2000, see Chapter 2) that conveyed bodily and embodied issues in a school environment. Individually and collectively the chapters provide an insight into the ways in which children at Tuihana School have understood their bodies in relation to their health and their worlds, whilst at school.

From a sociological perspective (within the ethnomethodological tradition), my discussion is a dialogic and interactive process (Crang & Cook, 2007). I describe actions and present conversational narratives from my findings about body pedagogies, making sense of the participants' perspectives and using literature to critically analyse the implications of the narratives inherent in the data. The discussion in the next four chapters is constructed from my data, based on understanding and convictions generated through my conceptual orientation and interpretation of the range of voices and stories from the children in Room 22.
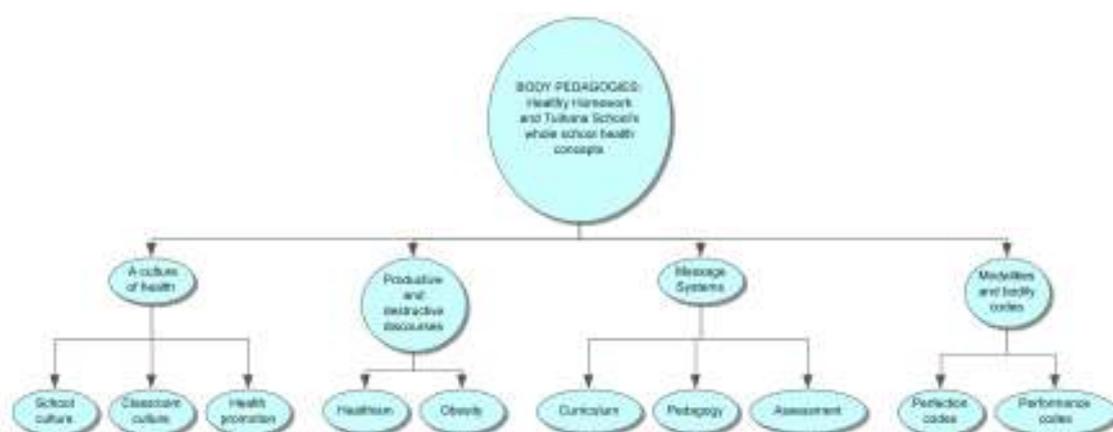
Figure 1 Healthy Homework and Tuihana School

Based on my data analysis, Figure 1 represents the links between the various threads of discussion in the chapters that follow, below.

- Ethnographic methodology is relevant in considering a cultural phenomenon such as the existence of body pedagogies in young children as it enables a dialogic process to co-construct children's understanding, especially through the visibility of performance and perfection codes. (Setting the scene in this chapter)
- Biomedicalised health interventions along with whole school health concepts contribute to the social and cultural constructs within a classroom learning environment and a school's micro-culture. (Chapter 5)
- The interrelationship of discourses such as healthism and obesity are active in a school and associated with, and expressed through, the language and actions associated with body pedagogies of children. (Chapter 6)
- Messages in curriculum health and wellbeing that are embedded in children's thinking, understanding, actions and language are reinforced through pedagogy and assessment (including surveillance). This assessment and surveillance portrays hidden or overt policies and practices and reflects how the body is socially constructed. (Chapter 7)
- Performance and perfection codes are evident in how children come to understand their bodies. (Chapter 8)

In this chapter, I first set the scene with an introduction to the Healthy Homework intervention and the connection with the whole school health concepts *Being healthy* and *Being human*. The School and my participants are introduced and the learning environment is described.

Theme one (Chapter 5) focuses on the health culture of Tuihana School and the classroom setting, which enabled an examination of the phenomenon of body pedagogies as it existed for my students and the class participants of Room 22.

For theme two (Chapter 6), I discuss the productive and destructive discourses evident in the profile of health in Tuihana School. I consider the phenomena of bodily messages and pedagogic understandings of healthism and obesity and how these messages have impacted my participants. I examine the interplay between these discourses, and the effect

these have had on children at Tuihana School, suggesting that biomedical health interventions promoted and delivered to young people in a learning environment are underpinned by obesity and healthism discourses (Cliff & Wright, 2010; Gard, 2008; McDermott, 2011; Powell & Fitzpatrick, 2015; Webb et al. 2008).

I discuss children's perspectives and use their voices about health and perception of their bodies for theme three (Chapter 7). My findings focus on the message systems in which these health discourses are evident, legitimised through a school's curriculum and attributed culture. The discussion reflects Bernstein's (1975, 2000) suggestion that society's values are promoted through the three message systems - curriculum, pedagogy and assessment - and how they have influenced the socialisation of Tuihana School's integrated concept of *Being healthy* and *Being human* along with the HH programme (Bernstein, 1975).

Lastly, theme four (Chapter 8) presents a discussion about the influence these message systems had on how participants have understood and seen their bodies, through two contributing perspectives; that is, performance and perfection codes (Shilling, 2004), as exemplified by Evans and Davies (2004a, 2004b) and Evans et al. (2009). Throughout the discussion chapters I capture and seek to foreground the children's voices, and provide an interpretation of their experiences. In analysing their embodied acts, I note that they exhibited both positive and negative values of different possible behaviours (perfection and performance) of and on the body.

Healthy Homework: a shortcut to health or just another biomedical intervention?

The HH programme arose as a result of a group of researchers explicitly trying to address the growing obesity rate within children and adults, through the implementation of a school / home programme. As previously mentioned in Chapter 1, Tuihana School was one of eighteen schools where this programme was undertaken. The Principal and staff had agreed to implement the programme the previous year and were well acquainted with the aims and objectives. Teacher professional development on the HH intervention had been conducted, with the school attending a regional workshop. This workshop

consisted of a half-day session led by the research team, where the programme concepts and manuals were shared. Further information about the background to HH can be found in the literature review (Chapter 2, section New Zealand primary schools and health interventions).

At Tuihana School the programme was taught by three teachers Matua Manu (Room 22) and two year 5/6 teachers, Teacher LB and Teacher LL. The Room 22 teacher where this study was situated (Matua Manu) embraced the HH programme as part of the wider school focus on health, but seldom used the teacher and student manuals as the research team intended. His reason for this was that he had a class of year 3/4 students (ages 7-8) and the programme was designed for years 5/6, thus he adapted the programme to suit the needs of his students. Teachers LB and LL (the year 5/6 teachers) used the teacher and student manuals as prescribed.

When asked about teaching a health focused intervention such as the HH programme, the teachers contributed the following statements:

> I thought it was a really good basis for a term's concept, working on it. It was good to get the kids to think about what they are eating and their activities, but having it done at home rather than so much at school to get their parents involved and talking about it, because I know a lot of kids just go home and talk about the things, particularly when they were finding out bar codes, not bar codes, but the nutritional information on the back, so they like those sort of things. They loved making up games and going out and playing, so there were lots of little things that they actually really did take on board. (Interview, Teacher LB)

> I think it was a huge amount of work, so it was actually too much stuff for the time that we had, and what I found is that we would start something, particularly seeing how kids were persuaded to buy foods, and we would start on that but because we were going through all the modules bang, bang, bang, we didn't get time to follow it up, so you could have put down a whole week, or even two weeks on each little session. (Interview, Teacher LL)

At Tuihana School, the decision whether to teach all aspects of the eight week programme within the HH intervention was the responsibility of each individual teacher. The programme involved teaching one session per week, followed by a homework task. Resources consisted of a teacher and student manual, a website where students could blog

about their experience and teaching and learning materials. All resource materials were supplied by the project team. Central to the intervention was a homework component, as the intention of the programme was to influence communities and families, therefore there was an expectation that families, including parents and caregivers, would be involved as well. The tasks in the student manual encouraged them to complete their homework activities with their family and upon completion, a reward was gained. The rewards were in the form of a rubber wrist band in bronze, silver or gold. Students gained these bands as they progressed through the programme, each one representing a higher level of completion. The reward system was based on the number of completed homework tasks. Whilst the HH teacher manuals were used for guidance, teachers interpreted the programme based on their own understandings of health and aligning this to the needs of their students. Through their classroom pedagogy the teachers adopted aspects of biopower and biopedagogies, some of which were unintentional (see Chapter 2, section on biopower and biopedagogies).

The HH programme

As explained in Chapter 2, the HH programme consisted of eight topics taught over an eight week period. The topics all focused on aspects of healthy eating and physical activity. The teachers of the three classes at Tuihana School chose to timetable the HH session into their week at different times. In Room 22 (my class), I was not always present when the HH session was taught as I only attended for one day per week. As a participant observer, I did not want to create an artificial environment whereby the HH or health lesson was only taught when I was present. Instead, in agreement with Matua Manu, he would decide when he scheduled the HH programme lesson, based on class needs and his timetable. However, from my observation and discussion with Matua Manu, it was evident that he used the HH manuals (teacher and student) to provide guidance and task sheets for use during class time, as well as at home. He stated that he would be guided by the HH programme manual, but that he wanted to be able to construct sessions that were relevant for him and his students (Field notes, February 2012). During week two, he explained to the class that his concept of health was focused on hauora and

that he had adopted this as it was part of his tikanga[17] and understanding of holistic wellbeing. My field notes revealed:

> Matua Manu on discussing the hinegaro dimension of hauroa, had to keep reminding the class that it was not about the body, but the mind. "No, not the body – the mind" he said. When he asked the class to think about a healthy mind, the response from the children was still 'food or exercise or fitness'. It took some time before the diagram (see Figure 2, below) was developed from this discussion. (Field notes, February, 2012)
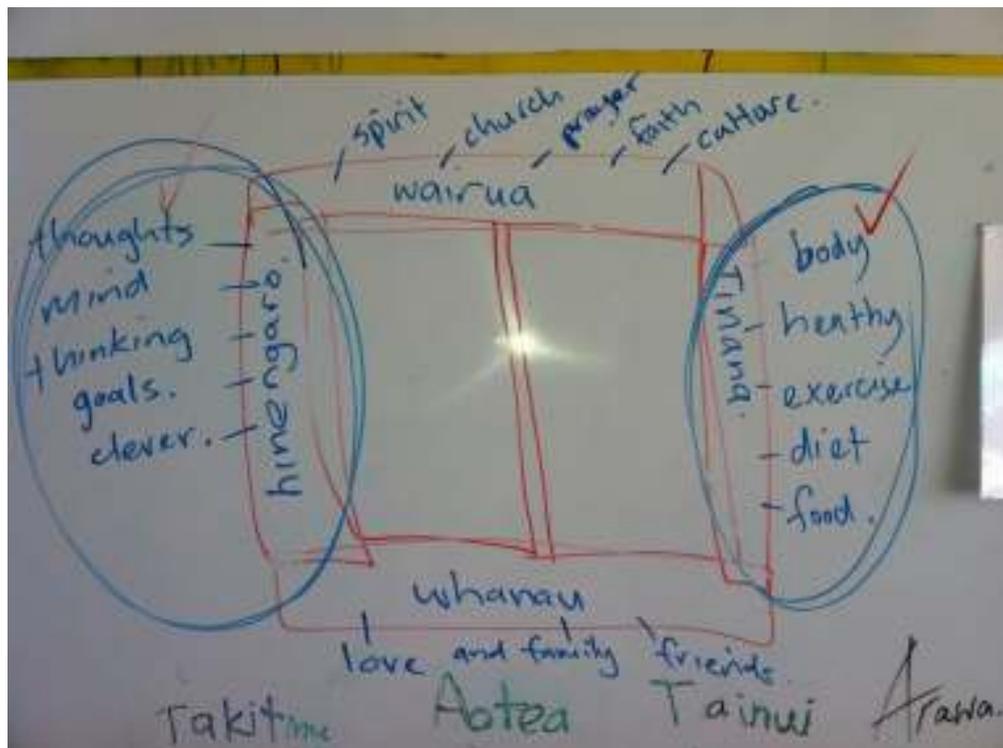
Figure 2 Room 22 Hauora brainstorm

This holistic focus on health and wellbeing (hauora) in Figure 2 is in contrast to what the HH manuals prescribed. In this instance, as depicted in Figure 2, Matua Manu wanted to encourage the children to look at the body more holistically and used the concept of hauora to elicit a more holistic focus from the students, as the brainstorm above shows. Interestingly, Webb et al. (2008) report that when they examined how physical education teachers perceived health and regulated health behaviours, their research found that children focused mainly on physicality (in their perceived image). In Room 22, Matua

---

[17] Tikanga is a Māori term for meaning, custom, obligations and conditions, provisions, criterion.

Manu expanded the students' thinking to include other aspects beyond just physical health.

Following on from the hauora diagram conducted in the class session, Matua Manu expanded the discussion on the word 'hinengaro'[18]. He asked the children to brainstorm their understanding of this. A range of definitions and ideas were shared by the students. These focused mainly around food or exercise. However, Tara said "Karakia gets you into a healthy zone". (Field notes, February 2012). Matua Manu accepted the students' comments, an approach that aligned with what Pinhas et al.'s (2013) study found worked. Their study concluded that teachers should adopt ways that will avoid transmitting their own biases about food, weight and shape onto the students they teach. However, in line with this, it was evident that, Matua Manu used his students' words and their ideas when brainstorming with the class, as Figure 2 shows.

According to Evans and Davies (2004), we should not view individuals (even children) as powerless and unable to resist discourse. Matua Manu tried to be student centred, to alleviate the feeling of powerlessness that is often discussed in literature. In the case above, Tara stated that the mind and thoughts are connected with health, exhibiting her ability to express herself. The students in Room 22 were able to apply their ideas about health into the four dimensions of hauora as demonstrated in Figure 2, demonstrating an alignment with the intent of the Health and Physical Education learning area within The New Zealand Curriculum (Ministry of Education, 2007). Culpan (1996/7, 2008) and Tasker (1996/7) reiterate the need for young people to think critically when they promote the sociocultural philosophy of Health and Physical Education. Having the skills to speak up, negotiate, engage in meaningful activities, be critical, work with others and feel valued are all outcomes of a socio-critical curriculum (Wright et al. 2004). Johnson et al.'s (2013) research in a number of curriculum intervention studies in secondary schools investigated the potential for resistance against socially constructed discourses, by encouraging pupils to adopt a critical inquiry approach to learning. The HH programme provided an opportunity to utilise this; however, it was reliant on the individual teacher's

---

[18] Hinengaro – meaning mental and emotional wellbeing as a dimension of Hauora from *Health and Physical Education in the New Zealand Curriculum*, (1999).

understanding of the HPE curriculum philosophy and pedagogical content knowledge inherent in the New Zealand Curriculum.

Connections with the whole school health foci: Being healthy and Being human

In the first weeks that I was in Room 22 I focused on capturing data from the class about the Healthy Homework (HH) programme, as this was the catalyst for my study and basis from which to explore the children's curiosity about health and hence an understanding of their bodies. However, as the Principal and staff had agreed to have a two year focus on health across all curriculum subjects, I was able to collect data beyond the eight week HH programme and use this to continue my research into students' understandings of health and body pedagogies.

Being healthy and *Being human* were whole school concepts that were intended to focus holistically on creating a healthy culture within Tuihana School. The concepts had a focus topic for each term, with the *Being Healthy* concept encompassing the following in 2012: healthy body; healthy mind; healthy spirit and healthy communities. In 2013, *Being human* had school wide topics focusing on: human nature; human body; human adventures and human attributes.

The Principal focused on the physical and emotional needs of students, as she believed these to be an essential part of health and understanding what it is to be human:

> We drew connections between the HH programme and the overall concept that we were following for the year. We talked about our enduring understandings that we want for the children and talked about our fertile questions and just maybe a little provocation with the teachers and how that is working and what they are actually delivering. (Interview, Principal)

This demonstrated that she and the staff aligned the school health concepts with the HH programme. I asked about the effect of this as well as the HH programme on the school and she said:

> Yes, definitely [an effect], especially in the area of conversation and discussion. [The children] had a lot more knowledge to bring to a discussion. They had grown their connections in and across different areas of 'Being Human.' Umm, and could bring just a lot more confidence. Um, I think it deepened their thinking around 'Being human' and 'Being healthy' and that all contributed to being, um, a very fully functioning human. You know we [the staff] talked a lot about that really. Fully functioning, very aware of how it affected their brain… the connection between water and thinking and even their health, actually. (Interview, Principal)

This value that the Principal put on the alignment of HH, and the resulting recognition that the curriculum foci had on children's learning, is resonated in the quote above. However, my data highlights discourses of obesity and healthism and provides examples of these being influential and prevalent, both overtly and covertly within the classroom curriculum and in school culture. Further discussion about these discourses can be found in Chapter 6.

The challenge for teachers at Tuihana School was to integrate curriculum subjects under whole school health foci. In Room 22 one teacher (Matua Manu) taught the class in 2012; however, over the course of the 2013 year there were three different teachers. In terms one and two the Room 22 teacher was Whaea Katie, and in terms three and four the teaching was shared between Whaea Marie and Whaea Donna. Whaea Marie and Whaea Donna were part of the senior management team and took over the class when Whaea Katie left midway through the year. The Principal wanted to provide consistency to the class, so instead of introducing a new teacher to Room 22, Whaea Marie and Whaea Donna shared the teaching load between them. This meant that there was some variance in curriculum and pedagogy, as each teacher brought his/her unique style and approach to the classroom. These variances impacted on the students and contributed to the message systems inherent in both the classroom and school.

Providing curriculum guidance for teachers in primary schools is essential as the primary school setting is complex (Petrie & lisahunter, 2011). Teachers are expected to have and demonstrate pedagogical content knowledge in eight learning areas, whilst implementing broader educational policies and initiatives. At Tuihana School this was a challenge, but as my findings noted, it was one that the teachers embraced to the best of their abilities. The HH programme, along with the whole school focus on health, enabled messages to

be taught explicitly or hidden, as my data will reveal over the next four chapters. Consistent health messages were conveyed to the whole school by the Principal and staff, whenever possible. These messages were also demonstrated through the actions and role modelling of staff.   The messages were also exemplified through the HH programme and through the whole school health concepts *Being healthy* and *Being human,* discussed further in Chapter five.   The Principal reinforced this during a whole school assembly:

> During term three [2013] the whole school was in the school hall listening to a drumming exhibition by a visiting troupe from the Cook Islands. The Principal said to the school "think about our topic this year on 'Being human'. Put your hand on your heart and feel the beat. It is holistic when we think about a beating drum and our heart."   She concluded by saying "the heart beat is a kind of drum and as humans we all beat together". (Field notes, September, 2013)

Creating a safe physical and emotional environment for students is a requirement of all schools within New Zealand and is included under the Ministry of Education's National Administration Guidelines (NAG), specifically NAG 5(a)[19]. My data revealed that the community of Tuihana School was one where children felt safe because of the caring nature of the children and staff, led by example from the Principal, as attested by the quote above.   The actions of teachers also demonstrated a safe physical and emotional environment within the classroom and school.   In the example below, duty teachers were expected to help children problem solve issues in the playground. On one occasion it was noted:

> The duty teacher spent a lot of time over by the flying fox because it was being dominated by some bigger kids. She suggested to the older children that they needed to demonstrate more 'fair play'.   They (the older children) reacted immediately and helped out the younger ones. (Field notes, August, 2012)

In the example above, students considered the playground environment and used aspects of fair play such as taking turns, assisting others and helping with physical challenges to create a safe physical and emotional environment for each other, thus reinforcing the whole school health concepts of *Being healthy* and *Being human*.

---

[19] National Administration Guideline 5 (a). Each board of trustees is also required to: provide a safe physical and emotional environment for students; (Ministry of Education, 2015)

Fitting the jigsaw together: HH, curriculum and health pedagogy

Keeping messages about health (in itself a complex state as outlined through the literature in Chapter 2) simple is symptomatic of a number of health interventions that have been examined in primary schools both in New Zealand and in other Western countries such as Denmark, Sweden, Australia and the United Kingdom (Quennerstedt et al. 2010; Svendsen, 2014; Webb et al. 2008; Wright et al. 2012). Interventions that use the energy-in, energy-out balance and the good-food, bad-food messages (to name two) exemplify limited understanding of the discourse on obesity and childhood health (Gard, 2011; Welch et al. 2012). Research into such interventions suggests that teachers may well use these types of messages without examining or challenging their underlying intent, and are uncritically reproducing knowledge and adopting pedagogies that can have harmful effects on children's bodies (Powell & Fitzpatrick, 2013). At Tuihana School, my data provided evidence that teachers, students and parents were using simplistic messages that focused on physical health outcomes, either directly or indirectly. This occurred in the HH programme and through the curriculum and the teaching and learning environment. For example:

> In Room 22 during an activity whilst working on abstract nouns Teacher AMW asked: "Who looks after their health in this room?" I noted only eight students put their hands up. She then said, "Who eats lots of fish and chips?" No one put his or her hand up. She then responded with, "Oh, I am pleased you know that!" The class continued to work and one student then said "That means lots of calories." Another responded with "That is not good for your health." (Field notes, September, 2013)

Whilst the students were in some respects seen to be taking ownership for their understanding of health, this example illustrated that there was often a lack of justification for making an argument for or against the judgements, either from the teacher or from the students. This reinforced particular perceptions about health and food – in this case, that avoiding eating particular foods or restricting how frequently you do so is a prime consideration in 'looking after your health'. Gard (2008) suggests that informed decision making is a mainstay of health education practice and that when children take ownership of this practice they can transform their behaviour, knowingly. In the case of the Room 22 students, there was no depth to their thinking or justification for their statements made in the field notes above, indicating either a lack of knowledge or a reproduction of delivered messages. In addition, the teacher's lack of critical thought or opportunity for a 'teachable moment' to link the HH programme and the school concepts together, was

lost and thus unlikely to engage the respondents in any higher order thinking about food practices as related to healthy bodies (Welch et al. 2012).

When reflecting on the intention and outcomes of the increased focus of health on the Tuihana School community, the Principal indicated an increase in whole school curriculum focus on physical education or fitness:

> That is always pretty high, but the general level of activity in the playground is much higher. It is less sedentary, just sitting around and talking. It is more physical. The full grounds are being used. They are seeking more and I am just thinking actually we are going to have to get more activities out there for them. No longer do balls just suffice. They need a bit more activity to keep them busy. Swimming has been full on, all the way through. Everybody is swimming and some twice a day most of them and a different level of achievement in swimming too. You know for the first time since I have been here, we have had competitive races. We have never had that before. So we have got children healthier, being able to swim more, more stamina, more fitness – that is better, the level of activity in the playground has definitely risen. (Interview, Principal)

Interestingly, in the conversation above, the Principal focused on discussing what was seen or obvious from the physical displays of activity; that is, playground and swimming activities which could be either co-curricular physical activities or timetabled physical education. She considered this could have resulted in a change in the activity culture both at a school and classroom level. This inference on the children being healthier could have resulted from the interest in the body which Evans and Davies (2004a) suggest is drawn from Bernstein's subject and student-centred modalities. These modalities, characterised as performance and perfection codes by Evans and Davies, reflect consumerism and global capitalism's desire to focus on the embodied self in order to meet the industry and commercial needs of a nation and will be discussed as part of the last theme in Chapter 8. However, as my findings also show (see Chapters 5-8), the underlying discourses of obesity and healthism were an influence on the students' level of understanding of their bodies and health. These were reinforced through pedagogy and assessment practices, which portrayed hidden or overt policies and practices that exposed how children socially constructed their bodies.

Tuihana School and Room 22

The construction and interpretation of my students' dialogue, and the findings that are espoused under themes in the following chapters, were a result of data gathered from the intervention programme (Healthy Homework), being part of a school focus on the health concepts *Being healthy* and *Being human*, and being part of a school community which included parents, caregivers and extended family members. Therefore, attention was given to messages, actions and statements that were linked to their understanding of their bodies through learning about healthy eating, and being active and interpreted through an understanding of health and physical education literature.

During my study, Richie, Sarah and Tara (as well as their classmates) shared their understandings of health openly, in a range of ways. I was able to construct ideas and messages in the form of language, bodily actions and interactions from them and interpreted these as body pedagogies. These body pedagogies are manifested as themes and sub themes (See Figure 1) and are discussed in the following Chapters 5-8.

Chapter 5. A Culture of Health

Introduction

 A starting point to discuss children's understanding of body pedagogies must include the environment and culture in which their learning is situated. For my students this was the classroom and wider school environment. In this chapter I adopt a socio-critical inquiry and construct my knowledge from the policies and practices evident at Tuihana School, captured through my data. The New Zealand Curriculum (Ministry of Education, 2007) positions children at the centre, and fosters a learning oriented culture. In order to interpret children's understanding of bodily knowledge and learning about health, it is necessary to consider the cultural climate of both the Room 22 classroom and the wider school.

School culture

Cause (2010) draws on Bernstein's and Bourdieu's philosophies that education should be the primary social classifier in society, allowing access for all to knowledge. They suggest that the culture within a school is set by the dominant culture and that this culture essentially mirrors broader society. The dominant culture I observed at Tuihana School was one of learning and empowering learners in a caring environment. Tuihana School's cultural production is derived from its Mission, Vision and Values:

> Mission: To provide a vibrant environment where children become fearless in pursuit of their own learning.
>
> Values: Respect, Integrity, Perseverance and Empathy are the cornerstone values we use to inform our decisions, experiences and interactions. Intentional planning and honest communication throughout the school community is essential for us to give life to our values.

> Vision: Our vision is one where all stakeholders work collaboratively towards achieving the most supportive conditions for successful learning.
>
> Learners with different world views achieve educational success. Effective extra support is provided for those learners who require it.
>
> Teachers use current theory, National guidelines and evidence–based assessment to confidently and competently design and support learning across the curriculum, for all learners. Parents and whanau are involved in, and understand, how to support their child's learning effectively (Tuihana School charter documents, 2012).

School policies are often reproductions of wider social policies and trends, and are represented in a school's mission, values and vision. In order to foster the culture that is espoused above, the values and vision are expected to permeate through all levels of the school and school community. It is these values, along with the vision statement, that primarily influenced and developed the school culture that I observed at Tuihana School over a two year period, through practice demonstrated by teachers and students. If pedagogic practice informs and influences the social context through which cultural production and reproduction take place, then as Bernstein (1975) states, creating an environment for learners is paramount, and this was evident at Tuihana School.

Ethnic and cultural considerations of a school community should underpin a school's values and vision (Ministry of Education, 2007). Therefore, health interventions such as HH that are introduced into a school curriculum should articulate with the values, school philosophy and curriculum. Interestingly, the topics within the HH programme displayed a hegemony often found in traditional English-medium language contexts (Healthy Homework Teacher Guide, 2011). For example, in the breakfast, lunch and dinner topic, the breakfast ideas excluded food preferences from other cultures. However, the HH programme teacher guide did encourage teachers to adapt the programme to meet the specific learning needs of the children, and at Tuihana School the participant teachers did adapt the programme in various ways to suit their students' unique needs.

An example of teachers meeting student learning needs was observed in the first year of my study. Room 22's teacher was of Mdescent and he brought a richness of tikanga and

kaupapa Māori (Savage et al. 2014) to the classroom. When discussing why he chose to get involved with the HH programme, he shared the following:

> I said to my Principal, I said I'm going to teach Te Whare Tapa Wha[20] and I saw the handouts that they gave to us for Healthy Homework, and I went, I'm going to teach that. I pointed to a handout, and she said "Ok." Then I said we are going to do Taha hinengaro. I'm going to teach the three ketes'[21] of knowledge, so in some respects they have helped design my whole class curriculum because we are talking about 'health'. (Interview, Matua Manu)

Matua Manu's adaption of the HH material and the alignment with his kaupapa reiterated what Bernstein (2000) suggests, that values can be developed within the culture of a school and in particular within the rituals, ceremonies and the authority relations that pervade it. In this instance, it was his cultural background that influenced decisions he made in the classroom, which aligned with and in some instances matched the School's values. He adapted the learning environment to meet his children's needs in Room 22. He also shared his cultural values with other teachers in the school. For example, the school had a whole school event where students moved around different stations, participating in physical games and activities, called 'Move It'. During this day Matua Manu taught a Tai Chi activity (part of the daily ritual in Room 22), using Mlanguage and concepts. According to the Principal, this activity was really successful (Interview, Principal).

The whole school focus on *Being Healthy* and *Being human*, along with the HH programme, had the potential to enact Tuihana's School's mission and provide a vibrant environment where 'children become fearless in pursuit of their own learning'. The Principal, on reflection of the two year focus on health, said:

---

[20] Te Whare Tapu Wha is a Māori model of health which compares hauora to the four walls of a whare (house), where each wall represents one of the dimensions of hauora. Durie, M (1994). *Whaiora: Māori Health Development*

[21] A kete is a Māori word for basket or kit

I think that health is sort of ingrained really to a lesser or greater degree, depending on our learning areas, on our concept development. But, it is fairly ingrained in classrooms now. They have their eating inside of course and so the general discussion around that is what they are eating. They have a 'fruit break', there is a lot more discussion around water and eating when they need to eat instead of having some of those institutional barriers around eating. That has made a big difference, especially to our younger children or our more active children. You know they may come up and say, "look, I am hungry." There are no barriers any more, our teachers just say, "pop out and grab something to eat and get back in here." So it has changed attitudes in teachers because they have seen a positive result from it. (Principal interview)

Although Bernstein (2000) suggests that students develop values through being exposed to contradictory and paradoxical practices through external global market forces, they are also influenced by the traditional rituals and practices exposed to them through a school's culture. The discussion above is an example of how, when reflecting on the health focus across the school, the Principal believed it had become part of the tradition and rituals, both of which contribute to the school culture. The Principal used examples that indicated practices around the children's eating and physical activity – two of the outcomes desired from the Healthy Homework programme (Healthy Homework teachers guide, 2011). She mentioned the ritual of 'fruit break', with an emphasis on eating and drinking. This focus on the physical manifestations of health is, as Kirk (1992) suggests, just one source of the production and reproduction of corporeal discourse. It contributes to a whole array of interconnecting systems, both stated and hidden, that are concerned with meaning-making centred on the human body. This systems focus on health, by both children and parents, will be further discussed in Chapter 7, as it demonstrated how health was understood and shared within the school community.

Adopting an alternative concept which enables a more holistic perspective, that of 'body knowledge' (as opposed to a corporeal focus), contributes to a deeper understanding of an individual's sense of identity and 'embodied' self (Evans and Davies, 2004). At Tuihana School, as my findings illustrate, the emphasis was on corporeal discourse and not 'body knowledge'.

The Principal reflected on the HH programme and had this to say about the health messages:

> I think it [HH] has had a subtle effect in things like food choices – which are very different now. And when we do see children coming to school with big bottles of fizzy, the odd, very odd person, you know… packs of chips and twisties and things and that is all. The comments from the other children are like 'oh, you had better send that down to the office'. You know you can't have that at school, and you know you should not really being having that at school at all. (Principal interview)

Cause (2001), Penney and Harris (2004) and Powell and Gard (2014) suggest tensions arise when paradoxical practices and policies are evident in a school. Indeed, Leow et al. (2011) question whether schools should indeed be sites for health promotion. They, along with others such as De Pain (2012), Evans et al. (2008), Petrie & lisahunter (2011) and Powell and Fitzpatrick (2013), suggest that schools are considered as implementation sites for health related activities by both government and non-government agencies. At Tuihana School, the Principal was open to invitations from such agencies, at times being discerning when considering these offers. When asked why she agreed to be involved in the Healthy Homework intervention, she responded:

> It immediately fitted in with our concept for, actually all of the whole year really. Human, being human and one section of that was being healthy. What sort of behaviours, what can we do to maintain the health of our bodies. (Principal interview)

The Principal articulated a clear purpose for adopting the HH programme; however, a number of researchers consider that schools and teachers are not able to apply criticality to decision making when confronted with health promotion initiatives from government or other agencies (Powell & Gard, 2014). The work of Australasian and UK researchers, when considering the critical voice in school health promotion, articulates this understanding (De Pain, 2012; Harwood & Wright, 2009; Penney, 2013). Leow et al. (2011) suggest that there will be more pressure on schools to function as health promotion sites and therefore schools need to better understand how to select, filter, adapt, take up or resist health promotion initiatives. This pressure is evident in the learning area of health and physical education, where it is arguably increasingly important for teachers to be discerning when considering external health programmes (Powell, 2015; Williams & Macdonald, 2015). Whilst the curriculum itself is flexible and is contextually responsive, it also encourages the use of a critical perspective.

The Principal at Tuihana School applied some criticality to her decision making. She alluded to this in the quote above, when she stated that any intervention must fit with the

whole school learning concepts. However, she was also influenced by current national and international trends, and community sport and health initiatives. For example, when the local Tennis Association wanted to introduce a fundamental tennis skills programme into the school, she did not appear to critique the programme and its alignment with the needs of her students, instead agreeing to it based on the local 'popularity' of the programme. Thus, the programme involved the tennis coach teaching the same lesson to each year group each week, irrespective of age and ability (which was disparate to the stated school vision and values). Considering the vision and culture of the school, the programme outcomes varied for the children and did not always provide supportive conditions for successful learning. For example, as noted in my journal whilst observing several sessions being taught to Room 22 by the tennis coach:

> Richie is waiting for his turn at tennis and whilst waiting is throwing the ball up and catching it. He watches the Coach's technique and tries to copy it. He then serves the ball with his tennis racquet. He uses a frying pan grip. The tennis coach praised him for striking it and then came over to change his grip. Student S uses both arms to serve. She is not very coordinated with either, but does not seem to mind that the racquet does not connect with the ball. The Coach does not notice and therefore does not correct her. In addition, I notice during the activities that girls tend to say "sorry" if they hit it wrong. The boys don't admit to any mistakes. (Field notes, May, 2012)

The Principal often espoused a holistic view of wellbeing through her actions and words. She endeavoured to promote this through allowing a range of interventions from health and sport agencies that were permitted to conduct their programmes in the school. However, her critical perspective on holistic wellbeing was not consistent. For example, when asked about the outcomes of the whole school two year focus on health, she stated that health outcomes must be better if student attendance (through no illness) has increased:

> The children are a lot healthier. You don't have those systemic you know health issues, I did not realise it until you asked me that question. We hardly have anyone sick and now we have milk in schools. We hardly have anyone to see the health nurse. When the health nurse comes in, I have hardly anyone to refer to her. Yes, it has been 2 years and when I think back to the children who were in the younger classes. They are very healthy. We had 96% attendance in 2013 and 9% lateness. That is pretty good. I am just putting 2 and 2 together a little bit. So you know they are at school, which means they are probably a little bit healthier. (Interview, Principal)

This comment demonstrates that from the Principal's perspective, indicators of health are absence of visible/reported sickness, consumption of milk, attendance and punctuality, thus not demonstrating her espoused view of holistic health. McCuaig et al. (2013) remind us that by applying a salutogenic approach (a strengths-based positive focus on health and wellbeing, as opposed to a pathogenic, illness related model), schools can focus on their strengths and thus enable a sustainable culture of holistic health. The health and physical education learning area within The New Zealand Curriculum (Ministry of Education, 2007) aligns with a strengths-based approach to health and wellbeing (hauora) as part of its underlying concepts and pedagogy.

Tuihana School's motto, 'Children today, leaders tomorrow' portrays a public message about the school. The motto is on a range of school signage, including the school emblem, website and on any promotional material. A school motto often reflects a social consciousness, which is what Bernstein (1975) alludes to as a reflection of a dominant culture. The Principal reflected this social consciousness, when considering the future mental health needs of her students. An example of her broader holistic perspective on health is evident when she reflected on her students:

> I am really concerned at the moment on the mental health outcomes of our children, and of course that presents to us in the way of behaviour. But we have a lot of anger. The physical health is really quite strong, but the anger is really a challenge for a lot of our children, and of course a challenge for the school as a whole, and the teachers. So that is my current concern. (Interview, Principal)

The Principal was clearly committed to fostering the school vision and enacting the mission at Tuihana School. She had the students at the centre of her focus and was endeavouring to embed health within the learning culture of the school. Yet, the Principal, staff and students only make up part of the culture of the school. The school

community also encompasses parents, caregivers and stakeholders. During my study, I focused on considering the voice of the school community, and thus engaged with the parents and caregivers of my three students whenever possible. I conversed with both Sarah's and Tara's parents when they came into the school on a number of occasions. When I asked about the value of having a whole school health focus and in particular a health intervention like HH, Sarah's parent talked about the challenges for a school community:

> Try to get children off fast foods… I mean I know it's convenient but they need a balanced diet and one thing with the school if there is any fruit, a fruit season they always ask for parents to bring in extra from their trees and they do which is great, but the only way you can do that to get the community involved is to teach the children so that they can teach their children because quite often with the adults now it's too easy, so they are not interested. The only thing the school can do is teach the children about healthy eating and about how to prepare healthy food. (Interview, Sarah's parent)

The quote above reinforced the intention of the HH programme, as teaching children about healthy eating and about how to prepare healthy food was an intention of a number of the homework tasks. Sarah's parent appeared to endorse the intent and purpose of HH and was committed to fostering school culture by supporting it.

Tara's parent also confirmed that her daughter brought what she had learned in class, home:

> She didn't mention specifically about healthy homework, but she would come home and talk about the benefits of eating healthy, exercise and that she would feel better and be fitter and she's aware of that. (Interview, Tara's parent)

Bernstein (2000) and Bourdieu (1984, cited in Shilling, 1993), both suggest that schools favour the dominant cultural group within their organisations, and they agree that the notion of social, physical and cultural capital can arise from a school community. This 'capital' is evident in a school in how they demonstrate body pedagogics – the means through which a culture sees to transmit its main embodied techniques, dispositions and beliefs (Shilling, 2005, 2007). The comments above from both Sarah and Tara's parents demonstrated an endorsement of the HH programme as they understood it. Their statements reflect the dominant corporeal discourses of health in broader society; that is, the attention to food (healthy eating) and exercise (fitness) as a means to achieving

optimal health. Such an emphasis suggests that the school community basically mirrors messages from broader society (Bernstein, 2000).

The HH programme had similar value messages to that of the school. Underpinning the programme was the notion that children were required to share their knowledge and learning with parents and families/whanau, the resulting outcome being to create healthy lifestyle practices within the community. If this was the intent, some of the value messages were not reflected in what parents said. For example, Sarah's parent said:

> I think it's up to the individual parent. I think Sarah gets tired of us saying "you have got to eat your tea, it's healthy", and her grandfather keeps saying "It's a healthy meal, now you must eat that." (Interview, Sarah's parent)

Tara's parent did know what was being taught at school regarding health. She stated:

> "What I know and understand they are learning is different stages in different stages (sic) of healthy living, eating and exercise." (Interview, Tara's parent)

Simplistic messages about food, eating and exercise and their linkages to health are value laden, and confirm that the parents have been exposed to paradoxical statements and practices about health that are promulgating in society. The examples above of healthy eating, healthy living and exercise may or may not be 'healthy'. They also demonstrate an understanding of health from a pathogenic perspective, that is, the body (may or may not be) free from dis-ease and illness. These messages had clearly influenced parents' expectations about what their children should be learning in health.

Tara's parent shared some examples from her daughter's experience:

> Oh gosh, Tara just tells me about the sports that they had done that day and the teacher wanted them to concentrate on certain areas like eating a healthy lunch and not having as much sugar in your lunch box and things like that. (Interview, Tara's parent)

The above comments from parents reinforce what research tells us: that providing consistent socially responsible messages about health for primary school students that are also culturally and critically sound, should be the responsibility of both school and home (Burrows, 2009; Humberstone & Stan, 2011; Quennerstedt et al. 2010; Wright et al.

2012). This shared responsibility would enable a school community to have a seamless cultural understanding, enabling it to create an effective and efficient cultural change in health attitudes and behaviours.

Classroom culture; the Junglezone

The classroom provides an environment for children to learn about their bodies and themselves, and as Penny and Harris (2004) and Evans et al. (2008) remind us, this environment is not value free. Classroom culture is something that requires commitment and input from a range of people and perspectives, if it is to meet participants' needs, be sustainable and reflect the culture of the school. According to Wright (2009), classrooms as primary sites of socialisation are also not free of the influence of biopowers and biopedagogies, both of which serve to monitor and regulate health in order to conform to a social construct. My findings elaborate on the influence of biopower and biopedagogies through the delivery of curriculum and pedagogy in Chapter 7; however, in order to enable this to happen, consideration must be given to the influence of classroom climate.

Teachers in Room 22 at Tuihana School endeavoured to foster a positive classroom culture. Matua Manu aligned the school vision of creating supportive conditions for successful learning by creating a concept called the 'Junglezone'. The Junglezone was the name given to Room 22 at the beginning of the 2012 year. Matua Manu wanted to create a unique learning environment that the students owned and, together with the class, the name 'Junglezone' was negotiated. Students designed a banner and they all created a profile about themselves and what they could contribute to the class as members of the Junglezone. This was displayed on the classroom wall. At times throughout the year, Matua Manu referred to the class as the 'Junglezone' and used teachable moments to reinforce this connectedness. He said, "We are all animals in the Junglezone. We are all players in the Junglezone. We all contribute to the Junglezone." (Field notes, February, 2012)

In order to reinforce this classroom culture during the month of July, when the Olympic Games were on, the class created a Junglezone oath:

> Matua Manu talked to the class about creating a Junglezone oath,
> similar to the Olympic oath that athletes took. He justified it by saying
> "because we are all members and part of the Junglezone, we stand
> together." He used the whare tapu wha model and suggested that the
> students work in groups. He put words on the whiteboard that they
> could consider like honour, truth, promise, respect, team, health, glory,
> spirit, soul. The students then came up with their own group's oath
> words. (Field notes, July, 2012)

Interestingly, when the students failed to reproduce the words he was looking for during the above activity, he asked the following question, "What have we been concentrating on all year? He then answered with a rhetoric question, "Healthy minds, healthy bodies?" (Field notes, July, 2012).

Matua Manu in his actions deliberately reinforced the health topics that had been the focus of the year to date. Thus, he demonstrated an alignment of the school's health focus with classroom work and culture. He brainstormed on the whiteboard, using the words 'healthy minds/healthy bodies' (which were two subtopics of the school's focus *Being healthy*) in the centre. Students then contributed to the brainstorm with the following statements:

> I swear I will respect and be healthy in the Junglezone (Richie)

> I will not take drugs in the Junglezone (Sarah - laughing)

> We will try our hardest, even if we fail (Another student)

> I promise I will not be toxic (Another student)

> We will encourage each other and tell the truth and respect my brother
> (Another student)

> I promise I will fill the 3 kete's (Another student). (Field notes, July,
> 2012)
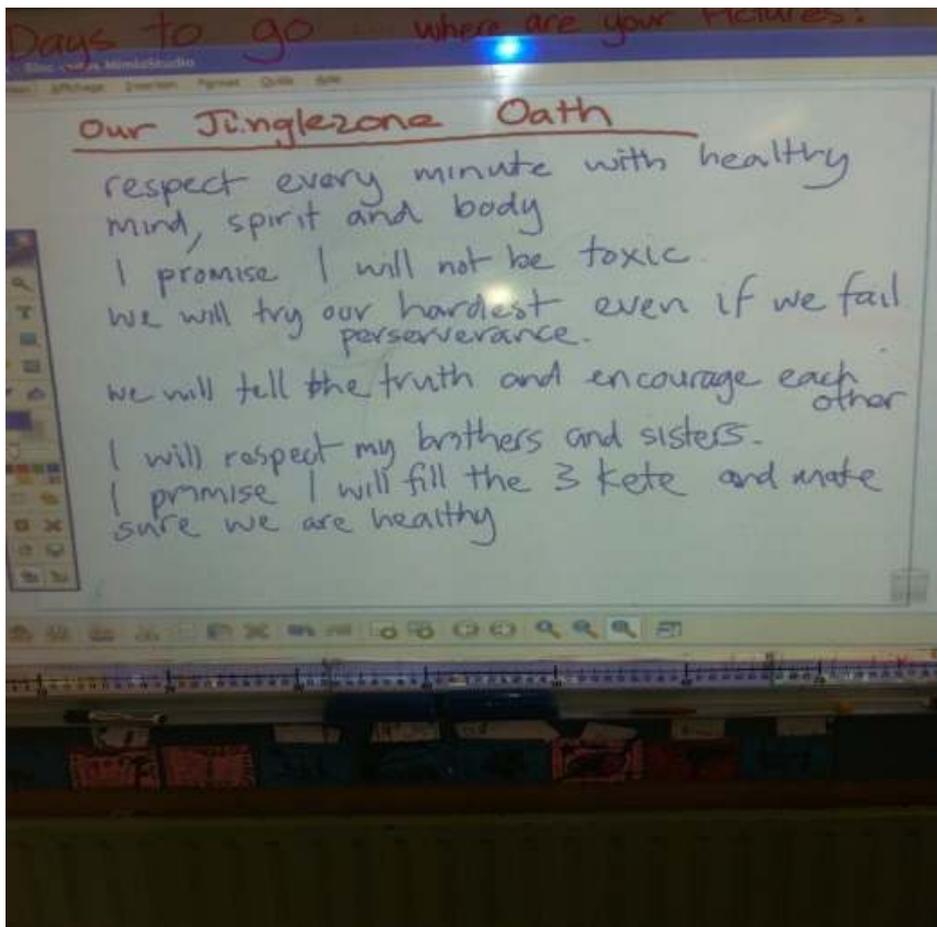
Figure 3 Room 22 Junglezone Oath (August, 2012)

The Junglezone oath in Figure 3 above represented an opportunity to formulate class values. These values aligned with the school values (respect, integrity, perseverance and empathy) that were posted around the classrooms and throughout the school. However, none of the children's statements in the Junglezone oath in Figure 3 were a direct reproduction of the school values, confirming that sometimes the contradictory statements found in a school policy that influence and determine a school culture do not transfer naturally into classroom practice and corresponding culture. Indeed, the Junglezone oath contained paradoxical value statements, some referring to health from a pathogenic perspective (e.g. toxic, healthy body), reflecting deficit and risk discourses.

Matua Manu continued to reinforce the connectedness and culture of the classroom through using the Junglezone concept during learning activities. For example he organised an activity during curriculum time called the Junglezone sprint. This coincided

with Melbourne Cup Day (when a major annual horse race occurs in Australia) on the 3rd of November 2012:

> The class takes part in a "Junglezone sprint" - a walking horse race that takes place outside on the courts during the day of the Melbourne Cup. This was a great use of the teachable moment, as the students enjoyed this as it brought the class together as one in a competitive physical activity, as well as learning about statistics, odds and favourites – all terms used in betting on horses. (Field notes, November, 2012)

At other times, Matua Manu reinforced the values of the classroom culture by referring back to the students learning about health and the school wide concepts and values. He reiterated that "negative or toxic attitudes do not happen in the Junglezone." He linked his expectations of Room 22 students to Mkaupapa when he talked about his class:

> I think that they all have a clear understanding of what their strengths are and be able to set goals, and that's what we talked about with Taha hinegaro (a healthy mind), and also just about being good people, not having people around who are toxic, or a toxic personality, we want people that are non-toxic. (Interview, Matua Manu)

Another example of reinforcing a cultural norm in Room 22 was through the introduction of a reward system where students could earn Junglezone dollars. The dollars (paper in the shape of a $1 note and designed by the students) were housed in a box in the classroom. They were used to reward students for a range of things, from good behaviour, to applying themselves to work, to helping others. When a student had banked 10 Junglezone dollars, he or she received a prize. The prizes ranged from time on the computers, to leadership roles, to leaving early for break times. Intrinsic and extrinsic motivation was used by Matua Manu, demonstrating what Bernstein (2000) called the 'schooled body'. He reinforced the values of the school (and possible wider societal values) in his classroom, in order to influence the children. The examples given above contributed to the classroom culture in Room 22, reinforcing the value systems that are evident in schooling (Bernstein, 2004). Further examples of this will be discussed in the next chapter, when further evidence of children's understanding of health will be explored through curriculum and pedagogical practices.

Health promotion

As discussed previously, health promotion in education settings has some distinct differences from health promotion by health professionals in the public health arena (De

Pain, 2012; Rowling & Jeffreys, 2006). Recent literature suggests a salutogenic approach to health literacy, through adoption of a strengths-based approach, may provide more sustainable behaviour change and focus on process, thereby enabling students to gain a wider perspective of health (McGuaig et al. 2013; Quennderstedt, 2008). (See Chapter 2 section on situating health from an ecological perspective.)

In terms of inspiring behaviour change, Tuihana School used a range of techniques to encourage children to be more active and focus on the school wide themes of *Being healthy* and *Being human*. For example, during the 'walk to school month' students gained points for tallying the times they walked or cycled to school. A chart was put on the wall of classrooms and students received rewards when they had reached a certain point. These rewards were provided by the local council as part of the intervention. This reinforces the concept that engaging in health promoting activities must have some relevancy for the learner (Cale & Harris, 2010; De Pain, 2012; Harwood & Wright, 2009; Kirk, 2006b; Penny & Jess, 2010). Activities that focus on the physical aspects of the body can fall into the biopedagogies category that Harwood (2009) describes. These biopedagogies inform us on how to move and how much we should be moving, sometimes resulting in a failure to connect with an individual's needs.

Whole school events were used at Tuihana School as a motivator for promoting physical activity and influencing health enhancing behaviour. The 'mov-a-thon' held in 2012 was an example of this:

> The 'mov-a-thon' was part of the *Being healthy* whole school concept. The 'mov-a-thon' was one of the most successful fundraisers we have had but not just for the fundraising. For the level of activity and we even included children from Ramsfield College to help us with that. We had older children come in and support us at the stations so it was less about the fundraising and more about the activity. (Interview, Principal)

When asked about the outcomes and influence on health behaviour as a result of the 'mov-a-thon', the Principal commented:

> Oh it was amazing. We had different activity stations all around the school including the pool. So we had children swimming then they would come around for 'jump jam' and then they would go over to the parachute. I think they had a little obstacle course and the children got their tickets clipped and according to how much they had clipped on their ticket, their parents sponsored them. So it was all put together and we will run another one of those again as it was the whole school moving at the one time and involved in something that was really good. (Interview, Principal)

The Principal was more focused on outputs (the activities) than outcomes (the end result, as evidenced in the quote above. She outlined what the students were doing and not what the students learned as a result of the health promoting activity. This reinforced the misconception that by just 'doing activity', they are learning health enhancing behaviours.

At Tuihana School, mixed messages in the form of biopedagogies were apparent. I perceived a dialogical situation where a deficit model of health (through resource material focused on preventing ill health and disease) was evident through the HH programme and through some of the messages taught via the whole school concepts *Being healthy* and *Being human.* For example, the HH manuals were prescriptive and directed children and parents to 'scientific' truths about health and wellbeing. This could be interpreted as a deficit model, where certain truths are used to 'fix a problem' and to change behaviour. In the case of the HH intervention, the 'problem' was obesity. These deficit models of health promotion often use biomedical knowledge (scientific truths) to scare people into taking certain action in order to prevent ill health or disease. In contrast, a strengths-based approach, for example as demonstrated by Matua Manu in his teaching of hauora (see Figure 2), afforded opportunity to build on existing knowledge and attributes, thereby engaging learners' (in this case Room 22's) commitment to change through building on their knowledge to sustain behaviour (McGuaig et al. 2013; McNab et al. 2013; Quennerstedt, 2008; St Leger & Young, 2009).

Where a strengths-based pedagogy was adopted by teachers, they were able to build on the existing attributes of the children, in order for their learning to have meaning and therefore be more likely understood and sustained. A strengths-based approach to health promotion in schools is dependent on all teachers (including school management)

understanding current health education pedagogy. A strengths-based (salutogenic) approach was exemplified at times by Matua Manu and Whaea Katie. An example of this approach was Matua Manu using karakia to start and end the school day and asking the children to reflect on the importance of this for their wellbeing. Some student responses proved that this reinforced their understanding of the importance of the Taha hinengaro aspect of hauora (Field notes, March, 2012). Another example was when Whaea Katie allowed children to lead the meditation sessions and ask reflective questions of other students at the end of each session (Field notes, July, 2013).

Parents were also naïve about the difference between the pathogenic and salutogenic health promotion approaches undertaken by the school to promote health, but they seemed to have both a salutogenic and a pathogenic appreciation of health promotion. At times the parents focused on the corporeal attributes of health. These consisted of the notion that eating healthy food and exercising regularly will enhance your health and keep you from being ill. Tara's parent said: "I think that you could live longer, not be obese. She has said that about her dad, saying dad should not drink so much beer and eat more vegetables and he won't have such a big guts. She's quite funny." (Interview, Tara's parent)

Sarah's parent stated:

> This is a good community school. It's a very good community school. We bought Sarah here because it was close enough for me to walk her up, but I wouldn't change it. I wouldn't change the school because to me this is an ideal [health] environment for a child to grow. (Interview, Sarah's parent)

Sarah's parent in the quote above considers that the school is part of the community and that the environment (including her perception of what they were doing in health) was ideal, thereby adopting a salutogenic health perspective.

Summary

Understanding health by students, teachers and parents was a focus for Tuihana School. The commitment to undertaking a health intervention, as well as a focus on the whole school concepts of *Being healthy* and *Being human*, demonstrated this. The school and community were expecting behaviour change and this was aligned with the school

curriculum implementation. My observations were that despite the good intentions of the Principal and teachers, there was often a lack of understanding of health education knowledge and pedagogy; instead, there was a focus on corporeal identity and wellbeing. However, Richie, Sarah and Tara did exhibit some understandings of 'body knowledge' as a result of this.

Opportunities to align classroom and school culture were evident, with the most significant finding being the adoption of a Māori kaupapa to health, as exhibited by Matua Manu. This concept demonstrated a unique strengths-based approach and went some way to adopting health promoting practices during the 2012 school year. This approach has the potential to privilege some students, particularly the students of Māori ethnicity, although this was not observed in the children as all children seemed to embrace the contexts that were used. Other examples of health promotion in action are discussed in the next chapter, where further evidence of children's understanding of health is explored through dominant discourses.

Chapter 6. Productive and destructive dominant health discourses

Introduction

This chapter focuses on how the Room 22 children at Tuihana School constructed bodily meaning, and how they interpreted health as a result of the exposure to health discourses through the HH intervention and the whole school health concepts that shaped the culture of the school during 2012 and 2013. I use direct quotes from children as section headings and under each section I provide school, student, teacher and parent perspectives relating to each section quote. I use the literature from Chapter 2 as a foundation for examining the dominant discourses of obesity and healthism, as they either intentionally or unintentionally reinforce messages that influence and shape the bodies of young people. Although the terms obesity and healthism did not feature explicitly in teachers' or others' dialogue during my study at Tuihana School, both discourses were evident through the actions and language of the students, Principal, teachers and the school community (parents and stakeholders), as provided throughout this chapter.

Bodily discourses

The messages about responsibility for health as a focus on bodily size and weight were prevalent amongst children as young as eight years old, as presented in my conversation with students whilst sitting at a work table during one morning tea time:

> A girl student says "I am skinny." I respond with, "Why did you say that?" Another student (boy) said to the girl "It is not good and you are not supposed to say that." This was followed by yet another student (girl) adding "It is not right to say that." (Field notes, June, 2013)

It was evident that children, including Richie, Sarah and Tara, felt they were responsible for their own health and bodies. Echoing previous research conducted in New Zealand schools by Burrows (2008), and more recently by Powell and Fitzpatrick (2013), the students in Room 22 frequently used words like 'skinny', 'strong' and 'fat' in describing bodies in relation to health. The students used words unconsciously and without noticeable critical reflection about them, whether in written work or when playing. For example, at break time when a group of girls played a slap dance, I noted:

> The children were using the words "big fat booty" as part of the rhyming lyrics whilst they are slapping hands. When I asked them what they meant by that, they pointed to their backside and giggled. I asked whether that was the right thing to say and they just shrugged their shoulders and said that they were the words of the slap dance and that they could not change it. (Field notes, March, 2012)

The students appeared unable to critically think about the words and their actions, instead they repeated disparaging comments about the body without seeming to know their meaning, which Shilling (2010) suggests is also evident in the body pedagogics of society where the body is objectified and is disconnected with the realities of modern life. He states that individual responsibility for the body is promoted. Some of the children appeared to believe this too, but were unsure where their ideas or understandings originated. When talking about health, they were not able to express exactly why they felt they needed to be responsible for their health. Instead, when questioned by me, they often responded with an "I don't know" or a shrug of the shoulders (Field notes, during 2012-3). This suggests that children find it difficult to decipher some health messages, whether expressed or hidden. See Chapter 2 for literature pertaining to this 'hidden curriculum' and other messages promulgating in society about the body.

Although healthism messages were not always explicit in the teaching and learning materials used by the teachers at Tuihana School, and in the teacher and student manuals within the HH programme, they came through what the children said and through actions both, intentional and unintentional. For example, when a girl classmate was standing in front of the class sharing an answer with the rest of the class, Sarah whispered to her that her stomach was sticking out (Field notes, April, 2012). Another example of an unintentional action was when comments were made by Tara about another student's food at morning tea time. The student stopped eating and put his food away. (Field notes, August, 2012).

A healthism discourse underpinned and was legitimated by the HH programme reward system, where a coloured wristband was awarded for completion of homework tasks that were linked to specific to physicality messages. One example was completing a task on creating a poster about non-exercise activity (i.e. walking around when talking on the phone) (HH student manual, p. 12). This system assumed that all children were

responsible for their homework tasks and therefore for their health behaviours, and as a result were able to attain a certain level of achievement, irrespective of their ability or circumstances at home. No staff member questioned the reward system, which used incentives for completion of work. Teachers assumed that providing information about health centred on messages that kept one free from illness and disease were enough of a change agent for behaviour, and that it was the individual student's responsibility to follow this through. The example from a HH homework task on listing six food items from the fridge or pantry and coding them according to the traffic light system (red - not often; orange - sometimes; green - frequently) reinforced expectations about consuming certain types of food, either to avoid obesity or for health purposes (HH student manual, p.15).

Conversations with teachers reaffirmed that the healthism discourse was not understood by the teachers at Tuihana School. When asked about the incentives for children to do homework, one of the year 5/6 HH teachers said:

> It seemed to be the ones that liked doing stuff at home, that was incentive enough, and the ones that didn't, well they didn't sort of get on the bandwagon at all, but that seems to be the nature of kids really. (Interview, Teacher LB)

However, as explained in Chapter 2, research shows that children do not always have control over their health and activity choices, nor are they always able to make decisions on 'healthy' choices, due to a number of social determinants affecting their home lives (Burrows, 2010; Gard, 2008; Williams & Hannon, 2013). These social determinants, for example, could be poverty, or a lack of adult support, or a disconnection from family/whanau, or poor housing, to name a few (Ottawa Charter, WHO, 1986). Further, as indicated in discussing the context of this study, the New Zealand Curriculum (NZC) (Ministry of Education, 2007) prompts teachers to explore social influences on health with students, thereby creating critical thinkers and consumers of health culture.

"Clever thoughts about health"

Tara described health by saying "Clever thoughts because you are eating healthy", thus demonstrating a connection of health with mind body duality, by suggesting that the mind can control the actions which affect one's health. In the first few weeks of the HH

programme the teaching material and sessions were on food groups and being active (walking). This focus appeared to frame students' thinking and conversations about health. For example, as Room 22's discussion on hinengaro (the aspect of hauora that focuses on mental and emotional wellbeing) continued, a range of responses were shared. "It is about thoughts – caring and kind." This got a quick positive response from the teacher, who said "You are on the right track Richie" (Field notes, February, 2012). The teacher tried to prompt the students to consider health more holistically (see Figure 2) and set health 'goals'. However, Room 22 students consistently stated their understanding of health in terms of a physical dimension, and connected the body and health through using exercise and sport examples. They spoke about the body in functional terms and connected size and shape to it, as a determinant of health. For example, Tara said, "Setting goals are like scores in sport, like when you score in basketball" (Field notes, February, 2012).

One year on from the HH programme, I asked Room 22 students about the word 'health' during a group activity when discussing their *human body* topic. The word generated a range of responses, again mainly focused on the physical dimension of keeping the body physically well and free from illness. This continued perception of health from a pathogenic perspective prevailed over the two years of my study, suggesting that the concept of health at Tuihana School and within the school community centred on an avoidance of risks, behaviours and diseases that cause ill health, and an adoption of a contrasting set of behaviours deemed 'healthy'. For example, for the word 'health', a group of students responded with:

> Never eat sweets and do not take drugs, eat veges (sic) and exercise, do not share food. (Richie)

> Sarah responded with "Drinks milk, makes us strong, strong bones, not smoking, drinking water."

> Others in the group added "Getting fit, Fitness, Reading using your brain. (Field notes, April, 2013).

Comments such as these reinforced the findings that Burrows et al. (2009) reported from research involving 2,868 New Zealand children from 249 schools. When analysing the responses to a 'Being healthy task', they found evidence of superficial understanding of health as a concept, and identified that responses were focusing on healthism, linked to

eating, exercise and hygiene. Whilst the hygiene aspect was not evident with children from Room 22, eating specific foods, getting fit and making choices such as not to smoke, testified that these children's ideas on health were seemingly no different from others reported in national and international studies (Burrows, 2010; Burrows et al. 2002; Burrows et al. 2009; Quennerstedt et al. 2010; Powell & Fitzpatrick, 2013; Svenden, 2014; Webb et al, 2008; Wright et al. 2012).

Children receive health messages from many facets of their lives. It was interesting to determine whether Room 22 students reiterated messages that were from their homes, and those that were widely promulgated in popular and professional mediums. One parent's comments suggested that their family predominantly conceived of health as eating particular foods and exercising:

> We try and stay pretty healthy anyway and we go out, I go out and exercise. She (Tara) has sort of weaned off, is that the word? …but she does make the effort when she has certain classes. Her eating is pretty good. She has always been quite a healthy eater, except for the lollies. (Interview, Tara's Parent)

As well as parents reinforcing such beliefs, Matua Manu, whilst saying that he valued the holistic focus of health as wellbeing, created mixed messages about health for his students. At times, he was seen to espouse a focus on the social and emotional dimensions of holistic health:

> …I hope they are more socially and emotionally, I hope they are. I hope they are more confident young people. The physical part, yeah that's important, but to me I don't worry if they are overweight, you know as long as they are happy in themselves, they know where they come from, they know what strengths they have and stuff, I'm pretty sure that they will be healthier people for it. We talk about being toxic too, so they know what being toxic is and non-toxic and you know you can't measure that in what your size is, just good people. (Interview, Matua Manu)

However, whilst espousing the holistic nature of health as described through his kaupapa Māori approach (Savage et al. 2014), in practical terms he invariably privileged the physical dimension, relegating health and wellbeing to a corporeal matter. This was especially evident when it came to timetabled physical education and sport:

> At 2.40 Matua Manu says "right we are going to play sports" and I know exactly what we are doing and it's a lead up to a game called Ki-o-rahi[22]. The class started by playing a modified game of bench ball, except it wasn't bench ball, it was circle ball and you had to score by getting the ball in the circle and the teams were chosen fairly evenly, but the game itself was very uneven because there were a number of boys on one team that worked together and dominated the game, easily scoring four nil. (Field notes, August, 2012)

> Absent here was consideration of social and emotional dimensions of holistic health. Matua Manu seemingly did not recognise the social imbalance of boys dominating the game through their physical prowess and instead endorsed this by continuing with the game. In another instance during the 'sport' lesson, my field notes indicated a focus on technique: …the game was dominated by boys that could throw accurately. (Field notes, August, 2012)

It was the physical sense of the body whilst participating in the classroom 'sport' activity that I observed often. Matua Manu reaffirmed this view:

> I try to encourage all of them in all sports, and I'll always, you know when we are doing basic skills say 'you are an athlete.' I think if you just say it, then they kind of believe it, even if they might not be as good as everybody else. (Interview, Matua Manu)

As indicated, much of the whole school focus on health was corporeal, and regular physical activity was evident in all classrooms at Tuihana School. Literature shared in Chapter 2 describes a goal of being healthy is avoiding illness and disease. However, having good health is constrained by a range of health determinants. These determinants were not stated as part of the concept topics *Being healthy* and *Being human*. When asked about timetabling a fruit break and fitness into each day, the Principal said, "That is why we changed to a fruit break and fitness. Everyone is doing it. Kind of pairing them together." When asked about continuing the focus on healthy eating and physical activity beyond the two year whole school focus she stated:

---

[22] Ki-o-rahi is a traditional Māori ball game played with two teams.

> I think that is sort of ingrained really to a lesser or greater degree, depending on our learning areas, on our concept development. But, it is fairly ingrained in classrooms now. (Interview, Principal)

In Room 22, almost every day the children did some kind of daily exercise or fitness for up to 10 minutes in the morning. This varied from yoga, to continuous tag games, to an activity using a Māori whakatauki[23], with Tai Chi[24] type movements, to name a few.

Over the two years, all of the Room 22 teachers had the word 'fitness' included in the daily timetable written up on the classroom whiteboard. I noted also that the words health and physical education were not used (unlike other subjects such as maths or science) in this daily timetable; instead, words such as sports, games or swimming were evident and were often relegated to the last part of the day (Field notes, April, 2012). Yet, from a holistic health perspective, the regular daily exercise (or 'fitness') session also had other social benefits.

> The day started again with 'fitness'. It was a type of continuous tag in the hall. The students do not seem to tire of this huff and puff game, as most are always involved in some way, whether running around tagging or avoiding tags or crouching until their tagger gets tagged so they can rejoin the game. One feature of this game is when there is a dispute over who gets tagged first, the pair use a rock, scissors, paper game to decide who is out. This means there are no arguments and the children accept fair play. (Field notes, May, 2013)

In the example above, Whaea Katie in Room 22 included in the tag game the 'rock, paper, scissors' activity to resolve disputes. This activity enabled social aspects such as playing fairly and problem solving to be conducted by the students. This demonstrates how learning opportunities can adopt a socio-critical approach to include outcomes where children have to think and learn more than just 'playing a game'. Interestingly, whilst Whaea Katie still called the activity fitness, some of the outcomes clearly contributed to other aspects of what researchers such as Culpan (2008) and Kirk (2009) deem to be part of 'what it is to be physically educated', and what the NZC advocates for. The New Zealand Curriculum (Ministry of Education, 2007) explicitly recognises that engaging

---

[23] Whakatauki is the Māori name for proverb or maxim.

[24] Tai Chi is a Chinese martial art practised for both its defense training and its health benefits. It is especially known for being practised with what most people would categorise as slow movement.

students in critical thinking in health and movement contexts may enable them to develop a more holistic understanding of health and physical activity.

In Chapter 2, I outlined the compelling evidence from a range of research (Burrows, 2010; Burrows et al. 2002; Lee & Macdonald, 2010; Powell & Fitzpatrick, 2013; Wright & Burrows, 2004) suggesting that in the main, young people uncritically link body shape to health and fitness. My study also provided evidence of this. Below are two examples of children's drawings of 'healthy people'. The first example (Figure 4), drawn for the teacher by Sarah, depicts a 'healthy person' surrounded by symbols of healthy food.

Figure 4 A 'healthy person' (by Sarah, Room 22)

In Figure 5 (below), this 'healthy person' has prominent abdominal muscles. I clarified this by asking what the lines in the middle of the person's trunk were. I was told they were a 'six pack'.

Figure 5 A 'healthy person' (by a Room 22 student)

These pictures drawn by Room 22 students in 2012 depict healthy bodies as being either muscular or influenced by healthy food. In Powell and Fitzpatrick's (2013) study, children associated thinness with being fit. I found the children in Room 22 responded similarly. In one instance during class work, the class members were asked to choose an adjective to describe a noun. They attached the adjectives 'fat' or 'big' to describe people:

> The children had to use stated adjectives supplied by the teacher. These were ugly, fat, clever, big and tall. I looked at the completed worksheets of 13 students. Six students said 'The man is fat' and four students said 'She is a big girl'. (Field notes, March, 2013)

Messages about the body and reinforced by the teacher (who chose the adjectives) about health and the body being a certain size or shape, were prevalent during my time at Tuihana School. Further messages about the body and links to fatness came from both parents and teachers. When asked how important body image is for her child and other children in the same age group, Tara's parent said:

I think it's becoming important. It wasn't so much last year, but as she's getting older she is questioning herself. Do I look fat? She doesn't say that but I can see she's self-conscious. Yes, so it's important to her I think. (Interview, Tara's Parent)

Furthermore a HH teacher in a conversation about body image and shape said:

I am thinking of one girl who is big, but I've never actually heard anyone call her fat. I've just heard from her mother, these children are picking on her, but I don't know how much is her needing (sic), because certainly I've never seen any evidence. You hear little niggles of what's going on underground. One reason is because I think there is high numbers of Pacific Island / Mstudents and the majority of them are big. (Interview, Teacher LL)

The children also linked eating generally with 'getting fat'. At one lunchtime a relieving teacher in Room 22 asked why a student was not eating his lunch:

The student responded with "I don't want any." The teacher then said "Go and get it because at 1.00pm you will be hungry." The student's reply was "No, because my mum said I am getting fat." (Field notes, December, 2012)

As other researchers have identified, this simplistic association with food contributing to fatness can be a result of messages received from adults and a range of sources. Researchers such as Azzarito (2009), Evans et al. (2008) and Rich (2010) explain that messages that influence our understanding of the body, food and fatness are often promulgated in the popular media. It was therefore not surprising to find the children in Room 22 espousing a 'truth' that eating good 'healthy food' and doing regular exercise will keep you healthy (free from illness) and prevent you from becoming fat. When discussing how some of the students see their bodies, one of the HH teachers at the school said:

We did a compliments circle about themselves and one of the boys said "you know something that upsets me is if someone called me fat", and we all talked about it, and I went to say, to help him, and someone else jumped in and said "are you fat then?, or maybe a little bit chubby" and he said "oh maybe sort of" and then somebody else said "Miss, but we have to have a little bit on us so that we can grow" or something along those lines. (Interview, Teacher LB)

Matua Manu talked about the messages inherent in the HH programme and how this had impacted his students:

> …in a way she (Tara) has a really great attitude to sport, but I would
> never focus on their body shape at all. (Interview, Matua Manu)

In this quote above, Matua Manu talks about particular students in his class and body shape. This is part of a discussion about the HH programme, however, the (hidden) message implied, is that he aligns body shape with sport and health. In a UK based study of teachers' perceptions about health and body image, Humberstone and Stan (2011) found that teachers can subtlety play out government biopedagogical strategies unintentionally, through their pedagogic technique.

When discussing the relationship between food and health in the HH programme and in relation to his kaupapa (hauora), Matua Manu said:

> …they kind of get given what they get given, but I just want them to be
> able to eat socially. It ties in with what we are teaching here with our
> hauora, part of it anyway. Because we talked about Te Whare Tapa
> Wha so it ties in with it definitely. (Interview, Matua Manu)

As discussed in Chapter 2, messages about health and the body have been included in school health intervention programmes like HH for decades. Powell and Fitzpatrick (2013) suggest, however, that only in the last decade have such school interventions been so explicitly focused on children's body size and weight, using food and nutrition as their medium. Wright (2004) suggests that children connect the three "f's (fitness, fatness and food) with society's expectation on what health and body image should be. My findings illustrated that Tuihana students reinforced the connections between these 'f's' and equated them to health. They did not appear to challenge assumptions around fitness, fatness or food, nor were they actively encouraged to do so by their teacher, or parents. They participated in discussions, but in doing so they often reiterated what they thought the adults around them wanted to hear. For instance, even though children did not always like cross country running (as observed from their body language when the teachers talked about cross country), they overtly indicated that they did because somewhere they have got the message that is supposed to be 'good' for them.

Cross country running was compulsory at Tuihana School, with all year levels exposed to training and running in the school event. One of the Room 22 teachers, Whaea Donna, explained that as the school attends the inter-school cross country event each year, cross

country training is an important part of all year 4, 5 and 6 classes, as students are in competitive sections (Field notes, August, 2013). Teachers did not challenge this tradition, but instead conveyed to students that it was compulsory and consequently Richie reiterated this to me as "something you have to do" (Field notes, August, 2013), thus putting the responsibility back on to the student, without justification.

> I am running with the class during a cross country session and afterwards students are excited to share their stories about running. One student says she likes cross country. Sarah says she is "puffed out". Another student likes cross country because "you are running everywhere to keep your heart pumping." Sarah likes running. She said she is "challenging herself about running slow then fast." I ask Sarah why? She says "because it is healthy. It is healthy to do cross country so you don't get too fat." (Field notes, August, 2013)

The perception that health is just a corporeal construction of the body was dominant in the language and actions of Room 22 students, and remained centred around body function and physical dimensions. Therefore, despite Tara's idea (reported earlier) about health as being related to 'clever thoughts', little critical thinking was evident in the students' responses to what they conceptualised as being healthy. A narrow corporeal construction of health was prominent during the HH programme and over the course of the 2012 year, despite the efforts of Matua Manu and his approach to embracing hauora.

"Good food makes you healthy"

Over a decade on from Wright and Burrows' (2004) research, simplistic ideas about health without acknowledging wider, social, political and economic issues are still being promulgated in schools by teachers, students and parents. As indicated above, a focus on 'good food – bad food', along with the understanding that good food equates with health, was very evident at Tuihana School. This was reinforced to me when observing what was taught in Room 22, listening to students over the two years and further confirmed by statements and actions evident in the wider school community.

School perspectives

Whenever there were events which included parents, staff and students, food was always shared, with food thus linked to social practice. This may be because the significance of sharing food aligns with a bringing together of people. Tuihana School is considered a multi-cultural school and has and an ethnic composition predominantly of

M(24%), NZ European/Pakeha (16%) and Pacific Islander (31%). The sharing of food is particularly significant with Mand Pacific Island populations, as it is part of the ritual of being together, as one. During my time at school I observed a range of offerings, from a sausage sizzle at the parent teacher meetings, a school community food festival fundraiser, morning tea with school volunteers, to sharing popcorn and carrots during class activities. The school is also conscious of the importance of ensuring children are not hungry, as they believe this helps their learning. "You know some can't afford it (food) so we appreciate that, but also you know if a child is hungry, for learning's sake you need to help that child." (Interview, Principal)

The school operated a breakfast club and provided lunch packs. At breakfast club, students had breakfast in the staff room before school started. Breakfast consisted of white bread, peanut butter and sometimes cereal and milk. In addition to this, students could also receive a free lunch pack if they were hungry during school. The lunch pack was donated from local suppliers and included a snack bar, a mini juice box and a small packet of chips or crackers. I compared the contents of the school lunch pack with the descriptors of healthy food in the teacher and student manuals of the HH programme, and found that there was a distinct contrast. The school lunch pack had foods with a high sugar content and little nutritional value (a common marketing aspect of donated food packs) and was donated free to the school. This confirmed that whilst healthy food is preferable, determinants such as hunger, access to food and poverty (in this case cost) influence decision making and action (Burrows, 2010; Powell & Gard, 2014; Welch et al. 2012). Tuihana's policy was such that if students were hungry they could obtain fruit from the office any time during the school day, since hunger is not restricted to break times. I also observed staff making students toast with peanut butter during lunchtime. This is not uncommon in lower decile New Zealand schools, where some students go to school hungry and with no food for the day (Harawira, 2014). When discussing children going hungry and the focus on healthy eating with the Principal, she said of Tuihana School's policy, "it has made a big difference, especially to the younger children." (Principal Interview)

Student perspectives

Students in Room 22 were able to show some knowledge of what foods they thought were 'good' and what were 'bad' for health. For example, as I always sat at the

tables during fruit break, morning break and lunchtime, I often had conversations with the students about what they were eating.

On one such occasion, a Room 22 student said to me:

> "Look I have a yoghurt for fruit break". "I had a pie and a bun for breakfast. Now I am having a banana and a yoghurt". I say "Yes, I can smell it". The student then continues the conversation and says "I like eating food but sometimes my sister does not." I use this moment to ask "What does food do for you?" He says: "It makes you healthy". (Field notes, March, 2013)

Richie demonstrated his understanding of food equating to health when he said "Eat protein stuff, run every day, eat healthy food and vegetables, healthy breakfast, not too much salt." (Field notes, April, 2013). Sarah's picture (see Figure 4) of a 'healthy person' showed a person surrounded by foods such as fruit and vegetables.

Students from Room 22 were often keen to have conversations about food, particularly when it was eating time during breaks (fruit, morning tea, lunchtime). Often they demonstrated a lack of depth in their understanding of health and the relationship to food. This discourse of healthy food equalling good health seemed to be common for this 8-9 year age group. It equated with the simplistic ideal that energy in and energy out enabled the body to function from a corporeal perspective, evident in both the teacher and student HH manuals. In contrast, the NZC (Ministry of Education, 2007) states at this learning stage students should be able to explore how people's attitudes, values and actions contribute to healthy physical and social environments. Room 22 students conformed with the research study of Burrows et al. (2009), in that over 50% of students in the same age group have ideas that 'being healthy' include references to food, eating and drinking (water and other liquids).

On one occasion I noted Richie and Sarah demonstrating their understanding of what healthy food was:

At morning tea in Room 22 there was packaged food everywhere. Sarah showed me a gingerbread man and said – "see this, it is a treat". I asked "why do you say it is a treat?" "Because you do not have it often" she replied. Sarah then went on to share it with another student. Sitting at the same table, Richie then told the teacher that another class member had no healthy food. I thought this was an example of thinking of others, being considerate and sensitive – not in a tell-tale way but in a caring way. The teacher then asked if she could look into what the other boy had in his lunch box. I saw two bags of chips and a croissant. The teacher then went and got the student's brother from the next door classroom to see what he had. She then suggested that they ask their parents for more 'healthy' food. (Field notes, May, 2013)

Both Sarah and Richie were able to ascertain whether or not the food they were presented with was healthy. Whaea Katie, when confronted by them with their concern about snack type food (chips and packaged food), took action by confirming that this was consistent in this family. However, the action taken provided limited strategies for the children concerned. Wrench and Garrett (2014) and McCuaig and Hay (2013) suggest that student-centred philosophies of teaching and learning in health and physical education emphasise the need for adoption of critical health literacies, rather than relying on health knowledge based on surveillance and judgement. The teachers in Room 22 did not always make use of the 'teachable moment' or demonstrate using a critical pedagogy, which is embedded in the sociocultural philosophy of the health and physical education learning area of the NZC. For example, teachers could direct attention to working with the students, to enable them to develop strategies to negotiate with their parents for better lunch food, thereby applying, as Harwood, (2009) and Wright, (2009) suggest, a socio-critical pedagogy to learning. In the case above, teachers would need to focus around being able to negotiate children's needs, understanding that social determinants often influence choice.

Tuihana teachers were aware of the social circumstances and social and cultural values of families in their school. In staff room conversations they often acknowledged that choices were limited in circumstances of low income families in their school community but they did not critically analyse health-related information available to them. Nor, did I observe any use of critical pedagogy in order to provide strategies that could exercise greater control over these circumstances, to promote the health and wellbeing of their students (Wrench & Garrett, 2014).

Teacher perspectives

When asked to give an opinion on the behaviour outcomes for their students from the HH programme, the year 5/6 teachers focused mainly on knowledge and understandings associated with food choices:

> They are aware of what they put in, and it actually affects what comes out and their ability to learn, they will be able to make those statements, but they are children and they are limited to making decisions in their family, so those children that come to school with chips and fizzy drink know. (Interview, Teacher LB)

Health education practice requires an understanding of the ways young people learn health, along with some understanding of health education pedagogy (Leahy, 2009). The messages in the teacher quote above are mixed. This teacher also commented that:

> I think they (health interventions) are useful because they give you more resources, things to build your teaching around and how you can integrate it. I suppose it's what a person is interested in, individual teachers because we are quite into healthy fitness, healthy eating and those sorts of things but we do that like personally. (Interview, Teacher LB)

Some healthy food messages were explicit, as demonstrated by Whaea Katie. In one instance she used the teachable moment to connect learning to health, making it more meaningful for the students:

> During fruit break this morning, Whaea Katie reiterated the importance of having something healthy to eat. She said that everyone should be eating fruit or drinking water at 10.00 am. She said she could not go for two hours without it (food or water) and therefore the class should not either. (Field notes, March, 2013)

Such a teachable opportunity raised awareness and reinforced messages about food and the body to the class. On several occasions Whaea Katie commented on what students were eating and insisted that if it was not fruit, then it was not to be eaten at fruit break time. Instead she sent children who did not have fruit to the office, where fruit donated by the school community was often available. The children were not embarrassed about asking for fruit or food, as demonstrated on one occasion below:

> A student in the class showed Whaea Katie her lunch box, which contained all sweet processed food - biscuits from the Philippines. The teacher said she would need to talk to Mum about that as it was too much sugar. The student smiled and said that was OK and asked could she go to the office and get a lunch pack. (Field notes, June, 2013).

My impression from staff room conversations, and from observation of students in Room 22, was that the teachers at Tuihana School recognised that children have little control over the content of their lunch boxes and that this was a compelling reason for the Principal accepting an invitation to implement the HH programme, and the focus on the whole school health concepts over the 2012-13 years. The homework sections of the HH programme required parents and children to work together to complete worksheets on nutrition. Thus, the intention was to better inform both parents and children about healthy eating and active lifestyles, the desired outcome being to influence behaviours.

In discussing the HH programme's impact on children's understanding of healthy foods, a teacher made the following comment:

> I had heard some comments from a couple of parents that said "oh we were in the supermarket and Kelly goes no you can't, don't buy that Mum, buy this one" and you know just little things and that's from the parents. (Interview, Teacher LL)

In terms of children's partaking in school food and parents' response to children eating food provided at school, the Principal said:

> You still have got some parents saying "gosh they eat so much. They need more and more". We have some, lots of children just come and tell us when they don't have enough. They do not hang back, they are not shy. Although we do have some parents who say they do not want us to give them food. They say "I give them lunch and I don't want you giving them food that could go to other children." (Interview, Principal)

Parent perspectives

It is widely recognised that parents play an important part in reinforcing the messages learned at school about health. They also often use healthism and obesity discourses (Gard & Wright, 2005; Humberstone & Stan, 2011; McCuaig & Hay, 2013; Pringle & Pringle, 2012; Quennerstedt et al. 2010; Wrench & Garret, 2014). The HH project was intended to stimulate community change by reinforcing the messages (productive) about healthy eating, so that children would share their new knowledge in

sessions at home with their families. When I asked one parent whether this was the case she responded:

> Well she growls at her father because he doesn't eat vegetables, but she does and she says 'that's not very healthy Daddy'. We have always had vegetables and on a Sunday we have a family dinner where everybody turns up. Sometimes we have 12 for dinner which she loves and we always have vegetables. (Interview, Tara's Parent)

Tara's mother stated that her child would specifically talk about the benefits of eating healthily and share some of the homework activities with her:

> She didn't mention specifically about healthy homework, but she would come home and talk about the benefits of eating healthy, exercise and that she would feel better and be fitter and she's aware of that. Oh gosh, she would just tell me about the sports that they had done that day and the teacher wanted them to concentrate on certain areas like eating a healthy lunch and not having as much sugar in your lunch box and things like that. (Interview, Tara's Parent)

Room 22 students reiterated the sentiments expressed by Burrows (2002), in relation to children relaying obesity discourse to their parents. However, often parents make statements that they hear from other sources (not just their children). The HH homework tasks didn't convey culturally diverse understandings of health and heathy eating for English as a Second Language (ESOL) families.

Parents reiterated the notion that good food equals health. "…we talk a lot about shopping and we talk a lot about healthy food, but she always has two veges [sic] in a meal at night" (Interview, Sarah's Parent). This was evident when I discussed 'health' with both parents and teachers. For example, when asked about the intention of the HH programme, one parent stated the purpose of the HH programme was: *"... about healthy eating and outdoor activities…also to try to get children off fast foods"* (Interview, Sarah's Parent). This discussion centred on the parent's understanding of what she considers is a contributor to Sarah's health, but then contradicts this by conveying a healthism message abdicating responsibility and putting it back onto the school: "The only thing the school can do is teach the children about healthy eating and about how to prepare healthy food." (Interview, Sarah's Parent)

Teacher LL recounted the disconnection that she felt parents had with regards to expectations of school health programmes when making a healthy food choice:

> A lot of it is the ESOL probably. Parents don't necessarily understand, especially if you get the [HH student manual], it's quite wordy and they didn't understand that and they just come from a totally different culture. You know the food is different so the kids are saying "don't do this" but traditionally they have a high level of fat in their food, in their diets. It's quite hard to battle against that, and you also don't want to be saying "parents must do this". You have to let them do it and the children don't have a bigger voice sometimes. You know if my kids came home and said you needed to do this, we do it, but they (others) might not even want to tell what they are doing, because they know there is no point. (Interview, Teacher LL)

Policy and practice

Tuihana School's policy of having a fruit break, or brain food break as some teachers called it, was scheduled around 10.00 am each morning. It was an opportunity for children to eat a piece of fruit and for teachers to remind them to drink water. In Room 22, it came after one hour of literacy and provided an energy break before the next hour leading up to the whole school morning play time. Over the two years, the four teachers in Room 22 had a different emphasis on fruit break time. Matua Manu did not monitor fruit or food consumption; instead, he was happy that the students were taking time out to eat anything. Whaea Katie, on the other hand, was more concerned with what the students were consuming:

> Whaea Katie called the 10.00 break 'brain break' today. She checked the children's fruit. Some children had fruit drinks as well. It was interesting to note that everyone was eating fruit today, including the teacher. (Field notes, April, 2013)

However, all the Room 22 teachers were particular about the rules for eating, insisting that all students had to sit at a table whilst eating during fruit break and lunchtime eating. Whaea Katie often ate with the children at fruit break and morning tea, and reinforced messages about food. I noted in my journal that she positioned herself as a role model, using herself as an example to reinforce learning:

> The class is following the whole school concept of the human body. During fruit break, Whaea Katie asks the class "who knows what a walnut looks like?" One child responds "your brain." Everyone is now sitting on the mat for reading. The teacher goes on to explain that she eats a lot of walnuts and that walnuts are full of omega 3 and that is good for your brain. She says "how about that?" All students are responsive and are nodding and looking interested. (Field notes, June, 2013)

Whaea Katie reinforced the concept that a classroom is a learning place, but often used the social opportunity when sitting together with food, to consider what else was happening for her students:

> During reading time in the classroom one day, a student asked Whaea Katie if she could go to the office and get something to eat. The Teacher answered "why – what is going on? You used to have good lunch box food?" She then said "the school is here to support you if you need food but it is not an expectation. What is happening for you?" The student shrugs her shoulders, but does not go to the office, instead reads quietly. (Field notes, June, 2013)

Listening to the voices of young people can provide insights and challenges that can contribute to more inclusive practices (Cliff et al. 2009; Gosling et al. 2008; MacPhail et al. 2003; Smith 2007). Unfortunately in this instance, the opportunity for constructive dialogue using eating as a social phenomenon and thus a contributor to the wider holistic dimensions of health was missed, and instead the student withdrew. In these messages espoused about food and health, the children were often not able to explain or apply any critical thinking as to why they associated food (good and bad) with health.

Sometimes statements came from my students at random times during the school day: "I ate a toffee apple for breakfast. My mother was not happy about my choice!" (Sarah, Field notes, May, 2012). In 2013, while I was sitting at a table with six students, I started a conversation about the HH programme whilst the children were eating morning tea. I asked "What do you remember about the HH programme?" One student said "There was a circle with food in it." Another said "You had to fill the book out." (Field notes, May, 2013) These comments suggest limited learning has been sustained and a lack of understanding of health promoting practices (Mohammadi et al. 2010; Rowling & Jeffreys, 2006).

The school newsletter reiterated the health learning intentions for the term. It was focused on the physical body and how the body processes food:

> Our theme for learning across the curriculum in Term 2 is "The Human Body". As part of this learning, children will learn how to keep their bodies healthy and functioning well. The Health Nurse will bring in a model of the human torso complete with internal organs so that children can get a picture of where and how the body processes food. The Life Education caravan will deliver specific lessons to groups of children in the areas of healthy heart, brain and air. (School newsletter, April, 2013)

The Life Education caravan and associated programme is a familiar feature of health education in primary schools in New Zealand, and the visit of the caravan to Tuihana School is discussed further in Chapter 7.

In another instance during eating time at morning tea break, I sat with Richie:

> He showed me his Up-N-Go[25] and said "Is this good food Whaea Denise?" I asked "What do you think?" He shrugged, so we read out what was on the back of the carton. It said protein, 98% fat free and fibre. We conferred together and he said "Yes it is good for you!" (Field notes, March, 2013)

With this influence and the varied food and health messages students received from their teachers, school, home and other mediums, it seemed that Tuihana children perceived that 'Good food makes you healthy'.

Powell and Fitzpatrick (2013) remind us that agencies delivering health interventions in schools do so knowing the power that their economic capital can bring to influence that community. We also know that food is a commodity that generates income and as young people are impressionable they are a great target for the marketing of food products (Welch et al. 2012). This in turn creates economic capital for food companies, and is often the reason the food industry is interested in young people (Powell & Gard, 2014). Hence, it is not surprising that the productive discourse about 'good food' and 'health' resonates with young people, as they are often the potential customers to whom health related companies are marketing.

---

[25] Up-N-Go is a food product marketed by Sanitarium as an energy food and an alternative for breakfast.

"Fitness is good and healthy"

Any discussion on health in Room 22 invariably included some talk about exercise and fitness, as seen in the above sub-heading statement made by Richie. He, amongst others, often equated exercise with health, but in particular fitness. Richie was probed more about this perception when I sat with him and other Room 22 students one day at their table during class, as they were discussing fitness:

> Richie said, "For fitness we run around the field and do star jumps." I then said "really – why?" One student responded "Because it helps your blood. It gets blood around your body to get your heart going." From this discussion Richie then said "Fitness is good and healthy. You need to stay fit". I asked "What do fit people look like?" He responds with "skinny" and another student adds to this saying "they look strong." (Field notes, June, 2013)

This objectifying of the body as skinny or strong is a corporeal entity associated with being healthy. As noted in Chapter 2, Evans, Roy et al. (2008) and Evans et al. (2009) suggest that there has been a growing appreciation of the significance of the fit 'ideal body' in how young people learn about their health in education settings. Their later work specifically focused on adolescent young women and considered how, through embodied communication, bodies were socially constructed. In Burrows' (2010) recent work on younger children and body matters, she concurs with Wright (2004), Wright, et al. (2012), Quennerstedt et al. (2010) and Reeve and Bell (2009), that messages conceptualised by young children on health knowledge are often simplistic and reflect a biomedical position as to whether the body is healthy or unhealthy, depending on size, weight and state. The students in Room 22 also projected this, as the use of the words skinny, strong and fit, attest.

School policy and pedagogy

At Tuihana school there was an expectation that all children would have some structured exercise each day, which varied from classroom to classroom. In Room 22 'exercise' took the form of daily fitness and was the first activity of the day. The word fitness was written up on the whiteboard in the daily timetable and even when a relieving teacher was present, classroom 22 students reminded them of the need to do fitness:

> Whaea Katie, when playing a game of continuous tag during the daily exercise (fitness) activity said "I love it when I hear people puffing – it means you are getting fit." (Field notes, June, 2013)

Whaea Katie's suggestion that the more puffing in the activity, the fitter the students will be promulgates a scientific perspective and, in so doing, limits the potential for promoting a holistic view of health and wellbeing. This example aligned with Humberstone and Stan's (2011) research on teacher and parent 'body knowledge'. My data revealed that teachers unintentionally use direct surveillance of students' bodies and often through their words or actions regulate and subjectify students, thus influencing their understanding of health (Fitzpatrick, 2011; Leahy, 2009; Lee & Macdonald, 2010; Rich, 2011). Tinning (2010) suggests that some physical education teachers promulgate healthism through the body ideal, therefore they are myopic when it comes to expectations of their students. Other researchers suggest that teachers need to be able to critically reflect on, and engage with, taken-for-granted beliefs about their own bodies and the bodies of children, thereby exploring assumptions and socially constructed influences (Powell & Fitzpatrick, 2013; Svendsen, 2012). Burrows (2008) found that beliefs about the bodily ideal (often populated through media), in turn, produce examples where children correlate fitness with thinness, fatness with laziness and exercise with health. For example, Richie said: "It is good to be skinny because you can run fast and win races and your Mum goes "yeah!" He demonstrates this by raising both his arms in the air. (Field notes, June, 2013). The physicality of the body that Tinning (2010) and others (Evans, Rich, Allwood et al. 2008; Ovens & Powell, 2011; Quennerstedt; 2011) refer to as the 'cult of the body' is described in Chapter 2.

Student perspectives

From my observations, Room 22 students enjoyed being active, both in the playground and in class timetabled time. Sarah, for example, on one occasion when she was required to attend a group tutorial for extra maths tuition instead of fitness, put her hands across her chest, stamped her foot and said: "I don't want to, as I like fitness." (Field notes, March, 2013)

The use of words that allude to fitness and eating healthily, for messages intended to reinforce healthy bodies, is common in respect of exercise and health. At no stage did any teacher, student or parent question the existence and nature of the word 'fitness',

instead correlating it with health. Powell and Fitzpatrick (2013) found similar results in their research of 24 (9 year old) primary school children's concept of fitness and health. Their children equated fitness with non-fatness and believed that if they got fit it would enable them to get thin or thinner. In their study, children not only commented on aspects of their bodies with which they were dissatisfied, but spoke about the actions they regularly undertook to mould their bodies and behaviours. Sarah made a statement which reinforced these findings, when she was considering her goals in class one day. She used fitness as one of her learning goals for the term: "Through learning about netball it gets you fit." (Field notes, September, 2012). She reflected a common assumption that children make about sport contributing to fitness and fitness contributing to health (Burrows, 2008; Powell & Fitzpatrick, 2013).

Sarah confirmed the importance of having fun, when she described why she did physical activity: "Because it is playing and playing is fun." Another Room 22 student joined in the conversation and said "Yeah – and playing and doing lots, is fun" (Field notes, April, 2013). Physical activity outcomes are not always designed for fun. However, as demonstrated by Room 22 students, fun is an important part of engaging in fitness and physical activity. Cale and Harris (2013), amongst others, state that in England the role of schools and physical education is increasingly to promote health, promote a 'healthy nation' and to tackle obesity. In New Zealand, most recently Powell and Gard (2014) joined with Burrows and McCormack (2012) and Petrie and lisahunter (2011) to suggest that health imperatives, such as corporeal reinforcement, are deeply embedded in school cultures and programming. However, programmes such as HH that privilege biomedical discourses only address short term outcomes, while purporting to be contributing to the alleviation of the so-called obesity crisis espoused in popular discourse today (Gard & Wright, 2005; Gard, 2011). Further examples of student perspectives on fitness and exercise and the relationship with biopedagogies and bodily modalities will be discussed in the next two chapters.

Teacher perspectives

When discussing the HH programme and children's health in general with the Principal, I asked whether the programme had impacted on any other aspects of classroom, school or family life. She answered:

> I think the level of resilience, overall emotional resilience in our
> children has gone up. I think they are more resilient to change, and I
> think that is attributed to their general rise in fitness. (Interview,
> Principal)

The Principal also described the change to a fruit break and a fitness time, when discussing the intention of the HH programme and focus on school wide health:

> I think that is why we changed to a fruit break and a fitness time.
> Everyone is doing… kind of pairing them together. Because we have
> I guess, a mind set for that fitness, that fruit break, around that kind of
> system, around the health of the children. (Interview, Principal)

The pairing of fitness with healthy food (in this case fruit) and the recognition of other benefits such as emotional resilience, as described by the Principal, demonstrated that she has been influenced enough by healthism imperatives to take action to improve the health status of her students. The 'mind set' referred to by the Principal was reinforced by Whaea Katie, who ensured that fitness was listed in the daily timetable on the classroom whiteboard:

> Today as the children were lining up to leave the classroom, Whaea
> Katie called it 'fantastic fitness.' I noted that she too joined in the
> continuous tag activity (as did I). (Field notes, June, 2013)

When the teacher is a learner (as the above field note recalls), learning conversations and partnerships can occur (Tinning, 2014). Facilitating shared learning is part of the effective pedagogy described in The New Zealand Curriculum (Ministry of Education, 2007). Whaea Katie was often heard to suggest that fitness was fun. Another teacher commented on what one of her students did in order to improve his fitness, as a result of perceiving that he was fat:

> … I think personally he [a boy student in her class] did feel that his
> body image was fat and he started running and things like that at school,
> but the rest of the class made sure that he didn't feel like that.
> (Interview, Teacher LB)

In the quote above, Teacher LB reinforced that some students did equate fitness with fatness, despite the rest of the class ensuring that he felt valued.

Parent perspectives

When discussing the HH programme with Tara's parent, she talked about her child: "…she would feel better and be fitter and she's aware of that." (Interview, Tara's parent). In further discussion about Tara's father, her mother said:

> She worries about her Dad's (health), because he has type 2 diabetes and he is a bit overweight, so she does worry about him and she does realise you know that if he does get into a good exercise regime and eat really healthy that he will get better. (Interview, Tara's Parent)

This reinforced that parents, as well as children, viewed health from a corporeal perspective, with healthism understandings based on an obesity discourse. This echoes researchers' analysis of children's understandings of 'being healthy' (Burrows & Wright, 2004; Burrows et al. 2002; Burrows et al. 2009; Gosling et al. 2008; Reeve & Bell, 2009; Wright & Burrows, 2004). In my study, fitness, food, exercise and the body were prevalent themes collected from field notes and interviews with parents. The one difference in my study, when compared to Burrows and colleagues, was that image centred on body weight or size as a result of eating unhealthy food and not exercising was not mentioned as much (see Chapters 7 and 8):

> I have heard through parents of some body and size issues that are just making their children a bit sad. Umm, and wanting to have something done about it. Umm, the parents want to help them to change their body shape. Not necessarily how they are thinking, but that they have moved straight to the physical. Oh well let's do something about that, you know. Umm, (clears throat) generally speaking, not a lot. They are usually speaking in anger or annoyance. I think there is a very general acceptance that it is the person we are dealing with rather than the 'shape' we are dealing with. (Interview, Principal)

Summary

My data reaffirmed that many Tuihana students, teachers and parents continue to uncritically accept the dominant obesity and healthism discourses evident in school communities today. Such destructive discourse continues to occur despite calls by academic researchers (see McCuaig et al. 2013; Petrie and lisahunter, 2011; Rich, 2010a; Wright et al. 2012) for teachers and schools to examine their practices. Healthism messages that put responsibility for one's health onto the individual reinforce what Burrows and MacCormack (2012) found when they interviewed three teachers to

ascertain whether their personal health values, experience and understandings correlated with their children's health understandings. My data aligns with their results, suggesting that there was sufficient evidence that the personal and political aspirations of teachers inevitably impact on the understandings espoused by students in the name of health education. This reinforces Bernstein's theory that teachers recontextualise knowledge (sometimes without realising it) and Tuihana School despite the good intentions of the teachers and school community, a pathogenic, biomedical perspective of health was embedded in the school culture, influenced by opportunities to promote health (and prevent obesity) in a corporeal way through their understanding of the HH programme and related dominant health discourses.

At times the underlying discourses of obesity and healthism were an influence on children's learning, and were prevalent both overtly and covertly within the classroom and in the school environment. It is difficult and complex for the primary generalist teacher to keep abreast of current health literacy and implement multiple health and broader educational policies and initiatives simultaneously. Hence, attributes of healthism and other dominant discourses like obesity can pervade their practices. Bernstein emphasised that challenging established practices can sometimes create legitimate and new knowledge (Bernstein, cited in Hay & Penney, 2013). At times the teachers did challenge traditional health and activity practice, but the prevailing concept that fitness is predominantly for exercise and physical activity, was evident in the actions of students and teachers at Tuihana School, in both structured and unstructured play. Further discussion and examples of this are found in the following chapter, when considering the relay of messages through the school systems of curriculum, pedagogy and assessment.

Chapter 7. Message Systems

Introduction

This chapter will focus on how students' understanding of health and their bodies have been socially constructed through the curricula and pedagogic discourse of teachers, parents and other agencies. Students often specify school as their main site of learning about health and wellbeing and this is no surprise, as Leow et al. (2011) and Evans, Rich, Allwood et al. (2008) remind us that children and young people spend approximately half their waking hours in school during the school year, for 10-12 years of their lives. Today, factors such as knowledge-driven economies, social connectedness, technological revolutions, developed communication systems and changes in production processes and work organisations can potentially alter what is taught, and how and where teaching occurs, both in (curricula) and outside of schools.

As discussed in Chapter 2, health initiatives such as the HH programme that are targeted towards behaviour change through the reinforcement of biomedicalised health information, often replicate the narrow epidemiological-based policies that are part of the neoliberal agenda of governments (Fitzpatrick & Tinning, 2014; Gard, 2011). My findings in this chapter focus on the message systems in which health discourses are evident, and that are legitimised through a school's curriculum and attributed culture. This chapter provides evidence of practices discussed in Chapter 2, with regard to health discourses within curriculum and pedagogy that expose traits of competition, individualism and individual responsibility, which are all part of a neoliberal perspective. The discussion reflects Bernstein's (1975, 2000) suggestion that society's values are promoted through the three message systems - curriculum, pedagogy and assessment - and how these message systems have influenced the socialisation of Tuihana School's integrated concepts of *Being healthy* and *Being human,* along with the HH programme.

In the first part of this chapter, I focus on curriculum, including the stated and hidden curriculum messages that students at Tuihana School were subjected to and that were reinforced. Regulative discourses, along with biopower and biopedagogies, are discussed

from a pedagogical perspective, exposing policies and practices within the classroom and school culture that have influenced the Room 22 students. A kaupapa Māori approach that was adopted by a staff member (Matua Manu) is then discussed in relation to pedagogy and assessment practices. Lastly, I consider how the messages through curriculum, pedagogy and assessment exposed a need for students to think critically and consider the implications of competition, individualism and individual responsibility when it comes to interpreting the messages about health and their bodies.

Curriculum

The Principal at Tuihana School described curriculum as instructional time. In the quote below, she considered the impact on the children from the whole school focus on health. She used the lens of the whole school health concepts when considering school life, and in particular children's learning about their own health from the curriculum and instructional time in the classrooms:

> Classroom, yes lots of discussion because they eat in instructional time. So their eating and their general health discussions are done in instructional time. School life, hmm, again this is just making me start to think. I think the level of resilience overall emotional resilience in our children has gone up. I think they are more resilient to change, and I think that is attributed to their general rise in fitness, which I think is part of the bigger picture from the intervention, from the HH and from the school wide concept development of *Being healthy, Being human*. (Interview, Principal)

Whole school health concepts and the HH programme

At Tuihana School, "the bigger picture" as described by the Principal in the quote above, was from the two year school wide focus on health. Each year had a school wide concept and each term a new topic was introduced, which would be integrated across learning subjects. In 2012 the whole school concept *Being healthy* had term topics of healthy body, healthy mind, healthy spirit and healthy community. The *Being human* 2013 whole school concept had term topics of human nature, human body, human adventures and human activities. The concepts were decided by the Principal and staff the previous year, and written into the 2012 charter as part of the student achievement (SA) strategy. The SA strategy states "Students continue to be involved in regular, quality physical activity and organised sport" (p. viii). One of the actions required to meet this

target was for all classes to participate in the Healthy Homework programme (Tuihana School, 2012).

Tuihana teachers did not have common work plans for the school wide health concepts and topics; instead, teachers aligned their class schemes with the relevant topic and taught according to their own class's needs. The HH programme was part of the term one, 2012 healthy body topic, taught in two year 5/6 classes and in the year 3/4 class (Room 22). Within the eight week HH programme the weekly topics were:

- Week one: walking, foods we eat.
- Week two: screen time, energy foods
- Week three: sports, general nutrition
- Week four: games, fruit and vegetables
- Week five: fitness, drinks
- Week six: dance and movement, breakfast, lunch and dinner
- Week seven: confidence and the outdoors, snacks and takeaways
- Week eight: assessment

As a curriculum, the HH programme consisted of teacher led activities from the topics listed above, as outlined in the teacher manual, along with self-directed homework tasks from the student manual. The HH teacher manual had a range of topic activities that had been developed, trialled in a pilot study and endorsed by a steering group of health and education professionals. The structure of each topic consisted of headings such as curriculum links, resources, classroom activities and learning notes. In addition, each school received a set of laminated resources and equipment to use in the programme. The teacher manual was informative and contained photographs and statistical tables. Teacher LL on reflection said:

> I think it was a huge amount of work, so it was actually too much stuff for the time that we had, and what I found is that we would start something, particularly seeing how kids were persuaded to buy foods, and we would start on that but because we were going through all the modules, bang, bang, bang, we didn't get time to follow it up, so you could have put down a whole week, or even two weeks on each little session. (Interview, Teacher LL)

The health discourse contained in the HH programme predominantly drew on medicalised knowledge (termed biomedical), which contributed to normative positions that valued food and exercise as a means to control health and weight. According to Welch et al. (2012), who undertook a study of health initiatives in three countries, interventions such

as the HH programme discursively subject young people to the requirement to be attentive to their health and bodies, through monitoring the food and drink they consume. This was evident in the homework tasks required of the students from their student manual. Teacher LB confirmed:

> I thought it was a really good basis for a term's concept working on it. It was good to get the kids to think about what they are eating and their activities, but having done at home rather than so much at school, to get their parents involved and talking about it, because I know a lot of kids just go home and talk about the things, particularly when they were finding out bar codes, including the nutritional information on the back. (Interview, Teacher LB)

As previously stated, Matua Manu and the Room 22 students did not always follow the HH programme, instead selecting certain HH topics and homework tasks that suited their learning focus during term one, 2012. This demonstrates the influence teachers can have which contribute to the social biases in education (Bernstein, 2000). In this case, teacher values can have a positive or a negative effect on learning environments. Teacher LB confirmed that she also varied her approach:

> For the homework tasks, I generally just let them choose. They chose themselves what they wanted to do and I would point them in the direction and say, if you are pushed for time this is a good one to do, or if you are interested in this one do this. There were some kids that just wanted to sit down and do it all and there were some kids that didn't want to do any of it. They would often talk about things but they wouldn't necessarily fill a book or they didn't quite understand what was involved. (Interview, Teacher LB)

Health messages: following fact or fiction?

The HH teacher's manual emphasises that physical activity and good nutrition in children are key priorities, and as described in the section above, each weekly session promoted a combination of both. However, the information about healthy food and exercise does not come from curriculum materials alone. In both New Zealand and Australia there is a neoliberal ideology supported by each government's health, education and social policies. These policies aim to reinforce the importance of self-managing, healthy or high performing citizens who can add economic value to their country. Macdonald and Penney (2009) suggest that if these values are promoted through school curricula then in health and physical education programmes we are likely to see an emphasis on the following: promotion of health-related fitness, maintenance of a 'normal' body mass index (BMI), a balanced diet, and social-emotional skills that equip students

to effectively handle completion, teamwork and wellbeing. Evidence of this aim (Macdonald and Penney's) towards 'self-managing, healthy, high-performing citizens' was not consistent in the students in Room 22 at Tuihana School, despite there being a school wide two year focus on health, plus an eight week health intervention. Instead, health knowledge by students such as Richie, Tara and Sarah was limited to reproducing recontextualised information derived from their learning environment. It was mainly about food and exercise and fitness, fatness and fun.

Health messages from children in Room 22 were simplistic and aligned with public health (societal) behaviours, emphasising the need to eat vegetables, drink milk and water, and get plenty of exercise and sleep. As a participant observer, I deliberately did not instigate discussion on health topics or curriculum work. Instead, I relied upon observation of the learning environment, providing help when asked by the teacher and supporting day to day classroom life. Consequently, the health messages espoused from the students in my data could have been picked up through learning about health via the HH programme, through the curricula focus of *Being healthy* and *Being human*, or through home life and public health media and popular culture. See Chapter 2 for examples of public health initiatives and interventions.

Conforming to health messages became part of the learning environment at Tuihana School. On one occasion Whaea Katie said to the class prior to the lunchtime break:

> "If you want a lunchtime swim you must eat your lunch". She did not say anything more, so I asked a student "What does Whaea Katie mean?" The student said "So you won't get hungry." Another student said "So we do not eat in the pool." (Field notes, April, 2013)

Students sometimes misunderstood the messages (sometimes hidden) from the teachers, as the example above shows. These messages often related to eating and health. Eating time was always in the classroom and students were required to sit at a table. All students were required to eat their lunch within a 15 minute time frame. During that time frame, as mentioned before, teachers were seen to 'police' the contents of the lunch boxes. (Field notes, June, 2013)

As an educator, a teacher's role is more than that of 'policing' lunch boxes, however this practice was accepted by the parents and students as something the staff undertook. This monitoring by staff was overt, yet it contributed to the school curriculum providing powerful, often hidden, messages about health, food and eating habits. This adherence to curriculum is something Burrows (2008) questions, especially in relation to how monitoring of eating and other activities present food, weight, and physical activity as something to be gauged and taught, either directly or indirectly.

Brain food break

Healthy eating and the consumption of healthy foods featured in the teaching and learning curriculum as well as through the classroom timetable in Room 22 and in other classrooms at Tuihana School. The teachers of Room 22 reinforced the focus on curriculum topics as well as using teachable moments to reinforce messages about health throughout each day. For instance, in the HH programme in week five there is a homework task on keeping a diary of how much water is consumed that week. It suggests that a drink bottle is filled with water each morning and sipped during the day. My data did not reveal that this was evident in Room 22 during term one 2012, or for the remainder of my study, hence an opportunity was lost to reinforce learning. This finding was interesting as the whole school had a break for water and fruit each morning, after one hour of teaching literacy. Whilst this was a break in curriculum time, it in itself sent a distinct message about health and addressing bodily needs. The teachers called this break by different names. For example, Matua Manu and Whaea Donna called it a fruit break. Whaea Katie called it a brain food break. I observed Whaea Katie in the first month of teaching in Room 22. She asked to see the students' lunch boxes at brain food break. She said "Please show me your lunch boxes and those students without fruit can get apples from the office." (Field notes, February, 2013)

Integrating health into the curriculum

The school wide concepts of *Being healthy* and *Being human*, as discussed in Chapter 6, enabled related health topics to be integrated into classroom curriculum over a number of learning areas in classes at Tuihana School. However, in Room 22, as the teachers were flexible in applying their long term year plan, they did not often follow this regimentally, instead using a teachable moment along with current events to align the curriculum and the health topics. An example was a class and homework task on the Olympics in 2012. Students had to bring into class any newspaper articles on the

Olympics. Richie one morning shared his article on Valarie Adams, and Matua Manu used this opportunity to discuss her attributes, emphasising that she was not only an Olympic champion but also a great role model. This was appropriate, as the health topic for this term was 'healthy spirit'; however, in the class discussion Matua Manu made no reference to this (Field notes, August, 2012). His reference demonstrated that an attempt was made to align and integrate learning with the school wide health concept, but the lack of reinforcement by the teacher reduced its effectiveness.

The function of the body from a corporeal perspective was a consistent theme in almost all of curriculum health over the two years that I spent in Room 22. There was limited classroom time allocated to health in the daily timetable (listed daily on the whiteboard in Room 22). Curriculum time each morning was divided into literacy and numeracy and therefore the 90 minutes available each afternoon was allocated to the other 6 learning areas, of which 'health and physical education' was just one. Health as a subject was not specifically taught in Room 22; instead, aspects of health were integrated into other subjects, such as social studies and literacy. During an instructional writing exercise, the worksheet used for writing practice was 'How to wash your hands'. This approach to teaching health from worksheets reinforced the concept that health is about preventing illness and 'dis-ease', hence the need to have clean hands. This and a number of other worksheets on health were in use at Tuihana School (Field notes, August, 2012).

An example in curriculum time of the emphasis on the physical body, where strength was recognised, was in a 'sports' (Matua Manu's definition) lesson on throwing. Matua Manu explained that the athletics day was coming up and that he wanted the students to practise for the 'softball throw' event. Students worked in pairs, standing behind a line on the field and throwing the ball upon the whistle, collecting it when the teacher blew the whistle again. All students had two throws over the whole session. No technique was taught, and Matua Manu finished the lesson by praising two of the boys (Richie and one other) for throwing the furthest (Field notes, October, 2012). This example reinforces the emphasis on corporeality and that students learnt the importance of this, as that was what the teacher praised.

Learning about health in Room 22 was captured in my data set through textual examples, through actions and through teacher, student and parent voices. For example, early in 2012 Room 22 was asked to describe health by Matua Manu. "It is about thoughts - caring and kind." (Richie, Field notes, February, 2012). One year later (May 2013) whilst sitting at a table during morning tea time, I asked the same group of students in Room 22 a similar question:

> What is this word health? Richie answered: "Never eat sweets and do not take drugs. Eat vegetables and exercise. Do not share food. Does not drink [alcohol]." Sarah said: "Drink milk. It makes us strong, strong bones. Not smoking. Drinking water." Another student added: "Getting fit. Fitness. Reading using your brain." Richie concluded with: "Eat protein stuff. Run every day. Eat healthy food and vegetables. Healthy breakfast. Not too much salt." (Field notes, May, 2013)

These statements are similar to data found in other studies on young children's ideas about health, around the world. For instance, Gosling et al. (2008) in their study of children in the United States, found evidence of children espousing the importance of healthy food and exercise as markers for health. An instance when this was evident as part of the integrated curriculum at Tuihana was when Matua Manu, in a literacy lesson, asked the students to write out a recipe. He focused on instructional writing and gave an example of one of his favourite recipes, 'chocolate cake'. Consequently, the students all found recipes for similar foods. This went unnoticed by the teacher and no comment was made (Field notes, August, 2012).

The Principal reinforced healthy food and exercise as markers for health when reflecting on a question about health in the school:

> Definitely in the area of talking about health, they (the students) have a lot more knowledge to bring to the discussion about talking about that, and also when they sit around eating. They have some strong ideas now. About what is healthy and what is not healthy, about what to eat. So they have made those connections and they are now using it in their lives. (Interview, Principal)

Interestingly, this quote demonstrates that the Principal was not in touch with the classroom curriculum and pedagogy in Room 22, relying on an assumption from her experience across the whole school.

As explained in Chapter 2, curriculum planning in health and physical education should meet the needs of students and be guided by the New Zealand Curriculum. Evans, Rich, Davies et al. (2008) note that today's schools (as a result of societal influence) are expected to "nurture and endorse particular 'corporeal orientations', ascribing value, meaning and potential to 'the body' in time, place and space" (p.79). This expectation of schools puts pressure on teachers to be knowledgeable in health education. In New Zealand, one such place for teachers to extend their knowledge about the health and physical education learning area is on the Ministry of Education website *Te Kete Ipurangi*[26] (TKI). Resources linked to The New Zealand Curriculum (Ministry of Education, 2007) are available to download for use in schools. Of particular help to primary school teachers in health and physical education is the *Curriculum in Action* series. This is a collection of resource topics directly related to health education and physical education teaching and learning, endorsed by the New Zealand Ministry of Education. At no time in my study did I observe any of these resources being used, and since my role as a researcher was to focus on the students and to observe their learning environment, it was not appropriate for me to question the teachers about this. However, issues like this are beyond the scope of this study, but are typical of the 'crowded curriculum' as time for teachers professional learning and development is limited.

External providers as a resource for health education

Outside agencies and pre-packaged curriculum programmes are a further contemporary 'resource' for teachers, as discussed in Chapter 2. At Tuihana School the Life Education Trust caravan visited in May 2013. My field notes described the children's reaction upon hearing that the caravan was going to be at their school:

> The teacher (Whaea Katie) asks the class "What are we going to be doing on Friday? What are we going to be learning about?" One student says "The giraffe." "What else?" says Whaea Katie. "Yes, Harold and the Life Education caravan are going to be here." She continued "We are going to be learning about the body and in particular the circulatory system." (Field notes, May, 2013)

Burrows and Wright (2004) comment that whilst the Life Education Trust programmes tailor their teaching resources to link directly to the aims and objectives of the New Zealand Curriculum, for some schools it limits their teaching and learning programme as

---

[26] Te Kete Ipurangi translates as 'the basket of knowledge'. It is a repository for teachers focused on The New Zealand Curriculum (2007).

they only have specified topics to choose from. I asked Whaea Katie if she was able to choose the topic for Room 22. She did say she had a limited choice from a number of topics, and the circulatory system was the one that she thought would fit in best with her term topic on 'The Body'. This demonstrates that Whaea Katie was discerning to a certain extent in her choice of topic, but reiterates what Tasker (2004) and Kirk (1992) maintain, that the teacher is often the best source of current pedagogical content knowledge[27] (PCK) (Shulman, 1987), and when lessons are constructed by well-meaning health professionals for the education arena, they can produce sometimes harmful unintended outcomes for learners.

The Principal looked for opportunities to enhance the learning experience for students at Tuihana School. Schools, and in particular lower decile schools, in New Zealand often had additional support from outside providers in the form of resources, sponsorship, donations or interventions, to enhance the experience (Petrie et al. 2014; Powell & Gard, 2014; Williams & Macdonald, 2015). At the end of 2013, the Principal explained why the school had decided to adopt a 'Milk in Schools'[28] programme. This programme provided the school with free milk each day for students. It is sponsored by a large NZ dairy corporation. She said:

> Our uptake on the milk being, according to some comments, it is very easy in this school compared to other schools. We have got new teachers in, because we have, I guess, a mindset for that fitness, that fruit break, around that kind of system, around the health of the children. We just see the milk as another thing on the menu. You know, another healthy thing on the menu. We are also seeing results in our children from that too. (Interview, Principal)

Her comment demonstrated a causal link between her understanding of healthy food (fruit and milk) and fitness.

Real world learning experiences

Another example of making curriculum meaningful across different learning contexts was evident in the first year of my study, during Matua Manu's preparation for

---

[27] Pedagogical content knowledge is the blending of content (curriculum) and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction (Shulman, 1987, p. 8).
[28] 'Milk in Schools' is an initiative by a NZ company (Fonterra) to supply daily free milk to all children in decile 1-3 schools.

the annual school cross country event. He focused on children's learning of numeracy skills to record laps in their cross country running activity. On the classroom wall was a 'Run the records' chart (see Figure 6). The children in Room 22 acknowledged what the chart was for:

> "Cross country." said Richie. Another student said "Because you need to train for cross country." I then asked "When do you do the training?" A girl student responded "At lunchtimes and playtime you could do your laps." I noticed on the bar graphs that only a few students had a lot of laps marked off (Sarah and Tara only had a few). Richie had the least, and when I asked him if he did this 'lap running', he said "No, I would rather play." (Field notes, August, 2012).
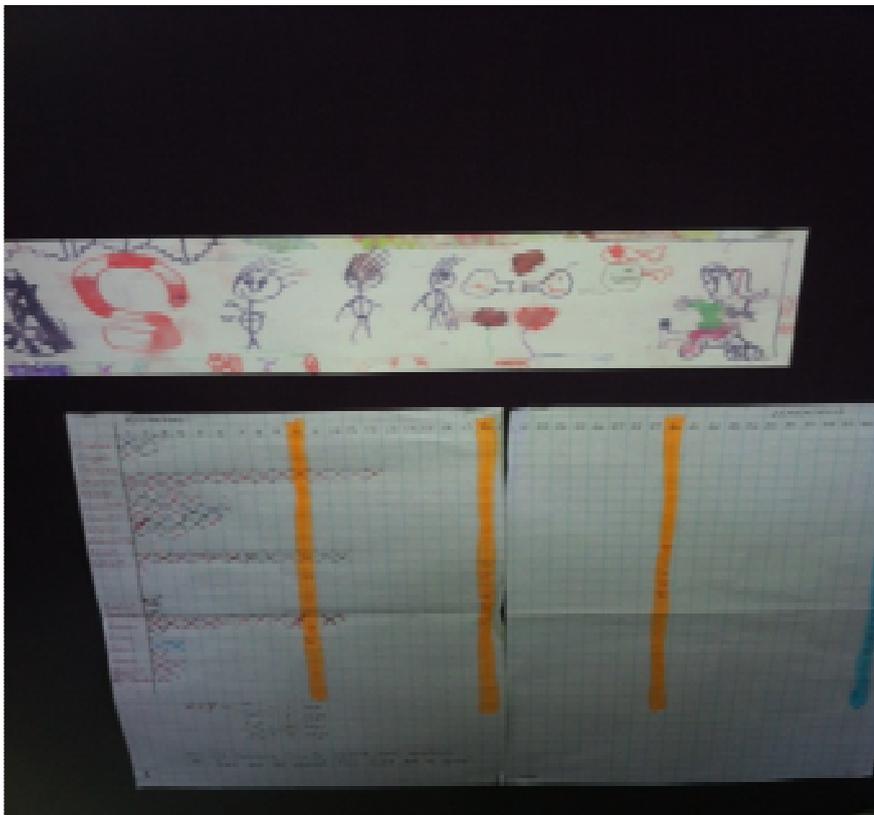
Figure 6 Room 22 'Run the records' cross country chart (2012)

Schools are in the business of education, and the example in Figure 6 reinforced what Kirk (1996) reiterates when he says that the school curriculum should be educational and that "as far as health related physical activity is concerned, it is the job of schools to ensure that children have knowledge and competencies to use exercise appropriately in contributing to an active lifestyle. It is not the job of schools to make children fit." (p.26). However, the preparation for the annual cross country event was undertaken each year of my research study during curriculum time. Interestingly, even though this event was a

curriculum focus, only a few children from years 4, 5, and 6 were able to represent the school at the inter-school competition, yet all children were expected to compete in the school event. My data revealed how Room 22 prepared for this during the 2013 year:

> Whaea Donna talks about cross country in preparation for the inter-school event, which is one month away. She said, "Five people were under two minutes on their first lap. Very good. If you get the stitch then Mrs Butler (a teacher) says stop and power walk." (Field notes, August, 2013)

Figure 6 and the example from my field notes above, demonstrate the different strategies adopted by the Room 22 teachers for the same context. Both teachers were involved in the two year focus on health, yet their placement and purpose of physical activity within the curriculum was different.

Aligning field trips with curriculum topics is a useful tool that can reinforce and enhance a learning experience for students. In 2012, for the 'healthy communities' topic in the *Being healthy* school wide concept, a field trip to a local marae[29] was planned. Prior to this, Matua Manu prepared Room 22 students by teaching the class how to prepare their pepeha[30] and about the Bastion Point land occupation. The learning was focused on taha wairua (spirituality) for individuals and hauora (wellbeing) from a community perspective. In this instance, Matua Manu's pedagogy demonstrated his holistic understanding of the nature of health. Room 22 students were required to ask their parents to help them prepare their pepeha, and practised this in front of other students during class time. This use of a kaupapa Māori approach to learning about yourself was well received by Room 22 students. One student commented that he was a refugee and did not know very much about his earlier life, before arriving in New Zealand. Matua Manu encouraged the student to share what he knew, and reinforced the concept of community by saying "we are all part of the Junglezone". This was an opportunity to engage with real world learning, both in the preparation of the students' pepeha and planning for a field trip. However, due to a tangi[31] the marae trip had to be postponed. (Field notes, December, 2012).

---

[29] A marae is the significant place for a local Māori community, with buildings for social and sacred gatherings.
[30] Pepeha is a presentation of your whakapapa (genealogy) and background about where you come from. This is often done on a marae.
[31] Tangi is a Māori term for a funeral, often held on a marae.

Learning was valued in Room 22, with all teachers reinforcing this notion and encouraging the students to value it. At the end of term three in 2012, Matua Manu created a brainstorm on the whiteboard with the words "What have I learnt this term?" All of the students completed the exercise for themselves. Sarah said "Through reading you learn lots. Through learning about netball it gets you fit." (Field notes, September, 2012). Sarah demonstrated that she valued learning in a sport (netball), but also associated sport with fitness.

Over the two years Room 22 teachers used real world experiences to reinforce learning, as was evident in activities undertaken in different learning areas. Some examples included dice games in Maths, writing a group oath in English and fair play strategies in fitness. An example from my field notes showed the focus on curriculum knowledge and understanding, but also exposed hegemony both in masculine and feminine physical action, reinforced by the teacher:

> Today there was a real world focus in maths. All the students were sitting in a circle playing a dice game, making up throws to equal the number ten. As they throw the two die, they have to decide to bank their numbers or play on. Children take turns around the circle and the class starts to cheer as the game goes on. It starts to get noisy, so Matua Manu says "no cheering as the teacher next door will hear." He then suggests that instead of cheering go "yes", use a whisper and pump your arm up in the air (he demonstrated with a strong fisted arm action and a soft voice). I observed the actions of the students as they copied the teacher. The girls giggled and the boys did it really well. (Field notes, November, 2012)

The situation above, whilst focused on a student centred learning activity, demonstrated the hidden curriculum in action; that is, where the intention, actions and dialogue do not always match.

The hidden or not so hidden curriculum

The term 'hidden curriculum', according to Kirk (1992) and indicated in Chapter 2, provides a label for that which is material but is not overt, sometimes not consciously taught and often negative non purposeful activity, in and about school curricula. The difference between the girls' and the boys' reaction in the field note above could be a result of the teacher legitimising the use of certain body actions; in this case a strong

masculine arm pump action, as an affirmation. My data revealed that the reaction from the class was that the boys copied the teacher, whereas the girls seemed a little embarrassed to carry out such a bold physical move, thus reinforcing this type of action is perhaps not an acceptable classroom practice.

Another example of the hidden curriculum reinforcing corporeality occurred during curriculum literacy time, when Room 22 was required to use adjectives as descriptors. The students were required to use a worksheet to fill in the sentence gaps, choosing a word from a given list. The words they had to choose were from the following list: ugly, fat, clever big and tall. The worksheet consisted of:

- The man is _____
- She is a _____girl
- It is a _____van
- The boy was very _____
- I have a _____dog.

I examined thirteen of the completed worksheets. I noted that six students said: The man is fat. Four students said: She is a big girl. Six students said: I have a fat dog. Six students said: She is a tall girl. Only one student said: I saw an ugly person (this was added by a student to one of the sentences). I particularly noted the answers from Sarah. These were:

- The man is tall
- She is a big girl
- It is a small van
- The boy was very clever
- I have a fat dog.

I asked Sarah why she chose the above adjectives. She answered:

> "Big girl is like the older girls at school." I then asked "Tell me about the boy being clever?" She said "Boys are clever." I probed further with another question. "Are they cleverer than girls?" She replied, "No, they are the same. Clever." (Field notes, March, 2013)

The results of this examination of Room 22's work aligns with Burrows' (2008) research, undertaken using a health questionnaire given to 795 students from two primary and two secondary schools, to find out what they knew about their bodies and health. In her research, the students correlated size and shape as predominant indicators of poor health and a lack of fitness. In Room 22's writing activity above, over half of the children used

adjectives of fat and big to describe people (fat man, big girl). Burrows' work also acknowledged that children in the two primary schools (62% in one and 25% in the other) said they had been told by somebody that they were fat or overweight. Interestingly, Sarah in her work equated 'big girl' with 'older girl', whereas I had assumed, as Burrows had discovered with her primary aged children, that big equalled fat or overweight. I made this assumption based on my understanding of the literature on obesity discourse and corporeal hegemony, thus demonstrating how easy it is to misunderstand curriculum intention, whether it is overt or hidden.

How the body functions was taught as part of the human body topic (from the whole school concept *Being human)* in Room 22. Whaea Katie specifically wanted to establish what the students knew about the human body. Whaea Katie was not cognisant of the material taught in the HH programme the previous year, but followed the whole school concept topics for 2013 (Field notes, May, 2013).   One activity undertaken was when Whaea Katie asked the children working in groups to draw a life size person on a large sheet of paper and recall everything they knew about the body. I walked around the room watching and listening to the groups whilst they were working:

> One group mentioned quads (quadriceps) and hamstrings. Whaea Katie then asked them what they were. It took a while for them to get the answer – finally, muscles. One student (boy) mentioned the word cells. Two girls drew a face on their person. It had long hair and eyelashes. Most of the groups drew and explained the physical things you could see e.g. ears, spine. Sarah included the word pelvis. Richie was surprised when his group drew the lungs on their person. He said, "I did not know that." (Field notes, May, 2013)

This type of knowledge, demonstrated above by Room 22 students could be a result of their developmental stand and is consistent with results from other researchers' studies on policy and interventions that were focused solely on biomedicalised health knowledge (Duncan et al. 2011; Graham et al. 2008; Kilgour et al. 2012; Kira, 2009; Rush et al. 2012; Svendsen, 2014).   In these studies (and in the example above), health knowledge had taken on a scientific and medicalised form, thus reinforcing the notion that knowledge will influence behaviour and therefore a problem (such as childhood obesity) can be fixed.

Humberstone and Stan's (2011) study about a wellness intervention in a primary school in the United Kingdom also uncovered mixed and hidden messages from both staff and

parents. They found that the head teacher's reasoning of 'enriching the curriculum' through a wellness project was a genuine attempt to raise awareness around health and the body, and was not intended as a direct surveillance of pupils' bodies. The Principal at Tuihana School had a similar intent, and did not appear to be aware of the potential of biopower or biopedagogies (where power and persuasiveness is prominent and is manifested in controlling the performativity and competency of bodies) when making curriculum decisions relying on 'taken for grantedness' and assuming that health programmes and resources are supposedly aligned to the NZC (Wright & Harwood, 2009). It was evident that biopower and biopedagogies contributed to the curriculum of body pedagogies uncovered at Tuihana School. This 'hidden curriculum', as an implicit underpinning, contributed to the normalising of bodily behaviours, though it was not explicitly intentional (Kirk, 1992).

Obesity and healthism discourses had influenced the parents', teachers' and students' sense of their identities, through policy and practice. The HH intervention and the curriculum foci of *Being Healthy*, *Being Human* are examples where the 'hidden curriculum' influenced and pervaded healthism and obesity discourses at the school. Interestingly, these health messages (either stated or hidden) from the HH programme and the whole school concepts were not always retained by Room 22 students. Petrie (2012) maintains that curriculum resources should be developed in a way that enhances teacher and student learning, and that these should provide learning experiences for students that enable retention. This in turn requires teachers to adopt a sociocultural and socio-critical pedagogy, whereby learning programmes are matched to localised needs, enabling students to make meaning from them.

Pedagogy

As outlined in Chapter 2, Evans and Davies (2004) draw on the work of Bernstein (2000) in suggesting that the distribution of power and principles of control in society translate into pedagogic codes (what is taught and how it is taught) and pedagogic modalities (what that looks like in terms of exhibited behaviours) in schools. This pedagogic modality is framed with tensions between health and education (Evans, Rich, Davies et al. 2008). Health care professionals with the best intentions are not always able to transfer their practices (pedagogy) into an education setting. Instead, their outcomes

are often refracted as they come under the influence and structures of policy and practices in schools. Evans, Rich, Davies et al. (2008) suggest that these outcomes result in schools becoming totally pedagogised micro-societies (TPMS). They suggest that 'health' of 'the body' is no longer the preserve only of those subjects or areas of the curriculum historically concerned with body issues, instead it is everyone's concern, in classrooms, playgrounds, dining halls and corridors. In some schools, as researchers have suggested, health professionals believe interventions that are successful in population/community health can be applied in school settings, thus replicating society (Gard & Wright, 2005; Leow et al. 2011; Powell & Gard, 2014; Pringle & Pringle, 2012; Williams, & Macdonald, 2015). (Further information about this type of health promotion can be found in Chapter 2 and in the Assessment section of this chapter).

Adjusting to the pedagogic modality of being a health educator was an expectation of the Tuihana School staff, as they had agreed to adopt the HH intervention as well as the outcomes of the whole school curricula foci, *Being healthy* and *Being human*. However, embedded within the teachers' practice were pedagogic codes and modalities in the form of embodied messages that reinforced obesity and healthism discourses which may have been aligned to the HH programme or been personal beliefs (something Bernstein, says is recontextualised through pedagogic practice). Evidence of these health discourses, which privileged the embodied self and corporeal focus, have been discussed previously in Chapter 6.

Teaching health versus understanding health

Quennerstedt et al. (2010) and Pinhas et al. (2012) suggest that health education practice should move away from teaching young people to be healthy to an understanding of the ways young people learn health. This focus on pedagogy (as well as curriculum) could enable students to have a greater retention and understanding of health issues, and the relevancy of these for them. In recent years, Burrows and McCormack (2012) suggest that there has been little research specifically addressing how teachers, rather than students, are making sense of the raft of health imperatives that are offered in schools. Gard (2008) contends that due to the 'war on obesity' the responsibility for what and how we are teaching health and physical education in schools is becoming the agenda of non-educational authorities. In Burrows and McCormack's (2012) study of three New Zealand teachers, they found that these teachers lived histories of 'health', using their

understandings of their own and others' bodies and their personal convictions about what, for them, constituted a 'good' and/or 'healthy' life. Their understanding of health, in turn, influenced the messages that they portrayed to their students.

In contrast, despite Room 22 teachers' limited understanding of health literacy and pedagogy (Alfrey & Brown, 2013; Kilgour et al. 2012; Nutbeam, 2008), the following is one example of an activity from the human adventures topic that adopted a sociocultural focus. It was taught under the *Being human* whole school concept:

> Drama was used to express how the Mexican born New Zealand polar explorer Ivan Trofimoff would have felt during his expedition on skis to the North Pole. The children were asked to dramatise how they would feel on an adventure if they were with Ivan Trofimoff. I observed, as they pretended to walk in skis, carrying a heavy pack and walking in difficult polar conditions. (Field notes, August, 2013)

As evidenced here and discussed by Petrie (2012), learning activities can have more meaning when they are interactive. The students in Room 22, through taking part in this dramatisation, were able to express how they felt through demonstrating a physical activity such as a polar walk. Enabling the learning to 'come alive and feel real', as demonstrated in the above activity, is one way to engage students and is fundamental in making pedagogy effective (Ministry of Education, 2007). Tasker and Culpan (1996/7), vilified by Penney and Harris (2004), suggest that the achievement objectives in The New Zealand Curriculum (Ministry of Education, 2007) enable a broader view of health, one that is multidimensional and socially and culturally constructed, thus providing a futuristic perspective.

A further example of the teacher ensuring that learning in health was relevant, and able to be understood by the students, occurred during the second year of my study in term two. The Tuihana School Principal had been approached by a health professional to run a pilot project on mindfulness in the school. Whaea Katie was asked to be involved, as she practised meditation and had a holistic approach to wellbeing (according to the Principal). My data stated:

> Mr Grigg (researcher pseudonym) is conducting a trial in Room 22 of eight meditation lessons every Thursday. After each lesson, the teacher continues each day for the remainder of the week. Students are also given a booklet, which they fill in for each lesson. There is a Tibetan brass bowl and gong that is struck to begin and end the meditation session. Children take turns to activate this. The actual meditation session takes five minutes and is facilitated by Whaea Katie (who has always done meditation with her class anyway). After the meditation she debriefs and asks everyone individually how they were feeling. The most common responses were – tired, calm, relaxed. (Field notes, May, 2013)

Whaea Katie demonstrated the value of health education PCK as she modelled this in the example above. Understanding the value and contribution that this pedagogy had on students' health was evident when the meditation practice and debrief was continued by Room 22 students, even after Whaea Katie left at the end of term two.

Health pedagogy requires a safe and supportive emotional environment

A safe and supportive emotional environment contributes to creating a learning environment where messages about health can be explored and addressed (Ministry of Eduication, 2007). The teachers at Tuihana School were expected to adopt an effective pedagogy to create this.

> I think the conversations that I am hearing, that kids are coming back to me with, like when they are talking about Taha Wairua and where they come from, they have had to go home and talk to their parents about it and I think that's a really powerful conversation. The Filipino kids are coming back finding out where they are from and how to greet each other in Filipino. Cambodian kids and Thai kids. They have all had to go and ask their parents about their rivers, and all that sort of stuff, so I think that has definitely been good for the kids, and the conversations I am hearing you know when they talk about the ketes of knowledge[32] and what they bring. (Interview, Matua Manu)

This excerpt (above) is evidence that Matua Manu believed that children's voice and allowing them to be partners in their learning can be powerful, something Soto et al. (2005) and Smith (2007) reiterate. Matua Manu described how using this type of pedagogy opens up opportunity for adults to learn from children, and allowed them to

---

[32] The 'ketes of knowledge' are part of Māori legend and hold conceptual knowledge for Māori. They can be defined as kete tuatea (basket of light spiritual realities, realities beyond space and time), kete aronui (basket of what we see, our natural world around us) and kete tuauri (basket of darkness, possibilities that lie beyond our sense of perception).

develop their own curriculum – both overt and hidden, establishing practices that are socially and culturally acceptable to them and, as such, being participants in their own biopedagogies (as discussed in the next section).

In Room 22, when students undertook literacy (writing and language acquisition), critical analysis was adopted as a pedagogy through a triangular process involving the teacher, a student and a student peer. However, it was not evident from my observation that it was adopted in writing for health education. Nevertheless, different pedagogies were used by teachers to engage students in considering aspects of health. For example, in Figure 7 Matua Manu used post it notes for students to contribute ideas about taha wairua, in order to complete a brainstorm diagram.
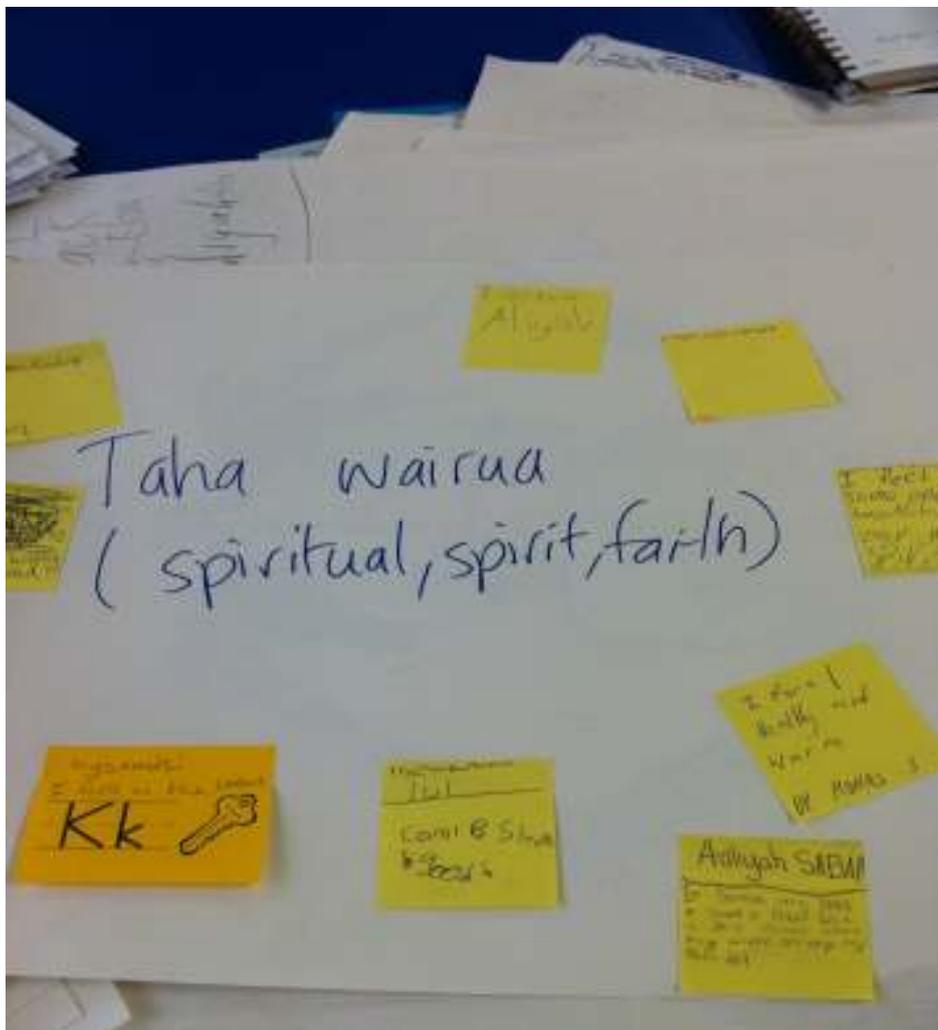
Figure 7 Taha Wairua activity by Room 22 students

This example (Figure 7) emphasises Matua Manu's kaupapa Māori approach, with the spirituality aspect of hauroa, taha wairua, part of his teaching of the holistic concept of health (as discussed in Chapter 5). Further information about this kaupapa Māori approach is discussed in the Assessment section of this chapter.

Social practices do influence what we say and do within a learning environment, such as a classroom and a school. For example, in Room 22 a karakia was spoken every morning to start the day. The karakia was led by the teacher and throughout the 2012 year, Matua Manu reinforced this protocol by periodically asking the students why it was significant.

> Richie said: "Because it gets you into a healthy zone." Other students also contributed ideas such as …pray to your gods; have a good day; it sets you up; think about poor people. (Field notes, November, 2012)

In some instances teachers are not aware of the messages that are inferred or hidden in their pedagogical practices. For example, when discussing how children use their bodies, Matua Manu said:

> I try to encourage all of them in all sports, and I'll always, you know when we are doing basic skills say "you are an athlete". I think if you just say it, then they kind of believe it, even if they might not be as good as everybody else. (Interview, Matua Manu)

In the quote above, Matua Manu reinforced this pedagogic message with his expectations of children being athletes. This could be seen as a positive or a negative, privileging some children and disadvantaging others (Bernstein, 2000). Teachers can promote the 'ideal body' or the 'ideal person' through curriculum and their pedagogical practice, often unintentionally through unexamined ideological assumptions that are found in health and obesity discourses. Researchers in education today find this disturbing (Gard & Wright, 2005; Evans, Rich Davies et al. 2008; Gard, 2011; Leahy, 2009; Rich, 2010; Shilling, 2010; Wrench & Garrett, 2014).

Parents as pedagogues

Parents of children at Tuihana School adopted pedagogical practices and followed social trends, mostly through the influence of popular media. These populist messages encourage populations (society) to conform to a 'norm' with regard to healthy body weight and size, healthy eating options and daily exercise. Specific examples of this were taken from interview data with parents and caregivers. Tara's mother said about health

imperatives "I think that you could live longer, not be obese." She justified exercise as a reason for staying healthy. "We try and stay pretty healthy anyway and we go out, I go out and exercise." Furthermore, these quotes above affirm that teachers, parents or the school can be an influence.

The influence of teachers and parents as role models is paramount, as Reeve and Bell (2009) concur when they suggest that children can be naïve learners, as they don't grasp the conceptual ecology and therefore rely upon learning from older others. However, as Allen and Petrie (2005) suggest, teachers may find it a challenge to consider how their practices contribute to social connectedness, in order to improve individual teacher performance. They suggest that it's about teachers' developing their personal and interpersonal skills to negotiate the social world that exists in school communities. At Tuihana School there were numerous examples where the teachers developed respectful partnerships with children and where learning was the central inference. The Principal described the influence that Matua Manu has with his class as:

> … (spirituality) is part of him. So that spiritualness (sic) that he brought
> to his classroom he would have brought anyway. (Interview, Principal)

This influence was reiterated when Matua Manu discussed how he approached teaching the whole school concept of *Being healthy*:

> What I've heard from [students] reflections, I've taken that on board. I
> think that they [Room 22] all have a clear understanding of what their
> strengths are and be able to set goals, and that's what we talked about -
> Taha hinegaro, a healthy mind, and also just about being good people,
> not having people who are toxic, a toxic personality, people that are
> non-toxic. (Interview, Matua Manu)

Playground pedagogies

Pedagogies adopted in the playground at Tuihana School were centred around play and led by students. Richards (2012) states that play in schools takes place in designated areas, at designated times. Children at Tuihana School had opportunity to play before and after school, and at morning tea break (20 minutes, including 5 minutes of eating time) and lunchtime break (40 minutes, including 10 minutes of eating time). The break times had scheduled eating times, during which children were in the classroom supervised by the teacher and were not released until the bell sounded. Thus, the school regulation of eating before playing was upheld and reinforced by the teaching staff.

Staff were required to supervise children at break times and one teacher was designated the 'duty teacher'. From term two onwards in my first year of data collection at Tuihana School, I often undertook the role of duty teacher, as it enabled me to observe students at play in an unstructured environment.

> In the playground there are distinct groups of boys and girls. Everyone is very friendly and the children do not hesitate to come up to you (me) as the duty teacher if there are any issues when they are playing. The duty teacher wears a fluro vest and carries a notebook and pen (in the pocket) to record incidents, including first aid referrals. Morning tea and lunchtime duties are divided into two shifts, and duty is shared amongst staff through a roster. (Field notes, October, 2012)

The playground games and activities varied, for example: tag-like games, tug of war, cricket, group skipping with a large rope, handball etc. In addition to the playground, at lunch break times the library was available to students in the winter and the swimming pool in the summer. An additional teacher was required for swimming pool supervision and this was often taken up by one of the senior staff (Deputy Principal or Principal). Playground games or activity contributes to what Bernstein (cited in Richards, 2012) calls the invisible pedagogy of surveillance, whereby spontaneity of the act is screened and shaped through interpretation, evaluation and diagnosis, often by the teacher and other students. At Tuihana School, my data stated that most students in Room 22 engaged in free play activities, using this time to actively play with each other. My field notes indicated that a large number of students did not use equipment in free play. Instead, they made up games on the field or courts. In addition, children of different age groups often played together in the playground:

> If it is organised sport or play (like playing with a rugby or football), then multiple ages do play together, provided they are of the same ability. Richie confirmed this when I asked why he played touch with the older boys and not from his own class. (Field notes, April, 2012)

Richards (2012) suggests students know how to behave in the playground, whether they are under surveillance or not. From my observations, the pedagogies played out in the playground were for pleasure and not as a result of compulsion or expectation, something Ross (2008) described when he suggested that play is an integral part of being physically educated. He said "play is serious because it helps each participant to make sense of their actions in the world. Play that is pleasurable because it is purposeful, active muscle contraction that involves our sensations of touch and muscle sense to evoke a sensual

warmth and excitement" (p. 64). The importance of play for pleasure was also described in a 2009 study by Burrows et al. They analysed a number of questions from the 'being healthy' task completed by 94 year 4 students (8-9 year olds) and 92 year 8 students (12-13 year olds), taken from a New Zealand National Education Monitoring Project (NEMP). They found that there was an absence of pleasure, fun and references to sociality in their children's responses. I also observed that my three subjects equated activity with pleasure. For example, Richie used his break times to play actively and have fun with other boys, most of whom were older. He often arrived back in the classroom smiling, hot, red in the face and in bare feet. On one such occasion after morning break play, I asked what he had been doing:

> Richie put his foot up on the chair and said "Whaea Denise look at my toe. I hurt it playing touch." It had a plaster on it. I asked "Will you still play at lunchtime?" He said "Yes." (Field notes, June, 2012)

Play is not just confined to playgrounds in schools. It always takes place in a particular social context, with its own particular social arrangements, and hence can occur in a range of different contexts within a school environment. Tuihana School students also equated physical activity and playing, with fun. For example, when I asked a group of girls (including Sarah) what physical activity they did on the weekend and why, they said:

> "Because it is playing and playing is fun." (Sarah) Another student added "Yeah – and playing and doing lots, is fun". (Field notes, April, 2013)

Having fun was one of the pedagogical play practices adopted by Matua Manu and Whaea Katie. Matua Manu said about adopting games to play in maths:

> It's a mental game, not a physical game. You know I saw that too. I actually didn't mean to make a point of it but it's just one of those things that you see because you want them to have fun, because when they are having fun they are learning, eh? (Interview, Matua Manu)

Whaea Katie also aligned fun and playing with her teaching and learning programme. In the first month that she was at Tuihana School she established a pedagogy for the daily fitness session held outside:

> 'Fitness' is written in the timetable on the whiteboard in Room 22. Fitness this month consisted of a game of continuous tag for 10-15 minutes. Richie took the box of hats out without being asked. Whaea Katie says "No hat, no play, no fun today." She then made a comment to me. "How great was Richie to do that without being asked?" (Field notes, February, 2013)

The students recognised the value of play, both in the school environment and in the home environment. During the summer months, children from Room 22 often swam in the school pool. In December 2012, I noted that on the days I was at school most (at least 80%) of the class, when asked, were keen to swim at lunchtime. This emphasis on enjoying play and physical activity was reiterated when the Principal discussed an increase in whole school focus on health, as a result of the HH intervention. She said:

> That (timetabled physical activity) is always pretty high but the general level of activity in the playground is much higher. Um, it is less sedentary now, just sitting around and talking. It is more physical. The full grounds are being used. They are seeking more and I am just thinking actually we are going to have to get more activities out there for them. No longer do balls just suffice. They need a bit more activity to keep them busy. Swimming has been full on, all the way through. Everybody is swimming and some twice a day. For most of them we see a different level of achievement in swimming too. You know for the first time since I have been here, we have had competitive (swimming) races. We have never had that before. So we have got children healthier, being able to swim more, more stamina, more fitness – that is better, the level of activity in the playground has definitely risen. (Interview, Principal)

Interestingly, the Principal focused on discussing playground and swimming activities, which could be either co-curricular physical activities or timetabled physical education, reflecting a change in activity culture, both at a school and classroom level.

Socio-critical pedagogy

Teachers are not always aware of the importance of adopting a socio-critical pedagogy when it comes to populist reproductive messages that are circulating in society, particularly in relation to health and the body (De Pian, 2012; Fitzpatrick, 2011; Petrie & lisahunter, 2011). In contrast to other Room 22 teachers in 2013, Whaea Katie did not subscribe to reproductive pedagogies, instead she viewed health holistically and role modelled a range of practices from meditation, to joining in play with students. For example, she engaged in productive pedagogies when she joined in the daily fitness activity. In an example, Whaea Katie when confronted with students touching each other (boys kissing girls on the shoulder, and looking into the girls changing rooms) when they

were not invited to do so, challenged the students' actions. She said "We do not do that as it is a violence against another." Her actions demonstrated how she felt about personal rights, when she sent the offending students to the Principal as a follow-up to this incident. (Field notes, March, 2013).

Other teachers of Room 22 demonstrated a limited understanding of critical pedagogy and few adopted a socio-critical approach to their teaching. When students made comment about each other's physical appearance, teachers did not question their reasoning, thereby forfeiting an opportunity to challenge assumptions and demonstrate a socio-critical approach. For example, in a swimming lesson the girls asked Matua Manu if they could wear a towel over their togs because the boys may see them. Matua Manu just ignored this remark and started the lesson. (Field notes, November, 2012).

Researchers argue that if teachers adopted a socio-critical pedagogy in health education, students would broaden their understanding of health, not just for themselves but by considering others and society as well (Fitzpatrick & Tinning, 2014; Harwood & Wright, 2009; Macdonald et al. 2014; McCuaig & Tinning, 2010; Wright, 2009). My field notes revealed the following:

> I wondered how realistic my expectations were of the learning resulting from the HH programme, when Richie asked me one day if I was a vegetarian. I said no, I eat meat. I asked Richie if he was a vegetarian. He said "No but vegetarians are healthy." I asked what he meant by that? He shrugged his shoulders. I said "Like… what is healthy?" He said "Eating good food." I asked "Like what?" He said "I don't know." (Field notes, April, 2013)

This comment by Richie confirms what other researchers have suggested about teachers being in control of and understanding the intent of learning programmes, to ensure that specific outcomes and intended health messages are learned by their students. Richie, in his response above, demonstrated a limited understanding of health, despite having been part of an intervention programme and having been taught health topics as part of a whole school focus, the previous year.

Biopedagogies

Biopedagogies evident in schools usually result from children (and others) uncritically thinking about the body and health, usually in a pathogenic way (Harwood,

2009; Leahy, 2009; Wright, 2009). These biopedagogies were evident when the teachers at Tuihana School focused on, and made comment about, the functioning of the body in relation to health. For example, Whaea Katie insisted children ate fruit during 'brain food' break time:

> Whaea Katie was monitoring the children's food intake, in order to support brain activity. She asked the class to go and get their fruit and come back and eat whilst silently reading. She then looked around the class and asked certain students for their lunch boxes, to check on food and whether it was appropriate or not. (Field notes, May, 2013).

The functionality of the body for action or activity was a reminder for students of their physicality. Whaea Donna reinforced the school policy and culture by preparing students for an interschool event. She reminded the students about competition:

> "Five people were under two minutes on their first lap. Very good. Every day we are training towards the cross country and year four is a competitive section." (Field notes, August 2013)

Soon after this activity I asked Richie why they did cross country. He shrugged his shoulders and replied "you just have to." (Field notes, August, 2013). Richie demonstrated that biopedagogies were evident, as the action required had been elevated to a status that reinforced the importance of exercising for health. The children had not made personal meaning from experiencing the activities described in the examples above, instead accepting the action required of them. Kirk (2006b), Tinning, (2009) and Leahy (2009) suggest that teachers often do not challenge certain curricular or pedagogical practices; therefore, they reinforce, as Harwood (2009) posits, the 'biopower' of health messages. The dominant 'biopower' message by public health agencies is about the value of conserving practices that sustain the body 'biopedagogies' (practices that enhance the physical function of the body). These messages permeate the schooling system and are manifested through curriculum, pedagogy and assessment practices that aim to enforce control (Evans & Davies, 2004).

It appeared that Tuihana School was not aware of the potential of messages of biopower and biopedagogies, when engaging outside agencies that offered their services to the School. An example of this lack of awareness and perpetuation of biopower was the tennis example that was used previously in Chapter 5. The pedagogy adopted was one that was not individualised for children or indeed age levels or ability, instead it was one

that was a 'one-size-fits-all' pedagogy that focused on regularising the students' knowledge and skill development for the game of tennis:

> Lesson one and Coach Vicky asked if anyone from Room 22 had played tennis before. Six said yes, four said never and the rest did not answer. The session was broken down in to a series of activities. During each of the activities Richie finished early. Sarah struggled to finish in time and Tara was successful. One activity was a coach and partner demonstration. Coach Vicky used Sarah, and I wondered why, when it was so obvious she was struggling to coordinate her moves. Sarah tried three times to catch the ball in the cone after it bounced. She failed each time. She was getting a bit frustrated and red in the face from exertion, but the class was supportive and made no comment. In the next activity, Richie and partner were really concentrating hard and helping each other achieve. Tara and her partner were competitive too and wanted to score a point for each hit. Sarah still struggled to catch one hit. Tara scored a 10 and showed the coach. She was very proud of her achievement. Richie then went up to the coach and said "watch me." He does this a lot as he likes attention. He hits big up shots. Confident body language and from my perspective, is the best in the class at this activity. Coach Vicky chooses a new partner and chooses Richie. They successfully demonstrated the next activity. (Field notes, May, 2012)

This example of biopower, exhibited by the tennis coach through her pedagogy unintentionally applied a message that engagement in sport (tennis) contributes to health and wellbeing. She exhibited that teaching this type of pedagogy will aid children's ability in the sport of tennis. Powell and Fitzpatrick (2013) suggest such initiatives by agencies outside of education justify their place in a school environment through their contribution to the physical health agenda (being able to perform) and of children being engaged in activity. The guideline of 60 minutes or more of moderate to vigorous physical activity each day for children was developed by Sport New Zealand (formerly SPARC) in 2007, in response to the then Labour government's Mission-On health initiative, aimed at reducing obesity in young people. This initiative concluded when the Labour government lost the election in 2009, but further attention from journalists, politicians, medical professionals and scholars over the last decade have ensured children's fitness, fatness, sport and inactivity have remained high in the New Zealand popular media, hence the prolific interest from outside health and sport agencies in schools (Burrows & McCormack, 2012; Fitzpatrick, 2011; Powell & Fitzpatrick, 2013; Powell & Gard, 2014). Further discussion about this influence is explored in the section below on surveillance.

Teachers inquire as to the effectiveness of their pedagogy through assessing their students learning. My data provided evidence of students reproducing statements about what they had learned about the concept of health. The students in Room 22 understood their bodies in relation to their social and cultural environment in the classroom, playground and wider school. This reflects the concept drawn upon by Evans, Rich, Davies et al. (2008) of Bernstein's idea of a school being a totally pedagogised society (TPS), where the learning and pedagogy that children experienced was often a reproduction of the messages, values and ideals they were subjected to through various mediums in society. In the case of the children in Room 22, they were very much influenced by the teachers and their reproduction of the school policies and practices, thereby reflecting an inculcation of society's values system. Evidence of this type of values surveillance is discussed in the following section.

Assessment

In this section I visit assessment of bodies and assessment of knowledge. Richards (2012) states that the wider process of learning is one that, in terms suggested by Bernstein (2000), involves becoming accustomed to being watched and evaluated throughout the day. Students at Tuihana School exhibited health strategies consistent with those valued by the school, such as participating in the whole school cross country and sports events, drinking water frequently, eating 'healthy' food during fruit break time, to name a few. These values were either overtly stated or covertly hidden and transpired through the inter-related message systems of curriculum, pedagogy and assessment. An example of the Principal reinforcing the importance of assessment in action occurred during a whole school event:

> After morning tea, the teachers prepared for parent- teacher- student interview time and the whole school went into the hall to listen to a visitor (a lady who was a nanny to Malaysian royalty) speak about her travels. Before the talk started, the Principal asked the whole school, "Hands up those who are training for Cross Country?" This was totally unrelated to the speaker and I wondered why she asked this question. Students responded by putting their hands up, and when they did, she nodded her head and said "Good." (Field notes, August, 2012)

This field note described the Principal espousing a social and cultural value of the school – participating in the school cross country event and evaluating whether the children understood the importance of this.

Assessment, in the form of surveillance and evaluation, occurred both within the classroom as well as within the school environment at Tuihana School. The surveillance reinforced Shilling's (1993, 2004) notion that schools are not just places that educate the minds of children but that they are also implicated in monitoring and shaping the bodies of young people. Rich (2010) concurs and suggests that in schools across Western societies, there is increasing evidence that school curricula and pedagogies are reshaped by initiatives that use evaluation and surveillance techniques to determine policies. Such an evaluation system is in place in New Zealand schools, where curriculum and pedagogy are reviewed and evaluated by the independent government agency the Education Review Office (ERO). ERO not only evaluates the curriculum programme, but it evaluates other criteria such as student wellbeing and school culture. In a 2011 ERO report of Tuihana School (Education Review Office, 2014), ERO reported the following about student engagement, learning and achievement:

> Teachers use assessment data to group children according to their levels of ability in reading, writing and mathematics. Students engage well in these instructional groups. They are increasingly able to discuss how well they are achieving and their next learning steps. The principal and senior managers plan to further develop students' ownership of their learning. (ERO report, 2011)

Whilst this statement does not comment on children's understanding of health or wellbeing, or of the learning area of health and physical education, it does comment on the use of assessment data and the focus of the Principal and the senior management team on using data for learning. Matua Manu used a system to encourage student achievement and to create a culture of learning in the classroom, rewarding ability and good behaviour:

> Matua Manu used the 'Junglezone dollar' as a reward system for achievement for Room 22 children (as previously discussed in Chapter 5). A jungle-zone dollar could be earned for progress and achievement in curriculum related activities, or for upholding the classroom cultural values such as helping another student or behaving during mat time. I asked Matua Manu about this and he said he saw this idea at another school where he went to observe a teacher at work. (Field notes, May, 2012)

This type of surveillance, evaluation and then reward can develop into an intervention that could be detrimental or advantageous, encouraging children to replicate and reproduce values with which they may (or may not) align. Students conforming to surveillance practices reinforce the dilemma with which Evans, Rich, Davies et al. (2008)

were concerned, that schools have an 'evaluative gaze' that encourages replication in their 'totally pedagogised society'.

Room 22 teachers often demonstrated this evaluative gaze when they policed what the children were eating. They too linked food to health and used surveillance techniques which included comments, in order to influence the children's food choices. It appeared that their framing of the relationship between food and health was subjective and based on their knowledge of nutrition. Hence the fruit break and the evaluation of food demonstrated the value the teacher and school placed it being available to all students.

The design and intention of the HH programme was a type of control system that used assessment to determine biomedicalised improvements in health. The programme used student data via quantitative measurements of weight, girth and pedometer steps to determine success from baseline data. Interestingly, students did not comment on this surveillance, demonstrating yet another form of body centred control (Bernstein, 2000; Evans & Davies, 2004c). The assessment of student health within the programme relied on practices informed by the biophysical sciences (anatomical and physiological functioning) and associated discourses (activity engagement). These were evident in the structure of the tasks in both the teacher and student manuals, based on the premise that HPE lessons are sites where tacit messages about desirable bodies and health practices are communicated (HH manuals, 2011).

A kaupapa Māori approach to assessing knowledge

A number of researchers tell us that messages promulgating in society imply and attest that schools should have a sense of responsibility for teaching students and the community about how to be active and healthy and thus become contributing citizens (Burrows & Wright, 2004; Evans & Davies, 2012; Macdonald, 2011; Shilling, 2004, 2008). In the Western world most education systems adopt the dominant culture's philosophy and way of assessing knowledge. In Aotearoa New Zealand an alternative culture and philosophy, that of the indigenous people (Māori) is also promoted in some schools. As previously discussed in earlier chapters, my findings provided numerous examples of an alternative approach to health used by teachers' adopting a Mkaupapa. The focus on Te Whare Tapu Wha and the 'ketes of knowledge' as described by Matua

Manu below, are an example of this. This approach, and the resulting assessment activity, was a variation from the HH programme. Matua Manu explained it to me when I spoke with him about the HH programme in June, 2012:

> I said to my Principal, I'm also going to teach the three 'ketes of knowledge" ' (kete tuatea, kete aronui, kete tuauri). So in some respects they have helped design my whole class curriculum and assessment because we are talking about health. I wouldn't have been able to do that if we were talking about citizenship. I would have to come up with another way to talk about it, but health has been the impetus for the whole curriculum that I am teaching in my class and I'm lucky that I am able to teach it. (Interview, Matua Manu)

Figure 8 Ketes of Knowledge by Room 22

The photos in Figure 8 show the children's work for the activity described when Matua Manu taught the ketes of knowledge. Children were required to consider traits that they have or would like to possess, in order to demonstrate their view of health. They did this by adopting a tikanga[33] Māori perspective. This means understanding how the three ketes (or baskets) of knowledge contribute to health or wellbeing from a Māori perspective. For example, Kete Tuauri involves the sciences, darkness, unknown facts. Kete Tuatea is strengths, things you can see and understand, and Kete Aronui is about an individual's pursuits, goals, to seek and to find things out. This activity was undertaken over the second term in 2012 and children contributed their ideas and drawings on pieces of paper which were then read out to the class and 'placed into' the kete on the classroom walls, thereby acknowledging their understanding and desires about their health and wellbeing. Richie, when choosing his three best traits for the Kete Tuatea, talked about one of those being a good brother to his siblings.

> Richie chooses his best three traits for Kete Tuatea. He also drew an additional picture which said on it "I want to be a good brother." Matua Manu then said "We are all brothers" and gave Richie a knuckle-to-knuckle high five acknowledgement. Richie had a huge smile on his face. Richie then asked me if I wanted to do one for the Tuatea kete. He said "write something you are good at Whaea Denise." I thought that was a nice thing to ask me to do and demonstrated my inclusion within the class. (Field notes, May, 2012)

The inter-dependent Māori concepts of hauora and a kaupapa Māori approach to health used in Room 22 during 2012 reinforced Bernstein's (2000) belief that the message system through curriculum contributes collectively with pedagogy and assessment in an inter-related way. However, one year later, I asked Sarah if she could share with me her understanding of Te Whare Tapu Wha. She said "Four walls, whanau, tinana, wairua and hinengaro." I then asked if she could remember what these were about. Sarah said "I can't remember." (Field notes, April, 2013) This demonstrated that Sarah could not express the meaning despite remembering the concept. This could have been as a result of the change in teaching staff, the lack of reinforcement of learning as it occurs, or not transferring understanding to other contexts.

---

[33] Tikanga is a Māori word for protocol or ritual

Surveillance

Bernstein (cited in Evans et al. 2009) suggests that authority reflects the interests and hierarchies of social class and culture. Dominant social groups emphasise rules (a type of surveillance) which impact on the corporeal device through ways of embodied communication - referred to in this study as biopower. At Tuihana School, leadership decisions were made by the Principal, in consultation with the Board of Trustees and the senior management team. This method of decision making and communication is standard policy, as responsibility for the teaching and learning in educational institutions lies with the Principal (Penney & Harris, 2004). However, as schools are influenced by society whilst trying to meet the needs of their communities and students, they have undertaken to endorse and nurture more corporeal orientations of 'health' and the 'body'. This was evident when I asked the Principal about the decision to adopt the HH intervention along with the whole school health focus:

> Um I think probably just drawing those connections between the HH programme and the overall concept that we were following for the year and I do it in almost a didactic fashion where we talk about our enduring understandings that we want for the children and talk about our fertile questions and just um maybe a little provocation with the teachers and how that is working and what they are actually delivering. So how is the HH programme supporting our concept? What areas are useful, what feedback can you give the rest of the school around it, that sort of thing and also then to sample the student voice. How has it changed the conversations that the children are having? So how has it changed the concepts? What are they thinking about keeping themselves healthy? What power has it given them in their decision making? (Interview, Principal)

However, my data revealed that children had limited decision making and power with regard to health and food choices. Matua Manu explained this one day:

> I think if we wanted to, we could be a little bit more fastidious about what they eat, which I'm not. What they get given is what they get given and as you see yourself there are lots of potato chips over there, probably not as many apples as there should be. So I think they know that, but they kind of get given what they get given, but I just want them to be able to eat socially. It ties in with what we are teaching here with our hauora, part of it anyway. Because we talked about Te Whare Tapa Wha, so it ties in with that, definitely. (Interview, Matua Manu)

Whilst Matua Manu wanted his students to consider the social elements of sharing food he was required to be guided by the knowledge (all be it recontextualised) through through the New Zealand National Education guidelines. Under the National

Administration Guidelines (NAGs, specifically NAG 5(b)[34]), schools are required to promote healthy food for all students. The NAGs are a legislative requirement under the Education Act 1989, for school administration. They set out statements of desirable principles of conduct or administration for specified policy and practice. Generally teachers at Tuihana School, whilst 'policing' lunch boxes, refrained from making personal comments about children's bodies. They did, however, make comments about food and healthy eating, constructed from their own understanding of health. This teacher knowledge, as Humberstone and Stan (2011), Burrows and McCormack (2012) and Rich (2011) suggest, was intended to be helpful, but it can also be inaccurate and potentially damaging long term, as Lee and MacDonald (2010) and McMahon et al. (2011) found with their respective studies on teenage girls' eating disorders and on body dysmorphia, the first of which was connected to learning programmes in the girls school.

HH was funded by a New Zealand government agency, The Health Research Council, and whilst it was optional for a school to be involved in the intervention, the project was supported because its aim was aligned with a public health priority; that was, reducing obesity (see Chapter 2 for more detail). This national agency is an example of what Bernstein (2000) suggests is social agency knowledge and control, recontextualised through a school health intervention. At Tuihana School, during the two years that I conducted my study, a number of health related agencies or outside providers of sport conducted interventions with children. These were: Life Education, Kiwi tennis, Hydra swim school, Trampolines, a rock climbing wall, ripper rugby, miniball, sporting codes such as AFL and football, Funskills and meditation. Researchers, as outlined in Chapter 2, comment on how easy it was for private providers to command a place in schools through the outsourcing of health and physical education. This outsourcing often enabled government agencies to regulate, through evaluative practices, efforts to achieve the 'bodily ideal'. One example of Tuihana School being influenced by such evaluative practices was through adopting the 'Funskills' programme, run by a local Regional Sports Trust (RST) The RST is funded partly by SportNZ, a government agency. I asked the Principal where the programme came from, and which children were able to participate in it. "I decided on who did it (Funskills) - those who were isolated and not included

---

34 National Administration Guideline 5(b). Each board of trustees is also required to: promote healthy food and nutrition for all students

much in games." (Interview, Principal). This example of biopower and control was reinforced by Whaea Katie when she commented:

> The Principal had chosen all the students (20 from the middle school) and I think it was because they needed further work on their coordination and social skills. (Field notes, May, 2013)

My field notes revealed that in Room 22 eight students participated in the Funskills programme. An instructor from the local RST ran the programme twice a week for 45 minutes, over one term. She brought in equipment each time, except for the heavier equipment (e.g. bars, mini tramps) which stayed in the hall. I observed students from Room 22 participating in Funskills on four occasions during May and June in 2013; each session was similar, with the focus on skill development.

> Funskills consists of four stations, with a group working at each station until required to move. It appears that children have been put into groups of mixed ability. The music starts and stops and the groups rotate after five minutes of activity. The stations are focused on fundamental movement skills (FMS), using a variety of equipment like hurdles, mini tramp, elastics, benches, swing station, walls for walking up, cheese mats for rolling, a caterpillar cylinder, cones, a trolley with wheels etc. At the start of each rotation, the instructor lined the children up in one line and they went through the circuit individually. She (the instructor) also had a clip board and was assessing using a checklist as to whether they had performed the skill or not.   The instructor looked stressed. She had to assess a student within a limited time before they moved on. Also the instructor does not know the student (or their names). I wondered whether she was measuring their FMS or their social and interactive skills, as that was the intention as described by the Principal. At the end of the session the instructor gave no feedback and just said to the students, "Pack up" and "See you Friday." (Field notes, May, 2013)

Webb et al. (2008), in their study on the discourses of health and embodiment by teachers in both Swedish and Australian schools, found that they privileged a fit healthy body and used their power to regulate at risk bodies in order to conform to expectations. The construction of the activities within the Funskills programme, and the focus on evaluating the specific skills by the instructor, affirms that biopedagogies and biopower were enacted.   When I asked the participating students from Room 22 to tell me about Funskills, they said:

"Is my face red?" Sarah held her hands at the side of her face. All the children respond "It is fun." I asked "Why do they make you huff and puff?" Sarah said "for fitness." I asked "Why were you guys chosen?" They responded that they did not know, and that they were just picked. I asked the group "How do you know you are getting better?" Sarah said "Now I can do bunny hops." Another student said, "I can jump fast." One boy responded, "We get to do cool things on equipment." Another replied, "All the cool things like the different activities."(Field notes, September, 2013)

Interestingly, when asked if they had told their parents about participating in Funskills and what it was about, they all said no. I went on to ask them what they thought their parents' reactions would be if they had told them:

Sarah said "They would be happy for me that I am getting exercise." She then asked me "Is my face red still?" I replied "No, but why are you worried about your face being red?" Sarah just shrugged her shoulders. (Field notes, May, 2013)

Teachers in Room 22 monitored performance and discipline. The children were required to be in control of themselves when moving about the classroom and school at different times during the school day. Matua Manu, when moving outside the classroom to another venue like the hall or field, would ask the class to 'mosey over', meaning walk casually in a group, but quietly. Whaea's Katie, Marie and Donna would always line the class up in pairs and used the regulation and formation of lines when moving around the school. Inside the classroom, Whaea Katie reinforced behaviours expected from children whilst sitting on the mat. The class were to sit quietly and not interfere with others. On one occasion when the class was not following this procedure, she said "Show respect for yourself and others." (Field notes, April, 2013). Students, in turn, replicated the discipline modelled by the teachers. Sarah, whilst listening to children in pairs during an oral feedback activity, said to one student "Be quiet Kayla (pseudonym), we all listened to you." (Field notes, May, 2012)

Assessment practices

Assessment was often evident in the attitude and practice of teachers at Tuihana, in placing importance on the outcomes of physical activity and exercise on the body, thereby reinforcing a corporeal perspective. Kirk (1997) and Ovens and Powell (2013) agree that the preoccupation with the body is manifested by society through concepts such as regular physical activity, healthy eating, avoidance of unhealthy products and practices and the development of fitness and sports skills. Both Tinning (2000, 2009) and Shilling

(1993, 2010) propose that in addition to the physical form, it is the social, political and historical contexts which influence how we perceive the body in the Western world. At Tuihana School, the body was assessed through what it can do in physical, social and cultural contexts. The teachers used daily fitness, sports and physical education to ascertain what the physical body can do. Matua Manu demonstrated this through a dance lesson:

> Matua Manu asked the students in Room 22 "What can you do with your body?" The students were given a picture or photo to look at and do a movement in open space whilst the teacher played his guitar. They were required to interpret their picture and create a movement to it. The teacher then asked the students to demonstrate their movement. Tara used big movements to move her body and arms. Richie moved only his eyes. The next activity was free movement to dance to. Next was guitar music – soft plucking chords. Richie made a hitting ball movement (like using a bat in softball) and then he raised his arms in a champion salute (two arms extended over his head, hands in a fist). He then used strong masculine movements – shooting with his fingers and arm into space. During this dance activity Matua Manu was observing students and playing the guitar. At the end of each student's movement he nodded his head in approval. (Field notes, March, 2012)

Matua Manu used observation, as in the dance lesson above, to ascertain the physical prowess and confidence of the children. Throughout that year, I observed that he acknowledged the physical ability of some of the students and used these students to lead activities during sports and swimming time:

> It is 'sports' time again. Matua Manu chooses two even teams to play a variation of the game of bench ball. He starts by choosing the two boys (the leaders) who are the most physically coordinated and then chooses students to go into each team. It is the boys who dominate the game, and all the children are like bees around a honey pot wherever the ball is. They call out names and put their arms out to catch the ball. The teacher adds a few new rules – no stepping with the ball, and then demonstrates how to move into space and get the ball back after you have passed it. Only the boys are able to do this in the game. (Field notes, August, 2012)

As mentioned previously, Matua Manu also praised children on their physical ability:

It appeared that Matua Manu favoured the physical prowess and ability demonstrated in particular by the boy students, as they were observed to be dominant in this area. My data described another 'sports' session in the hall, where this practice was observed:

'Sport' time 2.30pm. We used the hall with two teams playing each other in dodge ball. Matua Manu picks Kahu (pseudonym) and Richie as the two leaders and then he allocates the rest of the class into the teams. He goes in order of best players (the most coordinated, I note). The next two were boys – Robert and Jack (pseudonyms). Interestingly the next chosen are two girls. And so on… Sarah, along with two other girls, are last to be picked. I noted that none of these girls who were last to be picked appeared bothered that they were the last. (Field notes, October 2012)

A further example of this assessment and privilege of the physical body occurred during a running activity:

We go outside for sports. Matua Manu explains that athletics sports are coming up and they need to practice for the running races. He then sets up pair races in the form of two lines in pairs out and around a cone straight ahead, but once around the cone they run diagonally to the back of the opposite line. Matua Manu then chooses the pairs for the athletics race. He selects evenly on ability. Tara is not interested in this process, as other students are picked before her. She puts her hands in her pockets. Sarah is picked quite early this time. The running starts and after a couple of sequences the pairs become mixed up. Some of the students are competitive and look across as they are running, to see where their partner is. Other students are oblivious of this, even when the teacher calls out to them to try and beat their partner. Instead, they are more interested in getting back to the line to tag the next person. It is not surprising that Richie is competitive and looks across to try and win his race. (Field notes, November, 2012).

This privileging of physical ability and recognition of physical prowess is what researchers such as Macdonald (2011), Petrie and lisahunter (2011) and Powell and Fitzpatrick (2013) found when they investigated the pedagogical content knowledge of generalist primary school teachers in health and physical education. They suggested that lack of depth of knowledge and pedagogy in the HPE subject area is why a number of schools take up interventions provided by outside agencies.

Evans and Penney (2008) comment that a number of researchers have investigated why teachers continue to think in narrow ways about children's development in health and physical education, resulting in teachers defaulting to a position where they recognise and

value physical capital. This physical capital takes the form of particular skills and predispositions, and also privileges body shapes and 'looks' (Evans & Penney, 2008). Evidence of biopower was revealed in my data, as some teachers compared students' performance to other students:

> Whaea Marie encouraged and gave praise to the children who were at the front of the run around the courts during the exercise break. They had to do two laps around the courts. She specifically gave praise to the boys and suggested everyone should run like them. (Field notes, September, 2013)

The literature maintains that teachers adopt discourses that resonate with their knowledge and understanding of health, as well as the value system they model (Quennerstedt et al. 2010; Lee & Macdonald, 2010; Petrie, 2012; Webb et al. 2008; Wright et al. 2012). Webb et al. (2008) found in both Swedish and Australian schools that dominant discourses related to healthy bodies operated in physical education contexts. Petrie (2012) found that primary teachers using packaged curriculum resources afforded them to narrow their thinking and pedagogy as a result. The HH programme resources were designed to support a learning programme and provide teachers with current knowledge on health literacy and teaching materials. A significant amount of learning was expected through homework tasks, assessed and signed off by parents. Health literacy according to Kilgour et al. (2013) did increase teachers' knowledge about health issues, and provided information for them to help learners make choices about their health and wellbeing. Teacher LB commented about the value of the HH programme resources:

> … personally, I think the students' knowledge was definitely a result from Healthy Homework as they understood why it (a food product) had high sugar content in one of the ads with family, and that was pointed out. They then did a label reading activity and they could see it there too. (Interview, Teacher LB)

This assessment by the teacher of children's knowledge was identified as a result of an activity directly from the HH manual. Teacher LB found the teacher materials that were supplied with the HH programme useful. Generally primary school teachers draw on health and physical education knowledge and assessment practices from their limited pre-service training (in New Zealand sometimes as little as 40 hours over the course of their teacher training qualification) or from ongoing professional learning during their practicing years (Petrie, 2012; Petrie & lisahunter, 2011). Researchers tell us that whilst engaged in teaching, a primary teacher's health education knowledge about healthy bodies usually comes from the disciplinary fields of epidemiological medicine and

nutrition. It is from here that they get their understanding of biopedagogies and thus they use this to reinforce simplistic messages, often reinforcing a pathogenic perspective. This perspective then influences their pedagogy and assessment of student learning.

Teachers generally hold the power in the classroom, as their discourse (the sets of meanings that are produced through written, spoken and/or visual representations) is usually the dominant one (Webb et al. 2008). Homework is an assessment practice and an expected part of the HH programme. However, at Tuihana School teachers were relaxed about homework and setting tasks for the children to do out of school hours:

> The [HH] homework, for the majority of the students it was too hard and they didn't understand the questions even though we went over it a lot in class and chose the ones that best suited them, and particularly the year 4's in class, they struggled, and particularly the high ESOL, but they still wrote in the reflections that they did last week that the advertising was lies, so they picked that up. (Interview, Teacher LL)

In contrast, Matua Manu (the main participant in this study) did not use the HH homework tasks very much:

> I glanced over them (the homework tasks) and I think just the initiative of 'how', was the impetus for me, so that was the stepping stone for me to be able to do this. To be honest, sometimes they (the teaching materials) take a whole new life of their own. (Interview, Matua Manu)

Teacher LL also confirmed that parents were aware of the learning that was happening in the classroom, establishing perhaps that biopower has always been in the domain of the home. She commented about this when discussing some of the HH programme outcomes and 'healthy' assessment practices:

> I had heard some comments from a couple of parents that said "oh we were in the supermarket and Kelly goes no you can't, don't buy that mum, buy this one" and you know just little things and that's from the parents. (Interview, Teacher LL)

The students themselves, according to Teacher LL, had this to say when considering the result of the learning that had occurred in the HH programme:

They will come and tell you things. If you say I'm doing this or I'm doing that, they will go, "oh I told my Mum or my Aunty I'm going to do that too." They will say "how can I do this with sports or eating or making things happen?" (Interview, Teacher LL)

This assessment of children feeling empowered demonstrates that some learning had occurred. The voices of older children from the year 5/6 class (and their parents and caregivers) were able to be heard and were engaged in decision making processes affecting their health and wellbeing. Adopting a health promoting schools model, as promoted by St Leger (2000; 2004) and Nutbeam (2000) over a decade ago, is one avenue where stakeholders in a whole school community (including children, teachers, parents and community) can contribute to improving health outcomes for young people. However, as Keshavarz et al. (2010) state, schools are complex systems, and achieving and sustaining system-wide health promotion programmes is challenging. Nevertheless, multi-level system change is possible if all stakeholders buy into the concept, with everyone understanding their roles and being empowered to contribute.

Tuihana School, as described in my data, in its attempt to adopt the whole school concepts *Being healthy* and *Being human,* exposed a lack of understanding of the potential of health promotion in education. In addition, little planning and assessment of any learning from the health topics was undertaken across the different year groups in the school. Penney et al. (2009) suggest that assessment of isolated skills may have little relevancy unless it is in a meaningful, authentic context. Assessment in health and physical education in Room 22 was ad hoc and subjective, describing what Penney et al. (2009) suggest is the result of a dearth of assessment literature, resulting in poor practice. They state that assessment should be one of the three fundamental dimensions of quality physical education (the others being curriculum and pedagogy), yet assessment practices in schools are often de-contextualised, shallow and at times superfluous. The same can be said for health education (Hay, 2009).

Quality assessment in health and physical education or any physical activity in curriculum time requires an understanding of authentic assessment practices. It should form part of an outcomes focused learning activity using appropriate pedagogy, thus encompassing the three dimensions of curriculum, pedagogy and assessment required for relevant learning experiences (Hay, 2009). An example provided earlier from my data about the

relevance and meaning of the Funskills programme for children, whilst proving to have some outcomes as described by the children themselves, highlights what Penney et al. (2009) suggest is missing from a quality physical education programme - coherent evidence-based learning.

Summary

Message systems act as a primary social control agency (Bernstein, 2000) and as a carrier of power/knowledge relations (as part of a neoliberal agenda) in New Zealand schools today. Public health policies determine what is important for learning achievement within formal education, and are influenced by hegemony constructed under the biomedical sciences, not the social sciences (Evans, Rich, Allwood et al. 2008; Penny & Harris, 2004). This has been the case at Tuihana School, through the pedagogical activity evident in curriculum and assessment practices. A performative assessment culture through monitoring and surveillance of the body was demonstrated within classrooms, playgrounds and in the wider school community at Tuihana. The Room 22 teachers' personal aspirations for teaching health and their individual health philosophy and knowledge base was varied, each recontextualised depending on the knowledge and values of the teachers.

Evans, Rich, Davies et al. (2008) maintain that schools are expected to nurture and endorse particular societal "corporeal orientations" (p. 79). However, the narrowness of the corporeal focus and the surveillance of this through everyday curricula and pedagogy portrayed hidden and overt messages at Tuihana School. This, in turn, contributed to the social and cultural constructs within the Room 22 classroom learning environment and to the school micro-culture. Elements of power and control were evident in the range of pedagogic practices undertaken by the teachers (Bernstein, 2000).

Similar to Bernstein's (1996, 2000) findings, I observed that in Room 22, values were promoted through three message systems that underpin a school's culture (curriculum, pedagogy and assessment). Further evidence of children being privileged or marginalised by this will be discussed in the following chapter, when considering the resulting effect

of the message systems on the performance and perfection codes evident in the Room 22 children.

Chapter 8. The social construction of bodies: Perfection and Performance codes

Introduction

In this chapter I consider how children's knowledge and behaviour is demonstrated through performance and perfection codes, as determined by Shilling (2004) and exemplified by Evans and Davies (2004a, 2004b) and Evans, Davies and Rich (2009), providing a further interpretation of my participants' understanding of their embodied selves. Education is an arena of socialisation and allocation (Bernstein, 2000), and as previously discussed through my data, in social situations such as a classroom, playground and school, children demonstrate behaviours and knowledge about their bodies as they socialise.

Shilling (2004) maintains that we are placing contradictory demands on young people today, with emphasis on 'the body' within the school sector. Cliff and Wright (2010) contend that obesity discourse that has become embedded in school cultures and structures by teachers and students, is often a contradiction to what is espoused through the formal curriculum of health and physical education (HPE). In some instances, according to Cliff and Wright, well-meaning HPE teachers accept that the body pedagogies they mobilise in the name of obesity could have potentially dangerous health repercussions for young people (2010). In the case of Tuihana and the HH programme, my data found that teachers were not placed in this contradictory space. They had not shown any concern about long term repercussions (potentially due to a lack of awareness), despite the programme privileging 'the body' through its messages about improving one's health through healthy eating and active lifestyles.   Some of the healthism success measures of the HH programme were to reduce BMI in the children, and for children and families to adopt a healthier lifestyle. These measures relate to Shilling's definition of a modality that focuses on bodily perfection. As reiterated in chapter 2, dominant discourses of health are generating new body-centred perfection codes that are driven by the interests of business and the economy.

Perfection (competency) and performance codes as described in Chapter 2 refer to the bodily acts permitted and exhibited by the children at Tuihana School, including the positive and negative values of different possible behaviours, of and on the body (Evans & Davies, 2004c). For Richie, Sarah and Tara, and the other contributing students in Room 22, body pedagogies were characterised in terms of bodily image (weight, shape and composition) and bodily performance (perceived ability through participating and performing). According to Evans and Davies (2004c), body centred perfection (competency) codes displayed tenants of autonomy, self-responsibility, self-surveillance and control which required the children to be 'different from' others. Body centred performance codes on the other hand, reinforced authority, discipline, hierarchy and order, creating a 'similar to' culture. Both these codes influence children's sense of identity and their embodied selves.

Setting the scene

I use the story below to initiate the discussion of topics that have been chosen from my students' voices (Smith, 2007). I set the scene by describing a learning activity observed in Room 22, and subsequently use sub-headings from the story that focus on examples of bodily performance and perfection evident in my findings.

It is mid-morning in August 2012. The children were sitting at their tables working by themselves and preparing to summarise their reading book. The book *Mum's Diet* by Joy Cowley (1990) had been read to the children by the teacher, whilst they sat on the mat the day before, as part of a literacy lesson. It tells the story of a family whose mother goes on a diet. It goes something like this…

Mum (a round, cuddly-looking woman as drawn in the book) is a single mother who shares custody of her three primary aged school children with their father. Mum decides she needs to go on a diet and therefore when the children are at her house they have to eat 'diet food', which consists of 'healthy food' like vegetables and salads. Mum's fridge is filled with foods like lettuce, tomatoes, celery, parsley and carrots. Over the next few pages Mum behaves like she is in a 'grumpy' mood and growls a lot at the children. The children are not happy. They want the 'old Mum' (happy, nice, friendly) back. They then spend time at Dad's house (as the parents are separated) and discover that Dad's fridge is full of 'normal food' such as chicken, pasta, sweet cakes and fruit drinks. They eat up large at Dad's. Dad is surprised to see the children so keen to eat his food. He asks the children if their Mum is on 'another diet'. The story continues as they move between the two houses, eating the various types of food. The storyline portrays an unhappy atmosphere when the children are at Mum's house, compared to Dad's where the pictures in the book depict happy faces sitting around the table, eating a range of food. At the end of the book, Mum decides to ditch (stop) the diet and reverts back to 'normal food'. She says she is happier when she is eating spaghetti and donuts, thereby making herself (and everyone) happy. The concluding pages show pictures of Mum and the children either cuddling, looking happy eating together or with big smiles on their faces, inferring that this is a result of stopping the diet.

Matua Manu did not explore any of the issues or concepts underpinning the storyline in this book. Instead, the resulting task for the children was for them to summarise the plot, in their own words. I sat with Richie, whilst he attempted to do this and we had a conversation whilst helping him structure his summary. He reiterated the actions and storyline of the book. I asked questions like "What do you think the story is saying about food?" "Why is the family happy or unhappy?" "What is one thing you remember most about the story?" However, when I questioned him about the messages the book was portraying, he struggled to understand the underlying concepts of body image; healthy and unhealthy food; dieting efforts; and the relationship of body image (for 8 and 9 year olds) to happiness. His failure to comprehend these underlying messages did not surprise me because, as previously discussed in chapter 7, Room 22 students did not engage in deeper critical thinking about health. However, despite this lack of intellectual criticality and discussion about the body and health, the students at Tuihana School demonstrated through their everyday language, expressions and actions, the complex nature and influence of body pedagogies.

The body pedagogies demonstrated by Richie, Sarah and Tara, and other class participants in Room 22 at Tuihana School, were socially and culturally situated, reflecting as Evans et al. (2008) suggest that the prevailing corporeal orientations and health-related concerns are specific to the given time. It is these and other related corporeal orientations that are used in this chapter to explore the messages and contradictions evident when considering my students' understanding of bodily performance and perfection codes in curriculum activities and through the HH programme.

Perfection codes

Evans and Davies' (2012) research on body pedagogies and young people follows Bernstein's (2000) and Shilling's (1993) work, and focuses on body 'perfection' codes. Perfection codes have their social bases outside formal education and sit within the economic interests of business, industry, the media and the medical and health fields. They centre on the dynamics between body and nature and biology and culture – 'relations of' the body formulating in the embodied self. It is this embodied self, that is governed by social control and manifested in the actions of students wanting to be the 'same as' something.

Body image

Biomedical messages about the body being in deficit and in need of correction and repair were evident in both the story *Mum's Diet* and the material supplied through the HH project. Hidden messages about body image, diet food and happiness were evident in the book's storyline. In the HH material, the messages were more obvious. The teacher and student manuals focused topics on better diet through healthy eating and nutrition, and increased activity through sport and exercise. The HH intervention aimed at improving the 'lifestyle' of both children and families. The message inherent within all the HH resource materials was about health-enhancing behaviour change. The key messages in the manuals reinforced that physical activity and good nutrition (including healthy food choices) contribute to wellbeing which are priorities for children in New Zealand's health and education sectors (HH teacher manual, 2011). These messages in HH aligned with the *Mum's Diet* storyline, but avoided the word 'diet' (a good thing), however they conveyed subtle messages of control.

Modern society regulates the size and shape of the body through interventions that aim to avoid 'risk factors' that can contribute to obesity. This regulation has resulted in the 'cult of slenderness' as Garrett (2004), Evans and Davies (2008) and Tinning (1985) have alluded to, common both in and outside of school environments in a quest for corporeal perfection. This quest for corporeal perfection is promulgated by popular media and through cultural rules. It was evident that at Tuihana School, much of this promotion occurred in life outside the classroom, through students being influenced by their peers and family, and through exposure to music videos and other social media. Evidence of the influence of music videos is shared in a later section of this chapter. Sarah's parent had this to say about how Sarah viewed her body image:

> I get asked nearly every day "am I pretty?", and her mother and her aunties tell her she's too thin and we turn around and tell her "no you're not, you are just right", but she is very conscious of her body and her looks. (Interview, Sarah's parent)

The responsibility that Sarah takes on about her looks correlates with what Azzirito (2009) and Garrett (2004) suggest is learned by females since birth. They suggest discourses about thinness and the ideology of 'woman as an object' have been picked up, internalised and interpreted, and thus can contribute to how the embodied self is seen. In contrast to these discourses, Tara's mother responded to a question about how her daughter sees herself with regard to body image:

> She doesn't really comment about herself. She doesn't really have issues I think. Maybe every so often, but she's pretty confident. (Interview, Tara's parent)

However, Tara is influenced by what she thinks a healthy body size and shape should be, and knows the perceived risks of not conforming to the ideal, as evidenced by her behaviour at home:

> She worries about her Dad, because he has type two diabetes and he is a bit overweight, so she does worry about him and she does realise you know, that if he does get into a good exercise regime and eat really healthy, that he will get better. (Interview, Tara's parent)

Tara, along with her mother (in the quote above), considers that changing to a better diet, along with exercise, can improve health and possibly prevent or arrest an illness such as diabetes. This understanding is what Gard (2011) suggests is too simplistic, and one that

is often promoted by popular media. He, amongst others (Campos, 2004; Gard & Wright, 2005), believes that obesity is a condition that is socially constructed, and thus far more complex than a simple medical issue. Tara, on the other hand, was aware that size and weight can contribute to health problems, and like the story in *Mum's Diet*, believed that eating the right food and exercise could solve the problem. However, had Matua Manu used the story in the book *Mum's Diet* to challenge assumptions about dieting and weight, Tara may have had an opportunity to consider a different understandings or knowledge to take to her father's health problem.

The pressure to conform to an ideal bodily 'norm' was evident in my study when children changed into and out of their swimming togs, before and after sessions in the pool. Girls spent more time ensuring they were changed and ready for lunchtime swimming than boys:

> Free time swimming happens every lunchtime during term one, and is supervised by an adult. Room 22's teacher suggested that all people who wanted to swim were to get changed before eating their lunch. I noted that the boys ate lunch first and the girls spent their time getting changed. When they returned to the classroom to eat their lunch, the girls spent a lot of time fussing about their togs and towels – pulling them up high before sitting down. They spent 90% of the time on this and about 10% on eating. The boys were the opposite. They were interested in their food, ate first and then got changed for swimming after. (Field notes, February, 2012)

Interestingly, one year later and with an increase in girls' maturity, my field notes indicated that the girls were more interested in showing off their body when in their swimming togs. An example is in class time swimming with one student from Room 22 using her body to attract attention:

> It was swimming time after lunch. The class got changed into their swimming togs in the classroom's changing room. The children then returned to the classroom before walking together to the pool. A Room 22 student Ellie (pseudonym) got changed and as she came back into the classroom she smoothed her hands down her body and did a twirl with her towel, whilst looking to see if anyone was watching. She then put her towel under her arms and went and sat next to a boy student Raybon (pseudonym). She wiggled her shoulders and looked at him before sitting down. (Field notes, March, 2013)

Ellie's example of body consciousness highlights the emergence of a body hierarchy that relates to size and shape. Whilst her body is pre-pubescent, she is aware that her shape is

one that fits into the norm of the body ideal, that is, slender, and is happy to show this off to others (Burrows & Wright, 2004).

My field notes regularly captured incidents to do with body image that occurred spontaneously in the classroom and wider school environment. Students in Room 22 often commented to each other about their appearance and swapped jewellery or clothes. On one occasion Richie had a new haircut and I observed him playing with it (his new hairstyle) and asking others if they had noticed it. (Field notes, May, 2012) Sarah, aged eight, would often comment on the clothes she wore and sought approval or opinion. One day at school she asked me whether I liked her new clothes, which her Aunty had brought back for her from Australia. She wore pink fluorescent shorts, a purple belt, a yellow tweety bird tee shirt and knee high boots (Field notes, November, 2012).

> When drawing images of people, Room 22 girls added eyelashes and hair accessories to their pictures of female figures. This was in contrast to the boys, who added muscular physiques and solid features to their figures of males. (Field notes, May, 2012)

Socially constructed gendered images like those described in the field notes above were drawn by students in Room 22. These images were accepted and not challenged by either the teachers or their peers, suggesting that little reflection took place about the gender discourse inherent in the children's work, or the conformity to social messages implied by the drawings.

Other discourses that impact on gender and body image, such as obesity, contribute to how students come to understand knowledge about body weight. Sometimes this is a direct influence from adults. Humberstone and Stan (2011) found that adults' body 'knowledges' centred around popular discourses on the body and health. The mothers in their study demonstrated elements of resistance and were more open to questioning the current body normalising discourse and practices, particularly around body weight. In contrast, one of my student's parents did not question or challenge what was learned by the children about health whilst at school stating. "…she would come home and talk about the benefits of eating healthy and exercise" (Interview, Tara's parent). This suggested, as Humberstone and Stan's data revealed, that they were thinking about ideas that could be taught about the body. "Maybe a basic nutrition course, things that I think

they already have and do - exercise, body image, things like that." (Interview, Tara's parent). Interestingly, it was Tara's parent who mentioned body image and not Sarah's. This contrasted with my own observations, as Sarah frequently appeared more concerned about her body image than Tara.

When parents comment on body image, as the quote above demonstrates, there is opportunity for misunderstanding and potential damage in a child's identity construction, which can in turn lead to body dysmorphia. The Principal reinforced this when discussing parents and body image discourse:

> I have heard through parents of some that body and size issues are just making their children a bit sad … and them (the parents) wanting to have something done about it. The parents want to help them to change their body shape. (Interview, Principal)

Parents' influence on children is axiomatic. Gosling et al. (2008) in their United Kingdom study on 9 – 10 year olds' perceptions on physical activity and healthy eating, found that parents (and in particular mothers) greatly influenced their children's decisions on what they perceived as healthy and unhealthy foods. In some communities, being large is seen as a status symbol and bigger body shapes are regarded as attractive. Thus, this reinforces the perfection ideal, in this case a 'larger image' concept is still one of wanting to be 'similar to' others. However, schools often follow the social culture of the dominant ethnic group/s (Tuihana School had a combination of 54% either Mor Pacific Island) and therefore I was surprised to hear of the Principal telling me about a student's family being concerned about his weight. Usually the Room 22 children did not talk about dieting or others being fat, however they were cognisant of different shapes and sizes:

> A student stands at the front of the classroom to talk to the rest of the class, who were sitting on the mat. One of her class mates whispers to her loudly and said "your stomach." This was because it was sticking out the gap between her shorts and tee shirt. The student referred to is a physically active student who will have a go at most things. She was confident in her ability to be successful. However, Matua Manu heard the conversation and said "enough" in a commanding voice, which stopped any further talk about it. As a result of this, the student adjusted her posture and then pulled her stomach in. (Field notes, November 2012)

On the occasion described above, the comment about a student's body received a quick reaction by the teacher. This was not followed up by any further discussion, instead the

comment was ignored and the lesson on the mat continued. Burrows (2009) suggests that the boundaries are blurred between institutionalised pedagogy that goes on in schools and the kinds of educative practices that go on in homes. My data revealed that parents and teachers relay simple messages about what it means to lead a healthy lifestyle, but reinforce socially constructed ideals of 'normal body shapes', which are not always cognisant of cultural beliefs and values.

Couplets, such as the fat-unhealthy, thin-fast, good food-bad food, energy in-energy out, have been regularly recited by popular media and picked up by children, parents and teachers at Tuihana School. For example, students and Matua Manu discussed pies during one lunchtime:

> One student says: "If you eat pies you get fat. I only order [a pie] on a Friday." Matua Manu responds with "If you eat lots of pies you do get fat. I eat pies all the time. No just joking." (Field notes, March, 2012)

According to Burrows et al. (2009), teacher influence in dispelling myths and destigmatising body weight and size control is important, although as Petrie and lisahunter (2011) suggest, it is a daunting task for primary teachers to effectively navigate, comprehend, negotiate and translate into curriculum, policies and practices related to health and physical education. As Burrows (2008) found, and as my findings suggest, pedagogies are needed that assist children and young people to unhinge these myths.

Body image ideals were reinforced in a number of ways in the classroom in 2013. For example, Whaea Donna during a literacy lesson focused on teaching adjectives. She asked Room 22 to reflect on adjectives to do with the body (an area they should already know about as they had completed the human body topic previously as part of the *Being human* whole school concept). The children worked in small groups to come up with a list of adjectives and then presented these to the rest of the class. I noted that Richie and Sarah were active contributors to this activity and provided some evidence of prior learning. For example, the words associated with the human body that the children identified as adjectives were: active, beautiful, big, blood, curved, fatness, fast, skinny, ugly and yummy. (Field notes, July, 2013)

These describing words reflected the corporeal profile that the children had on their understanding of the body, perpetuated through the pedagogy of the classroom teacher. Whilst some of these words form part of an attitudinal paradigm (Grogan, 2006), the message conveyed is one of appearance, shape and weight. Later in 2013, I observed two children from Room 22 talking whilst sitting on the mat. One lifted his tee shirt and said *"Look at my abs [abdominals]."* He held up his tee shirt so the other boy could see. He said *"I have got four (and he points to them and said one, two, three four)."* (Field notes, September, 2013) This discussion demonstrated the notion that even though the curriculum focus was on human adventures, the learning environment was often determined by the knowledge that the participants themselves brought to the learning environment, and thus reinforced what mattered to them; in this case, a physical corporeal body image.

As mentioned previously in Chapter 7, at Tuihana School I observed that some play pursuits were gender based and contributed to the image the students wanted to portray:

> I was doing the second duty in the playground for the Principal. There were lots of students skipping and playing handball on the courts. I continued to wander around and watched and chatted to a range of different students. I noticed that all ages play together – even the boys and girls were skipping together. However, the handball games were boys only. (Field notes, August, 2012)

This example aligns with Azzarito's (2009) research, when she suggests that gendered discourses emerge through physical activity practices in schools. She and other researchers continue to work on understanding the social construction of the body and its pedagogical implication, in order to address this gendered discourse. She states that body shape, size, muscularity, and physicality are of central importance to girls and boys. I observed students in the classroom and wider school environment:

> There is little difference in ability between the boys and girls in the pool. This is noticeable when compared to the games and throwing activities that I have previously observed (both in class time and in free time), where the boys are superior to the girls. (Field notes, November, 2012)

An example from my data reminded me that personal space was also part of gender discourse:

> It is Maths time and the class are taking part in a numbers game –
> focusing on fractions. Matua Manu uses the game of 'bump' to teach
> fractions. For example, he calls out to the students to get into a group
> of one fifth of 20. The boys all wanted to be together. They kept
> huddling and putting their arms around each other's shoulders. It was
> very physical. In the end the teacher said 'no touching.' So the groups
> just had to stand next to each other. When it came to pairs, the class
> were not keen to go with a boy and a girl. Matua Manu insisted that
> the last two students (boy and a girl) had to go together. They looked
> very uncomfortable. (Field notes, November, 2012)

Diet and food – adopting behaviour change strategies

The story in *Mum's Diet* focused on diet and food and aligned with the message about the body needing to be 'similar to' others i.e. reinforcing a perfection code. Research literature tells us that children talk about 'good food' and 'bad food' contributing to health (Burrows, 2008; Gosling et al. 2008; Welch et al. 2012). The message from the story *Mum's Diet*, about the need to improve one's health through dieting (as all bodies need to look the same) and eating healthy foods, was also reiterated by teachers and parents at Tuihana School. My findings contained examples of hidden as well as overt messages. "We talk a lot about healthy food, but she always has two veges [vegetables] in a meal at night" (Interview, Sarah's parent). Sarah's parent [caregiver/grandparent] thus reiterated the healthism message about certain foods contributing to one's health.

In the HH programme manuals, the text focused on healthy (green) and unhealthy (red) food, using a traffic light system to identify these. The programme did not use the words good or bad. However, red light food always came up in conversation in Room 22 when discussing health. A study undertaken by Welch et al. (2012) of year 5 and 6 children found that the dominant discourses of food as being good or bad influenced children's perception of health and weight. I found similar examples:

> Whilst sitting at the table at morning tea, some children today talked
> about fruit and vegetables as being 'good foods' then in the same
> conversation they gave other food examples saying McDonalds,
> popcorn and tiny teddies are 'bad' for you. (Field notes, March, 2013)

Tara also mentioned the importance of healthy eating when at home. Her mother shared an example:

> Tara has mentioned that some friends buy their lunch nearly every day and they get fizzies, so why can't she (Tara) have fizzy every once in a while? I have told her that those children shouldn't be having lunch like that, but that's what the parents are giving them. She has also said "so and so had chips and fizzy again today, that's not very healthy is it?" (Interview, Tara's parent)

Whaea Marie, during one fruit break time, when a student opened a package of processed fruit tails in cartoon shapes, commented that is was not fruit and that they should go and put it away (Field notes, August 2013). This 'nutrition' message aligns with Wright et al.'s (2012) observation that teachers expressed a concern about the unhealthy food that came to school in lunch boxes and saw being overweight as an issue for a significant number of children at that school. Teachers at Tuihana School showed similar concerns, as mentioned previously, and suggested that children with English as a second language (ESOL) found it even more difficult to share what they knew and had learned about healthy food choices with their parents (Field notes from conversation with Teacher LL, October, 2013). This lack of influence (and power) could be a result of social conditioning in some homes, as children can find it hard to share their knowledge learned in school, with their parents who speak a language other than English:

> One lunch time a relieving teacher whilst monitoring the students eating in Room 22 noticed an ESOL student was not eating. When she asked why he was not eating he said "I don't want any." The relieving teacher then suggested, "Go and get your lunch box because at 1.00pm you will be hungry." He got his lunch box which contained left-over fried food from the family dinner the previous evening, and picked at his food in a disinterested way. (Field notes, December, 2012)

This example above may have demonstrated that children accept what is prepared for them by their parents, but they can rebel by not eating it if they feel judged by others that it could be deemed 'unhealthy'.

Matua Manu reiterated messages about food contributing to health and healthy bodies, reinforcing the perfection code that an ideal body is similar to the 'healthy body'. During one day in the last week of term Matua Manu had a movie morning where the children watched a movie and consumed food:

> Matua Manu negotiates what movie to watch from a choice of three for the end of term treat. Most of the movies the students had seen before. They choose 'The lion, the witch and the wardrobe'. He then said "We are having food too – carrots and popcorn because they are healthy snacks." He reminds the children that they like carrots as they had eaten a whole bag of them earlier in the year. (Field notes, December, 2012)

This association with healthy food that Matua Manu made may have had some impact on my participants, but at the time I observed that they were more interested in the popcorn.

My data found parents at Tuihana School did not question or challenge the biopedagogies around food evident through the HH programme and school wide concepts of *Being healthy* and *Being human*. Instead they valued the focus on healthy eating, exercise, sport and fitness activities undertaken by the teachers as they wanted their children to comply with the 'norm' (perfection ideal). For example, Tara's parent was supportive:

> I think it's really important that schools give them that because a lot of parents just don't know how to do it. If they are sending their children to school with fizzy drinks and chips and letting them watch TV all afternoon, maybe they are not the best people to teach their kids. I'm happy with their [the school] programmes. Tara does come home with a lot of information. She's well learned (sic) and she's trying to teach her sister, and me and her dad, so she's learning something. (Interview, Tara's parent)

Welch et al. (2012) suggest food knowledge has come from the fields of epidemiology, medicine and nutrition to reproduce a relatively consistent and reductionist message to young people about what is considered 'healthy' (i.e. fruit and vegetables) and which is 'unhealthy' (fast food, sweets and fat). At Tuihana School, the messages portraying healthy and unhealthy food were both hidden (i.e. school lunch packs supplied by the school) and overt (i.e. fruit break time, fruit supplied by the school). Biopower messages (i.e. food policy) and biopedagogies (i.e. monitoring of eating) were evident throughout the hierarchical structure from the Principal through to the students themselves. My data exhibited a number of instances of these, as the findings in my field notes have described.

Happiness is an 'ideal' body

As previously discussed, Matua Manu would often praised the boys in the class when playing sport or games in classroom time. Whilst he said he did not worry about size and shape, I observed that he indirectly conveyed appreciation for particular skills through his praising of physical ability, as mentioned in Chapter 6.

Humberstone and Stan's (2011) research found both parents and teachers were influenced by body discourses conveyed through the popular media towards the 'ideal' body. Their findings indicated they both favoured a certain type of body image, and that mothers were more sensitive to cultural pressures to conform to a limited range of acceptable body shapes. A notable difference in my study was that all Room 22 teachers including the one male (Matua Manu), dismissed any surveillance on the students' bodies and made few comments about body image or the 'ideal' body. This in turn may have influenced how students themselves viewed their bodies. Tuihana School teachers by not making comment on body image help to create potentially safe places where the negative hierarchies of the body are not reinforced.

In the story *Mum's Diet* which set the scene to discuss perfection codes at the beginning of this chapter, the hidden message about the 'ideal' body and the outcome of this (that having an 'ideal' body may or may not contribute to a person's happiness), was not explored by Room 22's teacher at the time. However, happiness and respect for each other was a focus for the Room 22 teacher (Whaea Katie) in 2013. Her focus was on valuing social relations in order to create a happy, respectful learning relationships within the classroom. This focus demonstrated that her view of health was different from Matua Manu's approach, but both had a similar sentiment, that is, adopting a holistic perspective and reinforcing value based positive competencies:

> During the literacy activity time this morning Whaea Katie talked to the class about being respectful and allowing her to work with the learning group. She stated that she could not do this if the room was too noisy. She reinforced the need for self-responsibility and to respect learning time. (Field notes, February 2013)

Another instance of children demonstrating self-responsibility and respect was in their greetings to each other (using any language) during roll call each morning. For example, Whaea Katie greeted the first person on the alphabetical roll, they then showed responsibility by greeting the next person and so on, until all names had been called and everyone, including myself, had been greeted. (Field notes, February 2013) This example of children being encouraged to use their own language showed respect for their language and their culture and created a happy positive environment at the start of each day.

Creating a positive happy environment in the classroom was important to Whaea Katie and contributed to her holistic view of health and wellbeing. One example of this was evident in Room 22's practising of meditation as part of their human nature topic in 2013. Meditation provided an opportunity for the students to train their minds into a mode of consciousness that promoted relaxation or helped with internal energy. The meditation that Room 22 and Whaea Katie undertook as previously described in Chapter 7 demonstrated that health culture can belong to the individual, but impact on the health culture of others as in the case in Room 22. I perceived a calmness and acceptance of children appreciating their bodies in a particular time and space during meditation practise. This was similar to the experience from the previous year when the children did the daily 'tai chi' type physical movements to a Māori incantation with Matua Manu. The pedagogies adopted by both teachers in both the mindfulness and tai chi practices enabled a holistic appreciation of their bodies which contributed to the creation of a learning environment where students were content within themselves. The students could have made a connection with this feeling (content) and the book *Mum's Diet* had Whaea Katie (or the students themselves) been aware of this. In these instances above, the students in Room 22 were exposed to an holistic understanding of health culture and body pedagogies from a humanistic perspective, something Evans and Davies (2004a, 2012), Evans et al. (2009) and Rich (2010a, 2011) endorse, but missing was the reinforcement of these stated intentions by the teachers.

Performance codes

Tuihana School as a TPMS created opportunities for training, performance and competition amongst its students. This culture of performativity in a school can be manifested through policies or messages systems as described in Chapters 2 and 7, and can relate to academic as well as bodily performance. For the purpose of this study, I considered the performance codes demonstrated by Room 22 students through their learning in health (either through the HH programme, or as a result of the whole school foci) as qualities that are 'different from' as opposed to 'similar to' others. My focus was on bodily performance, not academic performance. These bodily qualities are described in the following section, articulated through the language of performativity under the sub

headings of corporeality of exercise, fitness and sport, promoting a performance culture, health promotion, and performing, conforming and norming bodily practices.

The corporeality of exercise, fitness and sport

The portrayal of the body as a machine with the energy in-energy out analogy defines health from a corporeal perspective (Kirk, 2004a, 2006; Shilling, 1993, 2007). Indeed according to Burrows and Wright (2004) and Powell and Fitzpatrick (2013), schooling has not withstood society's influence on the body as children are subjected to a corporeal environment within schools today. This was evident in a number of instances, however, the Principal at Tuihana School suggested that the staff see students in a holistic way;

> I think there is a very general acceptance that it is the person we are dealing with rather than the 'shape' we are dealing with. And that is pretty much across the board. (Interview, Principal)

The quote above reiterated that whilst the school may be subject to a corporeal environment as a result of societal expectations, staff did not necessarily conform *knowingly* to this. The book, *Mum's Diet* is an example of staff not engaging in an opportunity to challenge assumptions about the social construction of bodies as depicted in the book, instead they were either oblivious to it, or followed what the Principal suggested above, and looked beyond the physical. This holistic perspective is reinforced in the study of Quennerstedt (2008) who stated that by limiting health to the physical attributes of human beings we may be providing negative body experiences or contributing to destructive behaviour, thus damaging children's health.

Exercise (including play), fitness and sport were strong themes that came through in my data set as the participants could not disassociate exercise, fitness and sport from health. Research from Gard and Wright (2005), Evans, Rich, Davies et al. (2008) and Wright (2009) in Chapter 2 suggests that the body is seen as a corporeal entity and therefore is considered to constantly need work in order to achieve the social ideal of being fit, active and thin. Therefore the policies and pedagogies that dominate within primary schools need to provide meaningful, relevant and positive physical activity experiences, so that exercise, fitness and sport are not seen as the panacea (along with healthy food) to improving health outcomes for young people. Room 22 had exercise timetabled into most days. In 2012, Matua Manu varied the time for exercise, sometimes it was scheduled for

first thing in the morning and at other times the last session at the end of the day. During the two years of my study, this activity time was never called 'physical education'. For example, Matua Manu equated exercise with sports, writing it up on the whiteboard timetable as 'sports' or 'games' or 'swimming' and always in the last session of the day. In 2013, fitness was written up on the whiteboard as a daily occurrence in the daily timetable by Whaea Katie. It was scheduled for 10 minutes, usually after the karakia each morning.

> Started the day again with continuous tag. It was longer this time approximately eight minutes of tag. Everyone was engaged for the first five minutes but in the last three minutes about six girls sat out. They said they were tired and bored. Whaea Katie picked up on this and discussed strategies at the end with the class to avoid this. She said "You are responsible for your actions." Some students were telling on other students for not tagging or getting out, so she reiterated "You need to take some self-responsibility and do what is right." (Field notes, April, 2013)

Whaea Katie used this time in the quote above, as a teachable moment and made comment about self-responsibility to ensure that the children were all active during this time, reinforcing the value she placed on continuous exercise and fitness as part of health. The teachers at Tuihana School along with the parents interviewed viewed activity as an essential part of being healthy. Indeed Tara's parent equated exercise with health. *"We try and stay pretty healthy anyway and we go out, I go out and exercise"* (Interview, Tara's parent). One instance in term one 2013, I spoke with John (pseudonym) a Room 22 student during the swimming lesson, as he often sat out. On this occasion, John was participating and when I made a comment about this, he reiterated a message about exercise. He said to me *"Mum said it is good exercise for you"* (Field notes, March, 2013).

Having a daily fitness time in school reiterates what Gard (2011) suggests, that policy makers in health are able to influence teachers and still continue to promote school-based physical activity as a central component of the strategy to reduce childhood obesity. In New Zealand daily fitness in primary schools was an initiative introduced in the 1980's as a preventative and in response to concerns about heart disease. Even today, preventing ill health and disease is linked to the public health agenda in schools, demonstrating deficit thinking in health education (McCuaig et al. 2013; Powell & Fitzpatrick, 2011). The message of fitness equalling health was also endorsed by students by their

reinforcement of messages about the slim body equalling a fit body and through their images of strong muscular bodies equalling healthy bodies (see Figure 5, picture of a 'healthy person').

Promoting a performance culture

Evans and Davies (2004b) state that the focus for performance modes is one where the body is seen as in deficit and at risk. Therefore, creating a focus on health within a legitimised curriculum space enables a form of 'trainability' of children and consequently a trainability of their bodies in order to serve a greater social function (performance), that of wellness. This trainability was one of the intentions in the HH programme and of the whole school foci on *Being healthy* and *Being human*.

This performative culture was exhibited internally through curriculum where the focus was on knowledge and skills related to corporeal functioning and externally within the school community, via representation of interschool sporting events through students participating in school sports' teams. Teachers expected competent students to engage in these and other environments where they are exhibiting their corporeal performance, as representatives of the school. According to Matua Manu, Tara was a competent athlete (Field notes, June, 2012). On one occasion Matua Manu at the end of the school day when handing out information forms for playing ripper rugby, did say to her *"Why are you not playing ripper rugby Tara?"* She replied *"It is too rough. You might get hurt"* (Field notes, May, 2012). Tara, in her response to Matua Manu, determined that she held the power over her body and did not conform to pressure of corporeal regulation and normalisation, as inferred or expected by the teacher. In documenting the progress of corporeal power and school practices Kirk (2004a, 2009) signals that the current climate in schools towards child centred, needs based, de-regulated sport and physical education programmes may be providing a looser form of embodied power as demonstrated by Tara. In the case of Tara, the teacher's question does reinforce Kirk's point that there is an expectation to conform to bodily norms, manifested as practices in schools.

Students also competed with each other when doing exercise or physical activity, demonstrating this corporeal performative culture:

> Two instructors from Hydra Swim School are taking the lesson.
> Students had to make a boat (in a 'u' shape) with float noodles and kick
> 6 kicks before standing up. Richie took off and gets to the end of the
> pool and said to me. "First. I am always first." Another student Bo
> (pseudonym) said "I am second." The next activity is dog paddle with
> the noodle under the stomach. It became a Richie versus another
> student Kahu (pseudonym) activity. Richie looked over to see if he was
> going faster than Kahu. He got to the end and said "First" again. Kahu
> said "No". Richie said "It is a tie then." He then tried to negotiate with
> Kahu but Kahu was adamant he beat him. In contrast, the girls were
> not really interested in competing. The next activity used the noodle
> on their back kicking the length of the pool. Richie was paired with a
> girl Stephanie (pseudonym). At the end of the activity Richie put his
> hand up in the air and said "First." In the last activity of the lesson,
> Richie was more interested in being fourth in the class, than doing the
> correct arm circles on the float board. At end of the lesson the swim
> coach said the class had five minutes to get changed and it became a
> race between the boys and girls. (Field notes, December, 2012)

The examples in the data above demonstrate that children in this context see
accountability, competition and comparison as aspects that contribute to the potential
performance of their bodies. They demonstrated a need for recognition thereby accepting
the surveillance gaze of others in terms of assessment (Evans, Rich, Davies et al. 2008;
Rich, 2010; Webb et al. 2008) thus, contributing to create the 'performative society' (Ball,
2004, cited in Evans & Davies, 2004b) which is characterised by endless learning and
trainability (Bernstein, 2000; Shilling, 2010).

Richie often looked to the teacher or another adult (sometimes me) for confirmation of
his physical ability and positioned himself not to fail in his performance, conforming to
the performance culture of the school. For example in one morning tea break whilst I
was on duty he asked me to watch him playing with the older boys on the field:

> Richie was playing touch with the older boys (again). He was holding
> his own and making ground on the attack. Most of the boys were from
> the year 5/6 class. They usually played six versus six on the field.
> Richie asked me to watch him play. I said that I would for a while, but
> I was also on duty. (Field notes, May, 2012)

Teachers were not consistent with the messages they portrayed about performance. For
example, Matua Manu stated that he was not concerned with bodily performance, but
more interested in the whole person:

> It's not just about what you can do with your body. Like a girl might not have any inkling towards any sport, but she's still a leader in lots of other activities, so I don't think one is more important than the other. (Interview, Matua Manu)

This quote by Matua Manu demonstrates in this instance that he was reinforcing his philosophy of health as being holistic and focused on individuals, thus not adhering to negative hierarchies within the perfection or performance codes. However, as previous examples in my data have demonstrated, he was not often consistent with his actions. He often said one thing, but through his actions, implied another. This was most obvious in the practical activities (called sport or games) undertaken as part of the class timetable. Other teachers in studies undertaken by Burrows and McCormack (2012), De Pain (2012), Humberstone and Stan (2011) and Webb et al. (2008) reinforce the emphasis placed on health policies. The teachers in their studies made decisions that disregarded criticality on the body. In contrast Matua Manu's decision making was cognisant of young people and he was not influenced by the HH intervention policy and programme, but more by his kaupapa Māori approach to holistic health.

The 'evaluative gaze' that the above researchers discussed in their work adheres to Bernstein's concept of a system of control. Evans, Rich, Davies et al. (2008) discuss that this control can take the form of a bio-pedagogy where power and persuasiveness is prominent and is manifested in controlling the performativity and competency of bodies. An example of this occurred when Room 22 joined the whole school in the hall for a rehearsal for the school dance performance:

> The class went into the hall for a dance rehearsal with the other classes. Richie joined in with the older boys to do the haka, but did not really know the actions and was looking around at them for cues. As a result of his lack of confidence he was put on the end, at the back. Room 22 perform their Bobo dance. Upon returning to the classroom at the end of the rehearsal, Matua Manu praised the class for their behaviour and self-management during their performance and when watching the other classes perform. (Field notes, June, 2012)

Messages about the human body were role modelled by teachers and students at Tuihana School. These has social and cultural significance as they reflected the values inherrent within the classroom and school. Gard (2008) suggests that in some classrooms the rhetoric espoused by teachers does not match the lived classroom experience. He states that because of the 'war on obesity' there has been a call for healthy lifestyle messages

and that people (including teachers) have been influenced by this. Some of these 'human body' (a 2013 topic) messages at Tuihana School resulted in teachers seemingly unaware of the implication of their language or actions. For example, Whaea Marie said often to the children that they need to go outside and "exercise to burn off energy" during periods of the day. Whaea Katie called fitness "fantastic fitness". Both of these messages imply that these teachers valued the discipline and order that exercise can achieve on children's bodies. However, in both instances there was no explanation justifying this value.

Modelling active participation was something Matua Manu and Whaea Katie reinforced. Matua Manu was involved in the daily tai chi and yoga activities throughout 2012 and Whaea Katie always joined in the 'daily fitness' activities undertaken by Room 22 in 2013. They created new social and cultural capital and challenged the norm that Powell and Fitzpatrick (2011) suggest, that is, the 'fit' body is a seen as powerful form of social capital (Shilling, 2004), something that the other teachers endorsed.

Other teachers used exercise as an opportunity to get outside and get some fresh air. One day in term three 2013, the class were disruptive and unsettled. They were not concentrating on a mathematics learning activity. Whaea Marie said, *"Exercise and fresh air is needed"* (Field notes, September, 2013). Other examples where the school cultural value of exercise and sport participation was reinforced by teachers, was to reinforce the policy of competing in local inter-school events. These ranged from athletics, cross country, to various sports tournaments. However, the intention of these was not always understood by the students, as Richie stated:

> Whaea Denise, I was the fourth person in the cross country training last time and if you take away the years five and six, I would be first. I asked. Why do you do cross country? Richie shrugged his shoulders and said you just have to. (Field notes, August 2013)

Engaging in physical activity needs to have relevance for the learner. As Richie demonstrated above, he did not understand why he had to do training for cross country. In a needs-based physical education programme, learning objectives should be shared with students, thus avoiding any misinformation about participating in activities. Parents also commented about how their children perceive the importance of engaging in regular exercise and activity in order for their bodies to look and perform in a certain way.

> I think she's a little bit competitive, not maybe as much as some other children, but she is very self-conscious about what other people think and say about her. Yeah she can be really self-conscious, worrying about what people think. I ask "Does she tell you that?" She replied, "Sometimes, but I can see it. At swimming she just tries her best and she worries about coming last and what people will think. I guess she does worry about how she looks too, because I see her checking her stomach." (Interview, Tara's parent)

This example suggests there is an association with the physical body (in this case a [flat] stomach) and exercise, in a child who is eight years old. Lee and MacDonald (2010), McMahon et al. (2011) and Evans, Rich, Davies et al. (2008), in their studies of teenagers suggest that these 'relations of the body' with 'the self' can be damaging to individuals and create obsessive practices such as exercise to control weight. Whilst my participants were younger, literature has informed us that body discourses focused on a medical classification of overweight can indeed be harmful and messages about this harm are promulgated through media at every opportunity (Evans, Rich, Allwood et al. 2008; Gard, 2011; Gard & Wright, 2005; Rich, 2011; Shilling, 2010). Thus, in corporeal terms, the concept of performance being 'different from' others can create a competitive and unhealthy environment.

Performing, conforming and norming bodily practices

As discussed in Chapter 2, the issues of bodily performance, control and discipline are central to the emphasis on health that has emerged in schools under the guise of physical education in recent decades. Shilling (2010) states the range of body maintenance techniques, regimes and services portrayed today focus towards the pursuit of physical perfection, both in form and in function (performance). The children in Room 22 were aware of body hierarchies (ability and performance, size and shape) amongst themselves which at times were also gender specific. For example in a dance lesson children were reluctant to demonstrate their individual moves in front of their classmates:

> The class were learning about the Bagobo people's dance from the Phillipines in order to perform it for the end of term concert. Matua Manu showed the class a video from YouTube and the students then practised the movements in it the classroom in a V formation. Richie watched, instead of practising. He was embarrassed to move his arms and stomp about in front of others. The teacher then got the students to go in pairs and dance down the middle of the two lines. They were reluctant to dance in front of everyone (even when all you had to do was stomp and turn your arms like an aeroplane, dipping up and down). Matua Manu then got the students to do a congo dance instead – using the same leg actions. This was more successful although the boys were reluctant to hold on to the girls by grasping their sides and vice versa. (Field notes, May, 2012)

Avoidance of risk factors that focus on the body as imperfect (from a performance perspective) were demonstrated by Room 22 in the above example. The majority of the class were reluctant to perform the new dance moves in front of their peers, however, Sarah conveyed body confidence in attempting the Bagobo dance:

> Sarah was out of time with the music. She did not seem to care and appeared to be really concentrating on her movements. Richie was improving. Matua Manu commented that he was getting better. I note that he is still too shy to perform solo in front of the class, as is everyone except one or two students. I asked Matua Manu about this and he said it is an 'age thing' and that in the middle school they get shy. (Field notes, May, 2012)

In contrast to structured movement in class time, in general, students at Tuihana School engaged in play and physical activity within the school playground and community. They did so often without thinking deeper about the purpose of this, instead taking part at every opportunity:

> These kids are pretty active anyway, like a lot of them do play a sport. They participate in everything. You know we get very few that sit around and who do not want to not join in. They generally want to. You know we offer after school sports and things like that and they are quite keen, and when you listen to them talking, they often go with their parents, if their parents are playing sports, and kick the ball around. These kids are generally pretty active. (Interview, Teacher LL)

In contrast to Humberstone and Stan's (2011) study (see Chapter 2), at Tuihana School the teachers did not challenge any discourse on self-surveillance (performance) as they identified that the children were participating for reasons other than striving for the ideal body, as the quote above alludes to. At Tuihana, the word 'sport' was often interchanged with exercise and physical activities. The Principal said that parents were appreciative of

the 'sports' that the school offered children inside and outside of curriculum time. This was due to teachers being the main coaches of sports teams which resulted in the school community being more interested in localised competition.

> A lot of our parents are now asking about sports and what we have got for the younger children. We have now got some fun after-school type of activities and we are also changing how we run Kiwisport. We are now going to have local competitions. (Interview, Principal)

Joining in activity during school play time and curriculum time was an expectation teachers and parents had of pupils at Tuihana School. This expectation also reinforced the performance culture of the school identified through their corporeal environment.

Performing

The physicality of the body and how it moves in time and space is accented through partaking in physical activities, sport and games. In one instance I observed Richie in a maths game using his physical presence as power over another student. When Matua Manu was asked about this, he said:

> He's just overly competitive. He loves to win and he was trying to take a mental agility game and use his physical size to scare them. I had to turn him (Richie) around and face me, not the person, but that's just him. He will play to win and he loves to play games and I think he understands the key is participation. He knows that it's fun, he just likes to win and he did win, twice, but you could see that, you could see that eh? (Interview, Matua Manu)

Richie was an active student and used his physicality at times, as demonstrated above. However, I observed that Sarah and Tara (both girls) were less physical, suggesting as Wrench and Garrett (2014) articulate, that young girls believe that to be appropriately female, is to be inactive or only partially active. An example similar to this concept of inactivity is the fear of getting hurt which Tara articulated when she was asked to play rugby (Field notes, May, 2012).

Gender specific activity was evident when Matua Manu taught a lesson where students were asked to explore a range of movement during a dance activity:

> Richie made a hitting ball movement (like hitting a softball with a bat) and then a champion salute (two arms with fists closed over his head) followed by shooting with his fingers and arms. Tara pretended she was floating and moved her arms in a soft movement. (Field notes, March, 2012)

Richie used strong masculine movements, whilst Tara displayed soft flowing feminine movements, demonstrating that students possibly conformed to societal expected actions. These actions demonstrated societal expectations and social constructions of the body, particularly when it came to gender. In addition, whilst the students demonstrated very distinct movements, the teacher made no comment about conforming to a certain bodily action or ideal shape, focusing instead on allowing the students to determine what they wanted their body to do and portray (Field notes, March, 2012).

Conforming

Social messages about the body are evident in the judgements children make about what they think is healthy and how they construct bodies. An example of this occurred in a maths' activity when children were asked to work in groups to design shapes using geometrical pieces.

> The groups split into one group of all boys and one groups of all girls. Matua Manu instructed the groups to make a robot. The boys made a square looking (masculine) robot with arms, legs and a hat. The girls made a distinctive shape of a girl in a dress (using the round and triangle shapes), including long hair with clips in her hair. The teacher then said the next shape could be anything. The children used paper, felt pens and shapes. Richie called me over to see what the boys had made. He said "Whaea Denise, see we are made a pacman." I then watched the girls. They made a scene of a house with a path and a distinctive girl (similar body to previous girl robot) standing by the path. (Field notes, October, 2012)

In the activity above there were definitions of the different figures, with the boys making strong masculine shapes and the girls accessorising the body of the shape they had made. This portrayal of different masculinities and femininities aligns somewhat with Azzarito and Katzew's (2010) study on gender identity through narratives. They used photo-elicitation techniques to explore the ways young people performed identities linked to their physicality, using photographs to evoke students experiences, feelings and memories. They concluded that young people's identities are fluid and that their bodies are sites of discipline to gender discourses as well as resistance to cultural construction revision and presentation. At Tuihana, evidence of observed gender identities were as

simple as boys pumping the air and exhibiting strong, masculine gestures when something positive happened, to girls twirling in their togs with their towels, by the swimming pool.

On another day whilst in the playground at lunch break I observed students from Room 22 (three boys and one girl) lying on their swimming towels doing specific exercises (press-ups and sit-ups) on the courts after having had a swim in the pool earlier at lunchtime. I asked them why:

> Because we can, and to keep warm. Now we are going to have running races. They then did some more exercise (burpees). I asked again, "But why?" They replied "So you can get energise (sic), because it is healthy." (Field notes, March, 2013)

These students were conforming to the concept of exercise for health. It was their lunchtime and they had a choice to either swim or play during this time. They chose to work out with prescribed activities after their swim. This reinforces Garrett's (2004) suggestion that for many, schooling is a site characterised by a pre-occupation with conformity, management and control over the body. Teacher LL reiterated this control and conformity from a teaching and learning perspective, when she reflected on the place of the HH intervention in schools:

> So part of the reason why the Healthy Homework programme got so much funding from the Ministry of Health was because it was supposed to have a direct impact on the health of families and community and this is me now saying …we often use schools as the vehicle, because it's a captive audience to get to other people, other things and sometimes I have a problem with that. (Interview, Teacher LL)

Evans and Davies' (2004a, 2012) research supports the above statement. They reiterate that over the last 33 years there has been considerable development in schools and classrooms as a result of the global social forces and trends relating to 'health' and 'the body'. Arising from this, issues of pedagogy, power and control have been examined by a number of researchers. Kirk (2006) suggests a message received by children is that the sooner young bodies are able to be manipulated and conform to a norm, the sooner they can perform more usefully in society. Indeed if the corporeal nature of the body has been developed as a result of school practices (physical education, health education and sport) and broader public discourses, then it is likely, as Kirk suggests, that the body will be relegated to a physical object that can be dominated and objectified until it conforms, namely to meet particular social and economic ends.

Norming

In schools, order and control of performance has seen techniques of surveillance, such as testing, observing and documenting aspects of students' personal dispositions and feelings occurring. These are central to the modalities that reinforce peoples' behaviours (Evans & Davies 2004a). An example of this monitoring occurred during the HH intervention. Like another New Zealand health-related intervention supported by the Ministry of Health, *Project Energize* (as described in Chapter 2*)* children's body measurements were recorded as part of the data gathering. At Tuihana School HH programme research assistants undertook the task of weighing and measuring students individually and issuing and collecting in their pedometers:

> Pedometers were collected. I asked Richie "What are the pedometers for?" He replied "To count your steps." I asked "Why?" He responded by shrugging his shoulders and said "I don't know?" (Field notes, April, 2012)

Knowing that the HH intervention used bio-medical measures for their evaluation, I asked the Principal about any influences on the children's perception of their activity levels, size and shape as a result of being monitored, weighed and measured:

> I haven't heard anything. That is probably the best thing for me to say. I haven't heard anyone say anything to me about that, in relation to the weighing. (Interview, Principal)

Monitoring and regulating children's bodies with frequently unintended and non-beneficial consequences encourages a form of performative health according to Humberstone and Stan (2011). This performative health relies on scientific disciplines such as exercise physiology and other biophysical sciences to inform the results of the data gathered. The teachers also commented on the measurement part of the HH intervention:

> No problems as they (the students) just went off (for measuring) and then they came back. They didn't actually talk about whatever they did. It was almost like a separate thing to us. (Interview, Teacher LB)

During my interview with two of the senior class (year 5 & 6) teachers I probed further with questions about the use of pedometers and the measuring of students for data collection:

> The thing with the pedometers was the switch over, as sometimes you were in the class and from the hall to wherever and they hadn't switched over their pedometers and things like swimming as well. They had trouble putting them on and off. I had trouble because I had to put some of them on for them and it was quite tricky (Interview, Teacher LL).

The Principal also commented:

> Sometimes they (students) did come in and say "my pedometer is this." But some did come and say they have grown (upon getting their measurement results), you know, but only a few. Some of the older kids did, but they are a bit more aware of measurement. The only challenge was getting the pedometers back. That is echoed in lots of other things, you know getting notices back, getting notices to school. The whole conveyance from school to home is problematic. So it was not just the HH or anything like that, it is just the nature of our families I think. Challenges, no, the children welcomed the input, I think they responded really well to the HH research staff who came in to do the measuring. They were interested to see what their measures were and to see any change. (Interview, Principal)

Richie returned to the classroom from being evaluated (weighed and measured) by the HH research project team, with a $10 Westfield voucher. I asked him what he had done to receive this. He shrugged his shoulders and responded *"Nothing, I just got measured and returned my pedometer"* (Field notes April, 2012). Richie did not appear to be bothered by either being measured, or by receiving a voucher, accepting both without questioning and saw it as a completion of a task, reinforcing confirming to the required authority.

Rich (2010, 2011) along with Burrows and Wright (2004) concur that the surveillance systems in place to monitor and control what happens when these type of health interventions are integrated into schools, is of concern. However, my observation of students (Richie in particular) and teachers, was that they were accepting of the HH programme and the surveillance and monitoring of attitudes and behaviours undertaken as part of the intervention. The gold, silver and bronze band system which rewarded students for completion of work along with the monitoring of weight, shape and size of students by the project team, seemed acceptable to both the Tuihana teachers and students. Evans, Rich, Davies et al. (2008), Cliff & Wright (2010) and Rich (2011), suggest that this type of surveillance along with the effects of constant assessment could be potentially psychologically damaging for both teachers and students as the goal posts are constantly changing as new social identities are created.

As discussed in Chapter 2, contemporary researchers who focus on the social construction of the body suggest that body size, shape, muscularity and physicality are of central importance to boys and girls. In the second year of my study, post the HH programme, I noted that there was more interest from the children in how their bodies looked and performed compared to the previous year. This may have been developmental maturity, but in a number of incidents when this occurred the teacher remarked about it and intervened:

> The Room 22 students were in the pool changing rooms. One boy Ben (pseudonym) went over to the girls changing room and looked in at the girls getting changed. Whaea Katie notices when the girls shriek and spoke to him and said "Ben that is abuse." She warns him not to do that again. (Field notes, March 2013)

Whaea Katie, although new to the School, was an experienced teacher and displayed the professional attributes and conduct expected of registered teachers as determined by the NZ Teachers Council code of ethics. However, during the first term of 2013, she and other teachers remarked in the staffroom how distracted the students were in Room 22 when it came to their physical conduct and personal relations both in the classroom and school playground. This monitoring and surveillance by teachers is an example of a performance modality being fostered in a school environment. Teachers were expecting the students to conform to a normal behaviour pattern. Room 22 students demonstrated an increased awareness of their bodies in the second year (at the pre-pubescent age of 8-9 years), as evident in the social relations between them (Field notes, March, 2013). This contrasted with what Humberstone and Stan (2011) found in their study on the perceptions of teachers and parents 8-9 year old children in the UK, with regard to their students/children's behaviour, body image and understanding of health. They found there was little evidence of a sense of direct surveillance of pupils' bodies by teachers, instead more subtle forms of subjectification through informal pedagogy.

The normalising of health and the messages conveyed by the HH programme and the whole school concepts were not just focused on knowledge but also on actions:

Tara has mentioned as a result of the HH and the school health focus that she doesn't want to watch as much TV when she got home and she has made an effort to go outside and play on her bike with her friends because they do watch a lot of TV. There was a point there where she did try and get her sister out on her scooter for a few days instead of watching TV. (Interview, Tara's Parent)

However, the culture of performance and the ideal of bodily perfection along with the healthism and obesity discourses influenced behaviour in students at Tuihana School. A school's perfection and performance codes according to Evans, Rich, Davies et al. (2008), are mediated by teachers, peers and friends and are interpreted through an individual's desire to achieve recognition of individuality. As Rich (2011) suggests, the abundance of monitoring and surveillance systems in schools, rarely allows for individuality, instead creating a culture where perfection and performance modalities are fostered. Our 21st Century society has adopted a form of 'bodyism' and schools as micro-societies portray this norm in curricula, through pedagogy and by assessing and monitoring students. The HH intervention, whilst its intentions were admirable, still portrayed the neoliberal ideals of a performative culture, that is, trying to shape young people into societies perception of the ideal citizen – active, fit and of a certain size and weight, although some of the monitoring didn't appear to affect students at this point in time.

Summary

Through the modalities of performance and perfection students are trying to be 'different from' and 'similar to' others when demonstrating health enhancing behaviours. The norming of bodily performance fosters a culture in schools where young people feel they need to conform to an ideal, resulting in the exhibition of a code of perfection. This body knowledge was exhibited by Room 22 students as a result of a number of influences on the learning environment. It privileged some children and disadvantaged others.

Through using the narrative of a children's story and the concepts inherent in this, I provided examples of my students' understandings of their embodied self, through perfection and performance codes. In analysing their embodied acts they exhibited both positive and negative values of different possible behaviours of and on the body. These modalities, characterised as performance and perfection codes by Evans and Davies (2004c), reflect consumerism and global capitalism's desire to focus on the embodied self

in order to meet the industry and commercial needs of a nation. Children conformed to this, in varying degrees, and were mostly dependent on the practice of the teachers. Teachers pedagogical approaches, knowledge and value bases varied, some exhibiting knowledge that conformed to a traditional biomedical approach to health, others to a more holistic approach. As schools are sites of social control, this enabled cultural production and reproduction to take place.

My data supports this assumption and further, that the relationship between food, exercise and shape has indeed contributed to my students' understanding of their bodies exhibiting both performance and perfection codes as a result of exposure to pedagogic practices. This type of finding according to Rich (2010), offers a compelling account of the enduring presence of school-based body pedagogies in young people's embodied consciousness and consequently their performance. Research studies have found similar results as my data, not only in New Zealand primary school children, but from children in other countries as well, suggesting that children today still equate health and fitness with traditional understandings of bodily knowledge (Burrows & Wright, 2004; Burrows et al. 2009; Quennerstedt et al. 2010; Webb et al. 2008; Wright et al. 2012). The children at Tuihana School seem to be no different.

Chapter 9: Conclusion

Putting the puzzle together

This concluding chapter re-engages with my research question *"What are the children's perceptions and experiences of their bodies and their selves within the micro-culture of a school, during and after a Healthy Homework (HH) intervention?"*

My intention at the outset of this study was to analyse the discourses around body pedagogies through discovering how the learning in a health intervention (HH programme) and the ongoing whole school health concepts shaped children's understanding of their bodies. In the preceding chapters I have reinforced findings from previous research through exposing a multitude of messages about children's bodies and health that are experienced within a learning environment, at one school, Tuihana School. I make some recommendations for addressing these in this concluding chapter.

This chapter first considers my experience as a participant observer, relaying the role I had as a researcher and reflecting on my positional experience in a New Zealand multicultural primary school. As my study is founded on subjectivism with multiple realities, truths and meanings (see Chapter 3), I posit a summary of my findings from my perspective, based on my understanding of what was reproduced and produced from the children within the complexity of the classroom and school.

In the second section I discuss the issues and implications that have arisen from my findings, and thereby demonstrate my contribution to the repository of knowledge in a number of areas including body pedagogies, school health culture, dominant discourses in school health interventions, and the influence that the messages systems of curriculum

and pedagogy assessment have and are evident in perfection and performance modalities in children. I consider these concepts in relation to the nexus of the body, school and society using Bernstein's (2000) notion that schools help shape and form young people's lives and Shilling's exploration of the role that schooling plays within educating bodies. I make some suggestions for stakeholders in children's education – parents, teachers, schools and for policy makers (government).

In section three, I attempt to construct the puzzle with three key pieces required to link my research study together. These relate primarily to Bernstein's theory of pedagogic relations and how these can be manifested in principles of control and the distribution of power, intentionally or unintentionally, in complex learning environments such as schools. The areas that could contribute to the growing body of scholarship are: adopting a sociocultural pedagogy; salutogenic approaches to health promotion and a kaupapa Māori approach to critically engaging with the nature, place and influence of health education in young people's lives. These were a significant part of my findings as described in Chapters 5-8.

In section four, I illustrate some realities of the socialising agents that influence learning environments and the identities of children. I make recommendations for further research on young people within education, in order to understand more fully the impact of health education policy and practice on their wellbeing. Focus areas for further research could be:

- Engaging young people in their own body pedagogy research and co-constructing a way forward that could inform education and health policy as well as meet their future health needs;
- Undertaking a longitudinal study in a multicultural school community that followed children into teenagers years in order to expose relational concepts of power and control over the body and
- Investigating teaching health education through adopting a kaupapa Māori approach that could be informed by salutogenic theory.

Finally, following an interpretive research paradigm, I discuss the completion of the jigsaw puzzle, a complicated exercise that presents more questions and further investigation, than answers.

Reflection of positional experience as a participant observer

My role, foremost as a researcher and secondly as Whaea Denise (the name given to me by Tuihana School) enabled me to observe and interact in the social world of my three students and the other students in Room 22. As a participant observer, I was able to describe and analyse the discourses around body pedagogies and the perceived understandings by my students Richie, Sarah and Tara. I observed how the HH intervention shaped their understanding of their bodies and their perception of this in relation to being active and 'healthy', for a further two year period after the intervention. As an educator with thirty years of experience, I had to ensure that I maintained some relativity, as Bryman (2004) suggests, ethnographic researchers can lose their sense of being a researcher and become wrapped up in the world view of the people they are studying. However, I appreciate that I was also a research instrument and, as such, filtered the findings through my own paradigm, using an interpretive lens to uncover multiple truths. I was reflexive so that I could interrogate my own position within the context of my research. In the introductory chapter (Chapter 1), I described my role, drawing on my position as a lecturer and health and physical educator and how these life experiences contribute to my research study. I accept that my social history and subjective experience in health and physical education teaching created a tension during my study, as I concentrated on ensuring I was not evaluating the HH programme and related school-wide health topics (*Being healthy* and *Being human*), but focusing on the children's voices about their body pedagogies. Subjectivism was adopted, as I could not separate my reality from those of my students. For ongoing reflexivity, I sought regular feedback from my supervisors. I was aware, as Crotty (1998) suggests, that we cannot avoid embedded assumptions when we connect knowledge and reality to what we encounter in our world. As such, I accept that my perspective comes from my passion for educating about holistic wellbeing, through being physically educated and educated in health.

In the role of a teacher aide, I got close to Richie, Sarah and Tara and other class members of Room 22. Over time, the attachment was mutual, as the class treated me as a member of their learning environment, both inside the classroom and the wider school. I was often

invited to play with them at break times and invited to school activities. I deliberately did not take any photographs of children or bodies, as I wanted to remove the emphasis on the image of the body, which may have influenced my students' responses. Therefore, most of my figures in this research study were of photographs of student work, or of the learning environment within the classroom.

A unique feature of my study was the nature of the unsolicited data gathered from my subjects. This was a deliberate act of being a participant observer and something I discovered would be an essential component of this ethnographic study. In my pilot project I was able to test out (as discussed in my methods section in Chapter 3) my tools and myself as a research instrument. During my pilot study my interviews with children were problematic as they responded back to me, what they thought I wanted to hear. Hence, after discussion with my supervisor, I undertook regular reflection on my impact on the children as I continued with my study. I was conscious that as an interpretive researcher I needed to pursue in-depth and contextualised understanding of what the children were learning about their bodies and health (see the section on Positioning my study in Chapter 3). My choice of observational field notes and informal conversations with the children in Room 22 aligned with the interpretive framework adopted in my study, that is, multi-voiced and dialogical.

Having gained the respect of students within the first few weeks, I found I was able to take field notes openly and discuss various aspects related to my study, as they arose. I found this discussion sometimes problematic, as I did not want to instigate any bias in any of the discourses they shared with me. I constantly reviewed the evolution of my ideas, reflecting on why particular decisions were made, why certain questions were asked or not asked, why data were generated a particular way and so on. I did not want Richie, Tara and Sarah and the other Room 22 class participants to feel they had to respond in a certain way just to please me, or tell me something they thought I would like to hear, so I used questions like "why is that?", "tell me more", "how come you said or did that?", instead of asking them direct questions. I found this difficult, as I like to challenge assumptions and look for solutions through adopting a socio-critical approach when considering new knowledge or data. However, I had to accept my findings as they appeared and construe meaning from these and other discourses that were evident, as they

arose. I was required to suspend preconceptions and use my present understandings and beliefs to enquire intelligently (Walford, 2008).

As an ethnographic researcher, I tried to articulate the assumptions and values implicit in my data (including myself, as a contributing participant) with some reflexivity. I use this final chapter to contribute to the production of knowledge and to articulate my meaning making from the two years that I was embedded in the culture of Tuihana School, and in doing so, articulate the experiences that I gained from engaging with the students, staff and parents/caregivers during this research process.

The puzzling pieces: Issues and implications from my study

Richie, Sarah and Tara demonstrated an understanding of their own and others' bodily existence. Evident in this understanding are a number of issues and implications, some of which affirmed the research from current literature and some of which are unique to my study. These are discussed in the following four sections.

A culture of health

My students' understanding about their bodies and the influences that impacted upon this understanding were shaped by the social and cultural context of the classroom and school. The data collected and analysed enabled some understanding of 'body knowledge', especially that which impacts on practices in schools and ultimately the recipients of such practices, that is, children.

The culture of the school influenced the discourses (both productive and destructive) found within the learning environment of the classroom, demonstrating that discourse and its association with power and knowledge is central in learning environments such as a school (Foucault 1980, cited in Evans & Davies, 2004b). As explained in chapter 2, Bernstein (2000) brought the relational concepts of power, order and control to the fore in his emphasis of the need to critically engage with the inter-related messages systems that impact on how children perceive their bodies and their selves. For example, the importance of aligning classroom and school values to enable consistent and coherent messages to be enacted throughout the school was evident at Tuihana. The Junglezone

oath (Figure 3) in Room 22 was an example of this productive recontextualisation of the school values and mission (see Chapter 5). This demonstrated a shared understanding of the social construction of knowledge and of the culture in Room 22 (Bernstein, 2000; Rovegno & Dolly, 2006). However, destructive discourses such as the subtle surveillance of bodies by both teachers and students produced approaches that draw on a healthism perspective, with the emphasis on individuals improving bodily performance through competition. An example was the traditional cross country training undertaken by the whole school. This demonstrated that there was a profile that students were expected to exhibit. Students were encouraged to fit this profile through the cultural understanding exhibited by the school, which as Bernstein suggests can create inequalities which privilege one body type over another.

Modalities of control demonstrated by teachers at Tuihana School can create an unequitable environment as children are without power and subjected to conforming to the teacher's knowledge and understanding of health. This resulted in some students being advantaged and some disadvantaged when 'healthy lifestyle' messages were espoused that did not align with their reality. For example, the narrowness of the corporeal focus and the surveillance and endorsement of "corporeal orientations" (Evans, Rich, Davies et al. 2008, p. 79), through everyday curricula and pedagogy, portrayed hidden and overt messages at Tuihana School that some students were unable to comply with, thus contributing to inequalities within the Room 22 classroom learning environment and the school culture.

These resulting school cultural imperatives were not always intentional, however, my data demonstrated that messages were portrayed through what was taught and how it was taught. This pedagogic practice was as Bernstein (2000) stated, a fundamental social context through which cultural reproduction-production takes place. Thus, I found that educating about health at Tuihana School focused primarily on corporeal knowledge and that the students' understanding of embodiment as a result of learning about health, was embedded within the dominant obesity and healthism discourses. I appreciate that some learning about the body from a corporeal perspective is productive; however, if all learning about health is focused only on the physical, then there is a lack of embracing the potential of embodiment – students' bodily identity becoming dynamic (socially,

historically, politically) and engaged in social meaning and behaviours (Garrett, 2004; Shilling, 2004; Sparkes, 2004).

At Tuihana School health promotion processes that were used in health education were not well exhibited or discussed in a critical way by teachers or parents. A broader understanding of the social and environmental determinants of health embraced by the teachers and principal did influence at times, both classroom and school culture. A positive example was Matua Manu and Whaea Katie adopting sociocultural approaches to health that embraced a Māori kaupapa and holistic understandings. My findings demonstrated that these did meet the needs of the children in Room 22. On the other hand, at time teachers did not consider the cultural impact of HPE programmes that were taught at Tuihana. (for example Life Education, Funskills, Tennis) and their prevailing corporeal orientations. Currently biopedagogies that are evident in health programmes designed by well-intentioned health professionals are rarely challenged by educators in schools (Harwood & Wright, 2009), highlighting a lack of critical thought about health. This was possibly the case with the adoption of the HH programme at Tuihana.

Bodily knowledge

Knowledge of and about health has become an inherent and inseparable mechanism of 'body control' (Evans & Davies, 2004a). As discussed in previous chapters, Richie, Sarah and Tara's body knowledge centred on corporeal identity. They expressed themselves in physical ways and often reproduced messages around a discourse of food and exercise. When they could express why, they made comments that were morally loaded, e.g. 'she has a fat stomach', confirming that the messages they relayed lacked a level of holistic understanding about health and the body. This type of message reinforced the surveillance and repressive actions that Bernstein suggests is part of the process of power that regulates and controls school populations through disciplinary practices. This draws attention to principles of control such as self-surveillance, evident in body-centred perfection codes (Evans & Davies, 2004c).

Despite this emphasis on corporeality, there were signs from Room 22 of some holistic understanding of the body and wellbeing, due to the nature of the pedagogy exhibited by some of the teachers. Students engaged in active play during unscheduled classroom time (morning tea and lunch breaks) displaying confidence in their physical ability and

demonstrating social-emotional skills which enabled them to effectively handle competing against each other and teamwork. These are values that support neoliberal ideals reinforcing that my data demonstrated that some 'popular' health messages were cultivated in Tuihana School resulting in, as Evans, Rich, Davies et al. (2008) suggest, a school being a TPMS.

Productive and destructive discourses

Many Tuihana students, teachers and parents continued to uncritically accept the dominant obesity and healthism discourses evident in school communities today. Such destructive discourse continues to occur despite calls by academic researchers (McCuaig et al. 2013; Petrie & lisahunter, 2011; Rich, 2010a; Wright et al. 2012) for teachers and schools to examine their practices. Healthism messages that put responsibility for one's health onto the individual reinforce what Burrows and MacCormack (2012) found when they interviewed three teachers to ascertain whether their personal health values, experience and understandings correlated with their children's health understandings. My findings align with their results, suggesting there was sufficient evidence that the personal and political aspirations of teachers inevitably impact on the understandings espoused by students in the name of health education. At Tuihana School, despite the good intentions of the teachers and school community, a pathogenic, biomedical (with a focus on obesity prevention) perspective of health was embedded in the social and cultural discourses in which the children made sense of their social world and thus their identity (Sandford & Rich, 2006).

At times the underlying discourses of obesity and healthism were seen to have a clear influence on children's learning, and were evident both overtly and covertly within the classroom and in the school environment. Fitzpatrick (2011) suggests assumptions and interventions about the so-called 'obesity epidemic' pervade health and physical education classrooms and national policy agendas in New Zealand (as they do elsewhere in the Western world), as a result of teachers uncritically accepting measurement tools such as BMI (BMI was used as an evaluative tool in the HH intervention at Tuihana). As my findings suggest, teachers did not seem to be critical consumers of the health and movement culture, in order to challenge 'body control' messages (such as using BMI as a measurement tool). This may be two fold. Firstly (after Bernstein) health knowledge has become re-contextualised through the design and content of the HH programme and

further re-contextualised by the teacher's personal knowledge of health, resulting in pedagogical practices that reflect a biomedicalised view of health. Secondly, generalist teachers in the New Zealand primary school have eight learning areas to teach, as well as additional pressure to assess students' literacy and numeracy work against national standards. Therefore, it is difficult and complex for the primary generalist teacher to grasp and implement multiple health and broader educational policies and initiatives simultaneously. As a result, the classification and framing of health attributed to healthism and other discourses like obesity can, and as suggested in my study, do, pervade their practices. This type of cultural reproduction is reinforced through themes such as fitness and nutrition and were prominent in the actions of students and teachers at Tuihana School, in both structured and unstructured play.

Message systems

Message systems act as a primary social control agency and as a carrier of power/knowledge relations (as part of a neoliberal agenda) in New Zealand schools today. Public health policies determine what is important for learning achievement within formal education, and are influenced by hegemony constructed primarily under the biomedical sciences (Evans, Davies, Rich et al. 2008; Penney & Harris, 2004). This constructed hegemony was evident at Tuihana School through the pedagogical activity in curriculum and assessment practices thus reinforcing a recontextualisation of a behaviourist and health-based perspective. Such a perspective was something Bernstein (2000) suggested emerged in the latter half of the 20th Century, yet was evident in health education practices in my study, in 21st Century schooling (all be it in one case study). For example, a performative assessment culture through monitoring and surveillance of the body was demonstrated within classrooms, playgrounds and in the wider school community. This assessment culture was based on individual teacher's knowledge and understanding of health and practices were not consistent, thereby creating a learning environment which privileges some children and disadvantages others.

At Tuihana School health messages were constructed through the teacher's own knowledge and understandings and realised through the framing of the pedagogy adopted in the learning environment. How children made sense of these health messages was both predictable and unpredictable. The unpredictability resulted from the teachers in Room 22's pedagogy, their 'pedagogical palette' (Bernstein, 2000). This afforded the

opportunity to demonstrate their preferences which reflected their personal health aspirations and philosophies, all of which were varied. The predictability was the reinforcement of modalities of performance and perfection which aligned with the school and society's culture and values. Health learning was recontextualised through HH and other lessons that reinforced exercise, diet and weight as factors that contribute to being healthy. The cross country training was a good example of this pedagogic recontexualisation (Bernstein, 2000), demonstrated by three Room 22 teachers in both the 2012 and 2013 years. The unpredictability was also evident in the inconsistency with which dialogue did not match action. In a number of instances teachers espoused one message, yet in their actions they did something different. This type of pedagogic practice can create inequalities in the classroom. Evans and Davies remind us that Bernstein emphasised that *all pedagogical relations are power relations*. "There is no instruction without regulation, no pedagogy divorced of control" (2004, p.215). An example was statements made by the teachers about eating, with some teachers reinforcing foods (deemed unhealthy) such as pies and fish and chips and at other times not reinforcing healthy foods (such as carrots). Such statements demonstrate that the emphasis on the messages about health at Tuihana School were tangible aspects that teachers can control, that is, the engagement in physical activity (exercise and fitness), the importance of food and the regulation of eating practices.

The curriculum (identified in Room 22 through the HH programme and the topics taught under the whole school health concepts *Being healthy* and *Being human*), reinforced the social constructs of what was deemed to be 'healthy' and were laden with values, a feature Bernstein (1996) says is selectively privileged by policy makers and reshaped for schools. Some of these values followed a pathogenic focus on health as demonstrated by the children in the examples shared in chapters 5-8. I didn't always observe teachers demonstrating strategies that enabled students to critically think or challenge assumptions about holistic aspects of health, but this does not mean to say it did not happen. Instead, I observed the use of power and persuasiveness to control the performativity and competency of bodies, mostly aligned with the schools (and societies) values. For example, Room 22 students practised running at lunchtimes (demonstrating modalities of discipline and self-responsibility) and wrote their results on a wall chart as part of training for the cross country competition in 2012. Included in this, the student with the highest score received a prize from the teacher. Similar results were found in Cliff and Wright's

(2010) research, where specialist HPE teachers sensed that the body pedagogies they mobilised (using power and persuasiveness) provided potentially dangerous messages and repercussions for young people.

Perfection and performance codes

Through the modalities of perfection and performance, students were trying to be 'similar to' and 'different from' others, when demonstrating health enhancing behaviours (Evans & Davies, 2004c). This norming of bodily performance fosters a culture in schools where young people feel they need to conform as they are subjected to multiple systems of order and hierarchy that exist in both classrooms and across the whole school (Bernstein, 2000). In addition, the students were subjected to messages about self-responsibility and control, creating a form of independence that makes them 'different from' others. This can be confusing for children as they grapple with trying to be like others and fit in (in terms of their bodily knowledge and actions) and also displaying tenants of competency (perfection) resulting in being in control of their bodies and their selves.

Through using the narrative of a children's story and the concepts inherent within it, my study recognised examples of students' understandings of their embodied self, and the alignment with both performance and perfection codes. In analysing the embodied acts of Richie, Sarah and Tara, I found that they exhibited both positive and negative values of different possible behaviours, of and on the body over the two years of my study. These modalities expressed by them and other participants in Room 22 reflected consumerism and global capitalism's desire to focus on the embodied self (possibly in order to meet the industry and commercial needs of a nation). The embodied acts were replicated often through the pathogenic nature of what was taught (avoid risks, ill health and disease, keep physically well) and evident at times in the behaviour (as a result of the pedagogy experienced) of my students Richie, Sarah and Tara. These students were typical of the other 8-9 year olds in Room 22.

Pertinent parts of the puzzle: Contribution to knowledge on body pedagogies

My study endorsed Bernstein's, Shilling's, Evans and Davies and others' research, reinforcing that the culture of the school and the process of social control relayed messages about the body that were reproduced and recontextualised throughout the learning environment of the classroom and school. Of significance to teachers of health and physical education is Tinning's (2010) concept that the relationship between food, exercise and shape isfundamental to understanding the concept of health from a Western perspective. My data revealed that there was not consistent understanding by the teachers and across the school of the potential that a holistic understanding of health education literacy and practice can have on children's understanding of their bodies. Instead, children were subjected to varied messages via a 'mixed palate' of pedagogy, resulting in their understanding of health and their bodies from a (somewhat limited) pathogenic and corporeal perspective. Findings such as this appear to illustrate the sorts of compelling accounts of the enduring presence of school-based body pedagogies in young people's embodied consciousness and performance (Rich, 2010). Other international studies have found similar results, suggesting that children today still equate health and fitness with body shape (Burrows & Wright, 2004; Burrows et al. 2009; Quennerstedt et al. 2010; Webb et al. 2008; Wright et al. 2012).

This study contributed to knowledge on children's perceptions and understanding of their bodies and their selves as a result of a health intervention and an ongoing school wide focus on health in one New Zealand primary school. Three areas from my study make a unique contribution to the field of body pedagogies. These are discussed further in this section.

Health education: adopting a sociocultural pedagogy

Literature suggests that a totally pedagogised micro-society (namely the school community, which includes students, teachers, parents/caregivers and whanau) is able to influence students' understanding of their bodies (Evans, Rich, Davies, et al. 2008; McCuaig & Hay, 2013). However, at Tuihana, 'health' in the micro-culture of the school was perpetuated by discourses that focused on a pathogenic perspective and practices that espoused healthism. Bernstein (2000) suggests there is a need to focus analysis on the social biases of education. These social biases were influenced and reinforced by parents

and their community, however, a school is required to provide students with the capacity to embrace the philosophy and pedagogy of health education as described in the NZC. Health education as described in the NZC (Ministry of Education, 2007) and other related Ministry of Education health resources provide a wider perspective on what it is to be 'educated' in health. My study revealed that the Tuihana teachers' knowledge (health literacy), and pedagogy was recontextualised through their pedagogic practice. This was despite some demonstrating well-meaning intentions and some adopting pedagogies that embraced holistic wellbeing. Health 'education' was predominantly relayed as a corporeal construct and not one that embraced the more holistic concept of embodiment.

In the NZC (Ministry of Education, 2007), health as a subject requires students to adopt a socio-critical perspective when examining the factors that influence their health and that of others. The curriculum states that they then learn to 'take critical action in order to promote personal, interpersonal and societal wellbeing' (Ministry of Education, 2007, p. 23). Teachers of health education therefore should be encouraged to be cognisant of what makes up the body of knowledge required for students to fulfil the intent of the curriculum (Alfrey & Brown, 2014; Leahy et al. 2016; Penney et al. 2015). My study found what other studies have shown; that is, generalist primary school teachers adopt child-centred pedagogies, but their health practice still focuses on teaching young people to be healthy, primarily from a biomedicalised (obesity) and pathogenic perspective (Quennerstedt et al. 2010). Tuihana teachers, like other primary school teachers from around the Western world, demonstrated a focus on teaching popular understandings of health (often based on obesity and healthism discourses) rather than on 'educating' students in health (Cliff & Wright, 2010; Fitzpatrick & Tinning, 2014; Petrie et al. 2014; Powell & Gard, 2015; Pringle & Pringle, 2012; Quennerstedt et al. 2010; Rich, 2010a; Soto & White, 2010; Webb et al. 2008). Generalist primary school teachers would benefit from considering 'body knowledge' (Evans & Davies, 2009) instead of 'knowledge of the body', as 'body knowledge' embraces a more holistic focus on the body and health. In addition an understanding of the social processes and practices of schooling including the importance of the relay that messages (via curriculum, pedagogy and assessment) can have on how these form and impact on children's sense of identity and health. Developers of biomedical health interventions would also benefit from considering these and the other concepts I have identified through my themes, when designing programmes for primary school use.

In addition, Rowling and Jeffrey (2006) suggest that in order to achieve health outcomes for students in schools, an inter-sectoral approach from health *and* education research should inform curriculum and programme design. They, along with other proponents of a whole of school community approach to health promotion (Mohammadi et al. 2010; St Leger, 2000, 2001, 2004; St Leger & Young, 2009), advocate that this inter-sectoral approach should be integrated into a school's policy and practice. This is something government agencies in health and education could consider.

Salutogenic approaches to health promotion

As the corporeal self of my students featured in almost all the experiences attributed to being educated in 'health', an exposé into what it is to be 'educated' in health through adopting a socio-critical perspective and applying a health promoting salutogenic approach would be advantageous for primary school teachers. In my study students were not exposed consistently to a strengths-based (salutogenic) approach (McCuaig et al. 2013) to health and wellbeing; instead, the HH programme, the curriculum topics of *Being healthy* and *Being human*, and much of the pedagogy focused primarily on corporeal identity and contained tenants of performance, competency and perfection codes. A salutogenic health promoting approach might enable students to explore a holistic understanding of their bodies and gain a sense of embodiment, through their teachers becoming more aware of the social and cultural influences on the body. Such a salutogenic approach builds on the existing positive influences, helping students to develop wider knowledge through a holistic health perspective and, in turn, enables them to take health promoting action to enhance their bodily knowledge, understanding and actions (Antonovsky, 1996; McCuaig et al. 2013; Mittelmark & Bull, 2013; Quennerstedt & Ohman, 2014).

Adopting a kaupapa Māori approach

An interesting aspect from my findings that is relatively unique to body pedagogy research, is that of a kaupapa Māori approach to the classification and framing of the activities demonstrated by children that enhance their understanding of their own and others' bodily existence. This classification and framing (Bernstein, 2000), through the teacher's construction of health knowledge and pedagogy (tikanga Māori), helped to define the cultural boundaries between students, the curriculum (including the HH programme) and the systems impacting on the students within the school. The expression

of these cultural boundaries was initiated by Matua Manu from the outset, when he decided to adapt the HH programme to fit his understanding of hauora (Durie, 1994; Kohere, 2003). It continued through the curriculum topics of the *Being healthy* whole school concept and he demonstrated it through the pedagogy he adopted during the 2012 year. Whilst he mostly privileged the corporeal aspect of health through his teaching and behaviours, he also espoused the spiritual (wairua) and emotional (hinengaro) aspects of health through practices such as karakia, and other practices such as the ki-o-rahi game and the Māori tai chi activity, which became a daily ritual for the class for part of the year. This 'framing' of rituals that crossed cultural boundaries was something the students continued to practise over the course of the two years of my study. Demonstrating to me that the children of Room 22 embraced this approach, even if they were not of Māori ethnicity. Adopting such a pedagogy could provide an opportunity for researchers and developers of health intervention programmes to apply an indigenous culture's kaupapa (such as kaupapa Māori) to further our understanding of our own and others' body pedagogies. Whilst embracing a kaupapa Māori approach is natural for a Māori teacher to do, it is not impossible for other teachers to adopt within the education sector as Bishop and Glynn, (1999) and Savage et al. (2014) suggest. The generalist primary school teacher is easily able to develop a relationship with their students (Burrows & McCormack, 2012; Petrie, 2010; Rowlings & Jeffreys, 2006; Tasker, 2004), and if they embrace the philosophy of Health and Physical Education in the New Zealand Curriculum (Ministry of Education, 1999, 2007), their pedagogy would reflect the underlying concepts and that of hauora. Ongoing professional learning for generalist primary school teachers to feel confident and competent in demonstrating the intent of HPENZC, along with embracing a kaupapa Māori approach (Savage et al. 2014) to health education, should be considered.

The missing pieces: Recommendations for future research

Throughout my study I adopted a post-structuralist perspective, in an attempt to report an authentic sense of the socially constructed nature of Richie, Sarah and Tara's world whilst at school. Drawing on the understanding that the embodied self is central to what it is to be educated in health and what it is to be physically educated, I reflected upon the work of a number of researchers and gave examples in my literature of several biomedical interventions that focus on evaluating 'the body' in schooling. As an interpretive researcher I observed students' learning whilst constructing an understanding

of their behaviours, and endeavoured to critically reflect on these understandings using social theory and current literature. I attempted to make sense of these multiple meanings and actions that were exposed in my students' articulation of their bodies and their selves, primarily as a response to them being subjected to health discourse.

My study uncovered many subjectivities shaped by and through the interactions my students had with their four teachers, with other people, through the use of the HH programme manual and other texts, and through the practices they have been subjected to as a result of the whole school focus on health. This influenced the ways they made sense of their bodies and their selves, enabling me to shape an understanding of their idea of health and of the demonstrated body pedagogies. Interventions in schools, such as the HH programme, can be a catalyst for considering how children understand their bodies, their selves and how they demonstrate their knowledge about health. The perceptions and experiences of children as a result of this learning will enable a deeper understanding of the value of such interventions and could inform public health policy and education practice on a number of levels – children; teachers; schools; health agencies and government..

I reflected on how current literature exposes the school-based practices that potentially encourage students to negatively evaluate their own and others' bodies (Azzarito & Katzew, 2010; Lee & Macdonald, 2010; McCuaig & Tinning, 2010; Rich, 2011). Evans, Rich, Davies et al. (2008), amongst others, remind us that one of the dominant discourses, the so-called 'obesity epidemic' is recycled in schools, enters educational processes and impacts on the identities and health of young people. Indeed, aspects of this 'mantra' were observed at Tuihana School. Power and control through surveillance and monitoring was evident at Tuihana school through lunch box checks, food and exercise diaries recorded in HH student manuals, calculating children's BMI by researchers and the rewards given out for using pedometers. The message systems that exposed knowledge and understanding of curriculum, pedagogy and assessment practices in the name of 'health' revealed how children made sense of their bodies.

I attempted to understand the dominant health discourses (obesity and healthism) that were constituted as regimes of truth (by teachers, parents, media and other sources) that have impacted on the identities of Richie, Sarah and Tara in relation to their understanding of bodily knowledge. However, I was unable to draw any conclusions to finish the puzzle about whether health interventions had any long term impact on children's understanding of their and others' bodily existence. Instead, after completion of the study, I have reflected upon a number of recommendations that are reported below.

Recommendation 1

It was not possible through my study to collect information about the resulting social and psychological long term effects that health interventions can have on students' experiences of them, and how they are manifested after such an intervention (Gard, 2008; Soto & White, 2010). The consideration of the social and psychological long term effects resulting from young children being subjected to a primarily biomedical health intervention could warrant a future study. For example, some of the social effects could manifest themselves in children and result in body dysmorphia and bullying (as examples), and therefore a longitudinal study of children as they move into adolescence could produce some useful research. In addition, one way to mitigate this risk (and others like children being privileged or disadvantaged in health education practice) could be to involve children in the decision making process about what they understand and need to know about health, their bodies and their selves. Engaging young people in this research and co-constructing a way forward to meet their future health needs could be beneficial for teachers, parents/caregivers as well as developers of health intervention programmes.

Recommendation 2

Another aspect that needs further consideration is how society has influence over the 'body' of students. This question, from a sociological point of view, would require a much wider study, one that is beyond the scope of my research. However, a potential research project could consider a study on young people and whether as a result of the monitoring and surveillance of their eating, weight and physical activity, this engendered for them potentially dysfunctional relationships with food and exercise, especially as they grow into teenagers and beyond. Shilling (2004) suggests that children who are subjected to health interventions that are focused primarily on the body, reflect society's values and create layers of class systems. This could be apparent in Aotearoa/New Zealand, especially since most health interventions are aimed at low decile (often multicultural)

schools and those in the population with a low socio-economic status. This warrants further investigation and could influence government health and education policy.

Recommendation 3.

I have highlighted new areas of knowledge that have been exposed as a result of my study, however, another mechanism for further research not previously considered in health education literature would be to consider investigating teaching health through adopting a kaupapa Māori approach (Bishop & Glynn, 1999; Savage et al. 2014). This approach along with salutogenic theory (McCuaig et al. 2013; Mittelmark & Bull, 2013; Quennerstedt & Ohman, 2014) could create a unique learning environment for New Zealand schools. The challenge would be to consider whether combining a salutogenic and a kaupapa Māori approach could co-exist in an English-medium school community environment.

Completing the jigsaw puzzle: ruminations and my research question

Over a decade ago Evans and Davies (2004a) challenged us to consider the origins (following Bernstein) of 'body knowledge' within the social processes and practices of schooling. They suggested practices in health and physical education helped to form an individuals' sense of identity and 'embodied' self. Today researchers, despite following the *Seventh Moment* (one that opens doors in new ways of studying and looking at human behaviour, attitudes and conditions), are still discussing whose socio-political and economic interests are being served in schools by policy and practices that are articulated as body pedagogies (Denzin & Lincoln, 2000; Evans, Rich, Davies et al. 2008; Fitzpatrick & Tinning, 2014). My findings as discussed in Chapters 5-8 drew on Bernstein's concepts and reinforced that the culture of the school and the process of social control relayed messages about the body that were reproduced and recontextualised by teacher pedagogy, throughout the learning environment, resulting in some interesting and some limited understanding by children of their bodies and their selves. The Principal at Tuihana School summed up her thoughts about what the children had learnt over their two year focus on health, in saying *"They have some strong ideas now… About what is healthy and what is not healthy, about what to eat. So they have made those connections and they are now using it in their lives"* (Interview, Principal).

In the analysis of my data, I acknowledged that everything was socially constructed and personally experienced and therefore I have shared multiple truths. One of the complexities that came out of my study was that Tuihana School used a range of resources, knowledge and different pedagogies to draw upon (Kaupapa Māori, HH, Life Education, Funskills, Mindfulness). The school made a desired effort to enhance participation, inclusion and understanding of health, and yet the children's experiences and understandings at times identified with modalities of performance and perfection. The concept of *'body knowledge'* [my emphasis added] in children could provide a sense of identity and understanding of the 'embodied' self, not just 'knowledge of the body' as was evident in my study.

A way forward

When designing health interventions, developers would benefit from taking into an account the constraints of the crowded curriculum in primary schools. In addition, in the desire for continuous improvement of bodies and children's understandings of health, teacher knowledge and policy is appropriated and is recontextualised through their pedagogy, sometimes selectively privileging certain desired bodies. Primary school teachers could benefit from an understanding of the ways young people learn and 'do' health, and practise this by enhancing their own health literacy and increasing their knowledge about dominant health discourses through adopting a socio-critical perspective, something that Fitzpatrick (2011) also advocates. In my study, I found that teachers were critical consumers of health messages some of the time (mostly as a response to personal beliefs). However, it was not consistent across the school, thus a variance between the culture of the classroom and the culture of the school was evident. Tuihana School valued health and wellbeing by providing a range or resources and experiences for children's learning and some teachers adopted an holistic and socio-cultural pedagogy when teaching health.

Despite the influence of society's values and discourses such as obesity and healthism influencing a school community, the educational policy (curriculum) and processes (pedagogy) can and do enable teachers to filter, mediate and recontextualise the learning

environment to suit their students' needs (Evans, Davies, Rich et al. 2008; Shilling, 2007). An example is the kaupapa Māori approach to teaching health. In my study, the children responded well to Matua Manu's specific approach. The children in Room 22 were predominantly of Māori and Pacific Island background reinforcing Bernstein's concept that schooling (and teacher pedagogy) can embrace and enhance social and cultural understandings.

Of significance was the evidence of performance and perfection codes in the actions of the children and in the pedagogical practice of the teachers, reinforcing the social significance of schools mirroring the social and cultural reproduction of societal values. At Tuihana School there was evidence through the message systems of curriculum, pedagogy and assessment that reiterated that the children's bodies need correction, that the body (any body) is still imperfect and unfinished and that we as a society are at risk of becoming unhealthy (or obese) if we do not increase our knowledge and change our behaviour. Messages of corporeality and a pathogenic focus of health formed a type of social control and were reiterated by children through their learning activities. At other times when a socio critical perspective was applied by the teachers as more holistic message of health was evident from the children.

I have considered the influence that a health intervention has had on how children (my students Richie, Sarah and Tara) have understood and interpreted their body knowledge, through the conscious activity they demonstrated over a two year period. I suggest that (8-9 year old) children's worlds are not able to be fragmented into discrete topic areas that can demonstrate their knowledge and understanding of their bodies and their selves, because 'health' as a concept is too big for them to espouse. As proposed, though, that obstacle can be overcome to an extent through adoption of a strength-based (salutogenic) approach to health education, whereby children are part of the decision making in health lessons, are able to critically think and challenge assumptions about health practices and inequalities, and contribute to the construction of knowledge and power over their bodies.

I have attempted to answer my question "What are the children's perceptions and experiences of their bodies and selves within the micro-culture of a school, during and

after a Healthy Homework (HH) intervention?", by providing evidence through my data of their understanding of their own and others' bodily existence, through their discussion and behaviours generated over the two years of my study. Finally, to help piecing the jigsaw puzzle together, I draw on both Foucault and Bernstein's conceptual understanding of knowledge, power and control within education systems and ponder a question as a result of my study. "Are biomedical interventions and programmes like HH just part of the public health agenda to provide a solution in order to create healthy, well citizens, or should they be a catalyst to engage young people to think more about holistic wellbeing? And if it is the former, over time will they prove to have done more harm than good?"

As an interpretive researcher investigating how children understand their bodies and their selves during and after a health intervention, I pursued in-depth and contextualised understandings of what children learned as a result of a focus on health and whether this was manifested and expressed through their actions and sustained over a period of time. The body pedagogies that were articulated and the messages inherent in the learning environment to which my students were subjected could indeed influence their health and wellbeing in both a positive and negative way as articulated in this and previous discussion chapters. Furthermore, as my study has demonstrated, teachers are an essential part of the jigsaw, as together with students, they can assemble the pieces, make a fit and create a whole, and thus enable policy makers and designers of health interventions to have a greater understanding about children's bodies and their selves.

References

Alfrey, L., & Brown, T. (2013). Health literacy and the Australian Curriculum for Health and Physical Education: A marriage of convenience or a process of empowerment? *Asia-Pacific Journal of Health, Sport and Physical Education, 4*(2), 159-173.

Allen, B. & Petrie, K. C. (2005). Connecting through Physical Education: A position paper exploring social connectedness. *Journal of Physical Education New Zealand, 38*(1), 81-94.

Anderson, G. (1998). *Fundamentals of educational research.* London, England, England: Falmer Press.

Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International, (11)*1, 11-18.

Atkins, D. (2014, February). *Body pedagogies: An investigation of the ways in which children come to understand their bodies.* Paper session presented at the AIESEP International conference, Auckland, New Zealand.

Atkins, D. (2014, November). *Educating bodies: An investigation of the ways in which children come to understand their bodies.* Paper session presented at the AARE/NZARE conference, Brisbane, Australia.

Azzarito, L. (2009). The panopticon of physical education: Pretty, active and ideally white. *Physical Education and Sport Pedagogy, 14*(1), 19-31. DOI: 10.1080/17408980701712106.

Azzarito, L. (2011). Body encounters: Embracing pedagogies of difference. In S. Brown (Ed.), *Issues and controversies in Physical Education: Policy, power, and pedagogy* (pp. 103-113). Auckland, New Zealand: Pearson.

Azzarito, L., & Katzew, A. (2010). Performing identities in Physical Education. *Research Quarterly for Exercise and Sport, 81*(1), 25-37. DOI:10.1080/02701367.2010.10599625.

Barab, S., Thomas, M., Dodge, T., Squire, K., & Newell, M. (2004). Critical design ethnography: Designing for change. *Anthropology and Education Quarterly, 35*(2), 254-268.

Begley, P. (1999). Introduction. In P. Begley (Ed.), *Values and educational leadership* (pp. xvii –xix). Albany, NY: State University of New York Press.

Berg, B. L. (2007). Qualitative research methods for the social sciences. Boston, MA: Allyn and Bacon.

Bernstein, B. (1996). Class codes and control, towards a theory of educational transmissions (Vol 3). London, England, England: Routledge & Keegan Paul.

Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research and critique.* Revised edition. London, England: Rowman & Littlefield.

Bernstein, B. (2004). Social class and pedagogic practice. In S. J. Ball (Ed.), *The RoutledgeFalmer reader in sociology of education* (pp. 196-218). London, England: RoutledgeFalmer.

Besley, T. (2003). The body and the self in the New Zealand Health and Physical Education Curriculum. *New Zealand Journal of Educational Studies, 38*(1), 59-72.

Bishop, R., & Glynn, T. (1999). *Culture counts.* Palmerston North, New Zealand: Dunmore Press.

Bordo, S. R. (1990). The body and reproduction of femininity: a feminist appropriation of Foucault. In A. Jagger & S. Bordo (Eds.), *Gender/body/knowledge* (pp.13-33). New Brunswick, Canada: Rutgers University Press.

Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Thousand Oaks, CA: Sage Publications.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. DOI: 10.1191/141478088706qp063oa.

Breslin, G., Gossrau-Breen, D., McCay, N., Gilmore, G., MacDonald, L., & Hanna, D. (2012). Physical activity, gender, weight status and wellbeing in 9-11 year old children: A cross-sectional survey. *Journal of Physical Activity and Health, 9,* 394-401.

Bromfield, P. V. (2009). Childhood obesity: Psychosocial outcomes and the role of weight bias and stigma. *Educational Psychology in Practice, 25*(3), 193-209. DOI: 10.1080/02667360903151759.

Brooks, C., & DinanThompson, M. (2013). Professional insiders/outsiders? Teacher professionalism and the primary school Physical Education specialist. *Asia-Pasific Journal of Health, Sport and Physical Education, 4*(3), 235-248. DOI: 10.1080/18377122.2013.836767.

Brown, R., Scragg, R., & Quigley, R. (2008). *Does the family environment contribute to food habits or behaviours and physical activity in children?* (Unpublished project report). Wellington, NZ: Scientific Committee of the Agencies for Nutrition Action.

Bryman, A. (2008). *Social research methods.* (3rd ed.). Oxford, England: Oxford University Press.

Burrows, L. (2008). "Fit, fast, and skinny": New Zealand school students 'talk' about health. *Journal of Physical Education New Zealand, 41*(3), 26-36.

Burrows, L. (2010). "Kiwi kids are Weet-Bix kids" – body matters in childhood. *Sport, Education and Society*, *15*(2), 235-251. DOI: 10.1080/13573321003683919.

Burrows, L. (2011). Thinking with attitude. In S. Brown (Ed.), *Issues and controversies in Physical Education: Policy, power, and pedagogy* (pp. 71-79). Auckland, NZ: Pearson.

Burrows, L., & McCormack, J. (2011). Sporting fat. Youth sport and the 'obesity epidemic'. In S. Dagkas & K. Armour (Eds.), *Inclusion and exclusion through youth sport* (pp.125-136). Hoboken, NJ: Routledge.

Burrows, L., & McCormack, J. (2012). Teachers' talk about health, self and the student 'body'. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 729-744.

Burrows, L., & Ross, B. (2003). Introduction. In B. Ross & L. Burrows (Eds.), *It takes 2 feet: Teaching Physical Education and Health in Aotearoa New Zealand* (pp.13-18)*.* Palmerston North, New Zealand: Dunmore Press.

Burrows, L., & Wright J. (2004). The good life: New Zealand children's perspectives on health and self. *Health Education Journal*, *9*(2), 193-205. DOI: 10.1080/1357332042000233930.

Burrows, L., & Wright J., & McCormack J. (2009). Dosing up on food and physical activity: New Zealand children's ideas about 'health'. *Health Education Journal, 68*(3), 157-169. DOI: 10.1177/0017896909339332.

Burrows, L., Wright, J., & Jungersen-Smith, J. (2002). ''Measure your belly'': New Zealand children's constructions of health and fitness. *Journal of Teaching in Physical Education, 2*(2), 39-48.

Cale, L., & Harris, J. (Eds.). (2005). *Exercise and young people: Issues, implications and initiatives.* Basingstoke, England: Palgrave Macmillan.

Cale, L., & Harris, J. (2011). 'Every child (of every size) matters' in physical education! Physical Education's role in childhood obesity. *Sport, Education and Society*, *18*(4), 433-452. DOI:10.1080/13573322.2011.601734.

Carspecken, F. P. (1996). *Critical ethnography in educational research.* London, England, England: Routledge.

Campos, P. (2004). The obesity myth: Why America's obsession with weight is hazardous to your health. New York, NY: Gotham.

Carspecken, F.P., & Walford, G. (Eds.). (2001). *Critical ethnography and education.* Oxford, England: Elsevier Science.

Cassidy, T., & Ovens, A. (2009). Curriculum acoustics: Analysing the changing voice of the New Zealand Health and Physical Education Curriculum. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for curriculum in Australia and New Zealand* (pp.22-37). Melbourne, Australia: Oxford University Press.

Cause, L. (2010). Bernstein's code theory and the educational researcher. *Asian Social Science, 6*(5), 1-9.

Clarke, G. (1992). Learning the language: Discourse analysis in Physical Education. In A. Sparkes (Ed.), *Research in Physical Education and sport: Exploring alternative visions* (pp. 146-166). London, England, England: Falmer Press.

Clark, H. (2006, 21 September). Mission-On healthy lifestyles for young Kiwis. Retrieved 10 November 2013 from (http:// www.beehive.govt.nz/speech/mission-package-launch).

Cliff, K., & Wright, J. (2010). Confusing and contradictory: considering obesity discourse and eating disorders as they shape body pedagogies in HPE. *Sport, Education and Society*, 15(2), 221-233. DOI: 10.1080/13573321003683893.

Cliff, K., Wright, J., & Clarke, D. (2009). What does a 'sociocultural perspective' mean in Health and Physical Education? In M. DinanThompson (Ed.), *Health & Physical Education: Issues for curriculum in Australia and New Zealand* (pp. 165-182). Melbourne, Australia: Oxford University Press.

Coffey, A. (2002). Ethnography and self: Reflections and representations. In T. May (Ed.), *Qualitative research in action* (pp. 313-331). London, England: Sage.

Connelly, F. M., & Clandinin J, D. (1988). *Teachers as curriculum planners. Narratives of experience.* New York, NY: Teachers College Press

Cooper, R. J. (2013). Waist to height ratio in relation to time to run 550m in primary school children in the Waikato region. (Unpublished master's thesis). AUT University, Auckland, New Zealand.

Cosgriff, M., Petrie, K., Burrows, L., Keowen, S., Devcich, J., Duggan, D., & Naera, J. (2013). What's in a name?" Re-imaging Health and Physical Education in the primary school. *New Zealand Physical Educator, 46*(3), 10-13.

Cowley, J. (1990). *Mum's diet.* Auckland, New Zealand: Scholastic.

Crang, M., & Cook, I. (2007). *Doing ethnographies.* London, England, England: Sage Publications.

Crotty, M. (1998). *The foundations of social research*. Thousand Oaks, CA: Sage Publications.

Culpan, I. (1996/7). Physical Education: Liberate it or confine it to the gymnasium? *Delta 48*(2), *41*(1), 203-220.

Culpan, I. (2004). Physical Education curriculum development: A humanistic positioning. In A. O'Neill, C. J. Andres, & O. Roger (Eds.), *Reshaping culture, knowledge and learning: Policy and content in the New Zealand curriculum framework* (pp. 203-223). Palmerston North: Dunmore Press.

Culpan, I. (2008). Physical education and The New Zealand Curriculum: Maximising the opportunity. *New Zealand Physical Educator, 41*(3), 51-61.

Culpan, I., & Bruce, J. (2007). New Zealand Physical Education and critical pedagogy: Refocusing the curriculum. *International Journal of Sport and Health Science, 5,* 1-11.

Denzin, N. K. (2001a). *Interpretive interactionism.* Thousand Oaks, CA: Sage Publications.

Denzin, N. K. (2001b). The seventh moment: Qualitative inquiry and the practices of a more radical consumer research. *The Journal of Consumer Research*, 28(2), 324-330. DOI: 10.1086/322907.

Denzin, N. & Lincoln, Y. (Eds.), (2000). *Handbook of qualitative research.* Thousand Oaks CA: Sage Publications.

De Pian, L. (2012). 'Emboldened bodies': social class, school health policy and obesity discourse. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 655-672. DOI:10.1080/01596306.2012.696499.

De Pian, L., Evans, J., & Rich, E. (2014). Mediating biopower: Health Education, social class and subjectivity. In K. Fitzpatrick, & R. Tinning (Eds.), *Health Education: Critical perspectives* (pp.129-141). London, England, England: Taylor & Francis.

DinanThompson, M. (2009). Voices in Health and Physical Education policy and practice in Australian States. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for curriculum in Australia and New Zealand* (pp.38-59). Melbourne, Australia: Oxford University Press.

DinanThompson, M. (2013). Claiming 'educative outcomes' in HPE: the potential for 'pedagogic action'. *Asia-Pacific Journal of Health, Sport and Physical Education, 4*(2), 127-142. DOI: 10.1080/18377122.2013.801106.

Duncan, S., & Schofield, G. (2010). *Healthy Homework: pilot study 2008-2009.* (Unpublished project report). Wellington, NZ: Health Research Council.

Duncan S., McPhee, J., Schluter, P., Zinn, C., Smith, & Schofield, G. (2011). Efficacy of a compulsory homework programme for increasing physical activity and healthy eating in children: the healthy homework pilot study. *International Journal of Behavioural Nutrition and Physical Activity* 8:127. Retrieved from (http://www.ijbnpa.org/content/8/1/127).

Durie, M. (1994). *Whaiora: Mhealth development.* Auckland, New Zealand: Oxford University Press.

Dyson, B., Gordon, B., & Cowan, J. (2011). What is Physical Education in primary schools in Aotearoa/New Zealand? *Asia-Pacific Journal of Health, Sport and Physical Education, 2*(3-4), 5-16. DOI:10.1080/18377122.2011.9730356.

Education Review Office. (2014). *Tuihana School review.* Retrieved from (http://www.ero.govt.nz).

Education Counts. (2014). *Statistics: School type.* Retrieved from (http://www.educationcounts.govt.nz/statistics/schooling/july_school_roll_returns /school-type).

Emmerson, R. M., Fretz, R.I., & Shaw, I.L. (2001). Participant observation and fieldnotes. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of ethnography* (pp 352-383). London, England, England: Sage Publications.

Erwin, H., Fedewa, A., Beighle, A., & Shn, S. (2012). A quantitative review of physical activity, health, and learning outcomes associated with classroom-based physical activity interventions. *Journal of Applied School Psychology, 28*(1), 14-36. DOI: 10.1080/15377903.2012.643755.

Evans, J., & Davies, B. (2004a). Pedagogy, symbolic control, identity and health. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.3-18). London, England, England: Routledge.

Evans, J., & Davies, B. (2004b). Sociology and health in a risk society. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.35-51). London, England, England: Routledge.

Evans, J., & Davies, B. (2004c). Endnote: the embodiment of consciousness: Bernstein, health and schooling. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.207-217). London, England, England: Routledge.

Evans, J., & Davies, B. (2006). The sociology of physical education. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The handbook of Physical Education* (pp.109-122). London, England: Sage Publications.

Evans, J., & Davies, B. (2012). Embodying policy concepts. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 617-633. DOI:10.1080/01596306.2012.696497.

Evans, J., & Davies, B. (2015). Physical education, privatisation and social justice. *Sport, Education and Society, 20*(1), 1-9. DOI:10.1080/13573322.2014.942624.

Evans, J., & Davies, B. (2015). Neoliberal freedoms, privatisation and the future of physical education. *Sport, Education and Society, 20*(1), 10-26. DOI:10.1080/13573322.2014.942624.

Evans, J., Davies, B., & Rich, E. (2009). The body made flesh: embodied learning and the corporeal device. *British Journal of Sociology of Education*, *30*(4), 391-406. DOI: 10.1080/01425690902954588.

Evans, J., & Penney, D. (2008). Levels on the playing field: the social construction of physical 'ability' in the Physical Education curriculum. *Physical Education and Sport Pedagogy, 13*(1), pp. 31-47. DOI: 10.1080/17408980701345576.

Evans, J., Rich, E., Allwood, R., & Davies B. (2008). Body pedagogies, p/policy, health and gender. *British Educational Research Journal, 34*(3), 387-402. DOI: 10.1080/01411920802042812.

Evans, J., Rich, E., Davies, D., & Allwood, R. (2008). *Education, disordered eating and obesity discourse. Fat fabrications.* London, England: Routledge.

Evans, R. R., Roy, J., Geiger, B. F., Werner, K. A., & Burnett, D. (2008). Ecological strategies to promote healthy body image among children. *Journal of School Health, 78*(7), 359-367.

Fairclough, S. J., Butcher, Z. H., & Stratton, G. (2008). Primary school children's health-enhancing physical activity patterns: the school as a significant environment? *Education* 3:13: *International Journal of Primary, Elementary and Early Years Education, 36*(4), 371-381. DOI: 10.1080/03004270801959676.

Fancy, H. (2009). Re-engineering the shifts in the system. In J. Langley (Ed.), *Tomorrow's Schools 20 years on…* Auckland: Cognition Institute.

Fitzpatrick, J. K., & Kazer, M. W. (2011). *Encyclopaedia of nursing research.* Chicago, IL: Springer.

Fitzpatrick, K. (2011). Obesity, Health and Physical Education: A Bourdieuean perspective. *Policy Futures in Education, 9*(3), 353-366. DOI:10.2304/pfie.2011.9.3.353.

Fitzpatrick, K. (2013). *Critical pedagogy, Physical Education and urban schooling.* New York, NY: Peter Lang

Fitzpatrick, K. (2014). Critical approaches to health education. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: Critical perspectives* (pp.173-189). London, England: Taylor & Francis.

Fitzpatrick, K., & Tinning, R. (2014). Considering the politics and practice of Health Education. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: Critical perspectives* (pp.1-14). London, England: Taylor & Francis.

Fletcher, T., & Mandigo, J. (2012). The primary schoolteacher and Physical Education: a review of research and implications for Irish Physical Education. *Irish Educational Studies, 31*(3), 363-376. DOI:10.1080/03323315.2012.710063.

Gard, M. (2004). An elephant in the room and a bridge too far, or physical education and the 'obesity epidemic'. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.68-83). London, England: Routledge.

Gard, M. (2008). Producing little decision makers and goal setters in the age of the obesity crisis. *Quest, 60*, 488-502.

Gard, M. (2011). *The end of the obesity epidemic.* London, England: Routledge.

Gard, M. (2015). 'They know they're getting the best knowledge possible': Locating the academic in changing knowledge economies. *Sport, Education and Society, 20*(1), 107-121. DOI:10.1080/13573322.2014.957177.

Gard, M., & Leahy, D. (2009). Dicing with death: Tensions, contradictions and awkward positions in school Health Education. In M. DinanThompson, (Ed.), *Health & Physical Education: Issues for curriculum in Australia and New Zealand* (pp.183-197). Melbourne: Oxford University Press.

Gard, M., & Wright, J. (2005). *The obesity epidemic; science, morality, and ideology*. Oxon, England: Routledge.

Gard, M., & Wright, J. (2009). Managing uncertainty: Obesity discourses and Physical Education in a risk society. In R. Bailey & D. Kirk (Eds.), *The Routledge Physical Education reader* (pp. 353-366). New York, NY: Routledge.

Garrett, R. (2004). Gendered bodies and physical identities. In J. Evans, B. Davies, & J. Wright (Eds.), *Body Knowledge and Control: Studies in the sociology of Physical Education and Health* (pp.140-156). London, England: Routledge.

Gilbert, J. (2005). Catching the knowledge wave? The knowledge society and the future of education. Wellington, NZ: NZCER.

Giroux, H. (1983). Theory and resistance in education: A pedagogy for the opposition. Westport, CT: Bergin & Garvey.

Giroux, H. (2003). Public pedagogy and the politics of resistance: Notes on a critical theory of educational struggle. *Educational Philosophy and Theory: Incorporating ACCESS, 35*(1), 5-15. DOI: 10.1111/1469-5812.00002.

Giullianotti, R. (2002). Supporters, followers, fans and flaneurs: A taxonomy of spectator identities in football. *Journal of Sport and Social Issues, 26*(1), 25-46. DOI: 10.1177/0193723502261003.

Gordon, B., Cowan, J., McKenzie, A., & Dyson, B. (2013). Primary school Physical Education in Aotearoa/New Zealand: The voices of teachers. *Journal of Physical Education, 44*(1), 9-12.

Gosling, R., Stanistreet, D., & Swami, V. (2008). "If Michael Owen drinks it, why can't I?" *Health Education Journal, 67*(3), 167-181. DOI: 10.1177/0017896908094635.

Grix, J. (2010). *The foundations of research*. Basingstoke, NY: Palgrave Macmillan.

Graham, D., Appleton, S., Rush, E., McLennan, S., Reed, P., & Simmons, D. (2008). Increasing activity and improving nutrition through a schools-based programme: Project Energize. 1. Design, programme, randomisation and evaluation methodology. *Public Health Nutrition.* DOI: 10.1017/S136898000700153X.

Grogan, S. (2006). Body image and health. *Journal of Health Psychology, 11*(4), 523-530. DOI: 10.1177/1359105306065013.

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), *The Paradigm dialog* (pp. 17-30). Newbury Park, CA: Sage Publications.

Harawira, H. (2014, May 22). Feed the kids bill. *The New Zealand Herald,* pp. A3.

Hargreaves, A. (2003). *Teaching in a knowledge Society.* Maidenhead, England: Open University.

Harwood, V., & Wright, J. (2012). Policy, schools and the new health imperatives. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 611-615. DOI: 10.1080/01596306.2012.696496.

Harwood, V. (2009). Theorising biopedagogies. In J. Wright & V. Harwood (Eds.), *Biopolitics and the obesity epidemic. Governing bodies* (pp. 15-30). Routledge: London, England.

Hay, P. (2009). Broadening perspectives on assessment in Health and Physical Education. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for curriculum in Australia and New Zealand* (pp. 214-229). Melbourne: Oxford University Press.

Hay, P. & Penney, D. (2013). *Assessment in Physical Education: a sociocultural perspective.* Oxon, England: Routledge.

Hammersley, M. (1990). *Reading ethnographic research. A critical guide.* New York, NY: Addison Wesley Longman.

Hammersley, M., & Atkinson, P. (1983). *Ethnography; principles and practice.* (1st ed.). London, England: Tavistock.

Hammersley, M., & Atkinson, P. (1995). *Ethnography; principles and practice.* (2nd ed.). London, England: Routledge.

Hokuwhitu, B. (2014). If you are not healthy, then what are you? Healthism, colonial disease and body-logic. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: Critical perspectives.* (pp. 51-71). London, England: Taylor & Francis.

Howson, A. (2004). *The body in society: An introduction.* Cambridge, England: Polity Press.

Humberstone, B., & Stan, I. (2011). Health, (body) image, and primary schooling: 'Why do they have to be a certain weight?' *Sport, Education and Society*, 16(4), 431-449. DOI:10.1080/13573322.2011.589641.

Jess, M., Keay, J., & Carse, N. (2014). Primary Physical Education: a complex learning journey for children and teachers. *Sport, Education and Society.* 1-18 DOI: 10.1080/13573322.2014.979142

Johnson, S., Gray, S., & Horrell, A. (2013). 'I want to look like that': Healthism, the ideal body and Physical Education in a Scottish secondary school. *Discourse: Studies in the Cultural Politics of Education 34*(3) 457-473. DOI:10.1080/01596306.2012.717196.

Katz, D. L. (2009). School-based interventions for health promotion and weight control: Not just waiting on the world to change. *Annual Review Public Health, (30),* 253-272. DOI: 10.1146/annurev.publhealth.031308.100307.

Keshavarz, N., Nutbeam, D., Rowling, L., & Khavarpour, F. (2010). Schools as social complex adaptive systems: A new way to understand the challenges of introducing the health promoting schools concept. *Social Science & Medicine, (70)*, 1467-1474. DOI:10.1016/j.socscimed.2010.01.034.

Kilgour, L., Matthews, N., Christian, P., & Shire, J. (2012). Health literacy in schools: prioritising health and well-being issues through the curriculum. *Sport, Education and Society.* DOI:10.1080/13573322.2013.769948.

Kira, G. (2009). Associations of patterns of daily life, physical fitness and body composition of primary school age children. (Unpublished doctoral thesis). AUT University, Auckland, New Zealand.

Kirk, D. (1990). School knowledge and the-curriculum package-as-text. *Journal of Curriculum Studies, (22)*5, 409-425. DOI: 10.1080/0022027900220501.

Kirk, D. (1992). Physical Education, discourse, and ideology: Bringing the hidden curriculum in to view. *Quest, 44,* 35-56.

Kirk, D. (1996). *Sociocultural foundations of human movement.* South Melbourne, Australia: Macmillan Education

Kirk, D. (1997). Thinking beyond the square: The challenge to physical educators in new times. *Quest 40,*182-186.

Kirk, D. (1998). Educational reform, physical culture and the crisis of legitimation in Physical Education. *Discourse: Studies in the Cultural Politics of Education, 19*(1), 101-112. DOI: 10.1080/0159630980190107.

Kirk, D. (1999). Physical culture, Physical Education and relational analysis. *Sport, Education and Society, 4*(1), 63-73. DOI: 10.1080/1357332990040105

Kirk, D. (2004). Towards a critical history of the body, identity and health: corporeal power and school practice. In J. Evans, B. Davies, & J. Wright (Eds.), *Body Knowledge and Control: Studies in the sociology of Physical Education and Health* (pp.52-67). London, England: Routledge.

Kirk, D. (2006a). The 'obesity' crisis and school Physical Education. *Sport, Education and Society, 11*(2), 121-133. DOI: 10.1080/13573320600640660.

Kirk, D. (2006b). School knowledge and the-curriculum package-as-text. *Journal of Curriculum Studies, 22*(5), 409-425. DOI: 10.1080/0022027900220501.

Kirk, D. (2009). *Physical education futures.* London, England: Routledge.

Kirk D., & Colquhoun, D. (1989). Healthism and Physical Education. *British Journal of Sociology of Education, 10*(4), 417-434. DOI: 10.1080/0142569890100403.

Kohere, R. (2003). Te hauora. In B. Ross & L. Burrows (Eds.), *It takes 2 feet* (pp.21-24). Palmerston North, NZ: Dunmore Press.

Lakin, L., & Littledyke, M. (2008). Health promoting schools: integrated practices to develop critical thinking and healthy lifestyles through farming, growing and healthy eating. *International Journal of Consumer Studies, (32)*3, 255-259. DOI:10.1111/j.1470-6431.2007.00658.x.

Langley, J. (2009). Introduction. In J. Langley (Ed.), *Tomorrow's Schools 20 years on…* Auckland: Cognition Institute

Leahy, D. (2009). Disgusting pedagogies. In J. Wright & V. Harwood (Eds.), *Biopolitics and the obesity epidemic. Governing bodies* (pp. 172-182). Routledge: London, England.

Leahy, D., Burrows, L., McCuaig, L., Wright, J., & Penney, D. (2016). *School Health Education in changing times: Curriculum, pedagogies and partnerships.* London, England: Routledge.

Lee, A. (2009). Health-promoting schools: evidence for a holistic approach to promoting health and improving health literacy. *Applied Health Economics and Health Policy, 7*(1), 11-17.

Lee J., & Macdonald, D. (2010). 'Are they just checking our obesity or what?' The healthism discourse and rural young women. *Sport, Education and Society, 15(*2), 203-219. DOI: 10.1080/13573321003683851.

Leonard, P. (1999). Examining educational purposes and underlying value orientations in schools. In P. Begley (Ed.), *Values and educational leadership* (pp.217-236). Albany, NY: State University of New York Press.

Leow, A., Macdonald, L., & McCuaig, L. (2011). Health promotion policies and schooling: The case of Eat Well Be Active. In S. Brown (Ed.), *Issues and controversies in Physical Education: Power, policy and pedagogy* (pp.57-67). Auckland: Pearson.

lisahunter. (2009). Should 'Kids be Seen and Not Heard'?: Where are the students in HPE curriculum? In M. DinanThompson (Ed.), *Health and Physical Education: Issues for curriculum in Australia and New Zealand* (pp.80-105). Melbourne: Oxford University Press.

Lim, D. H., Ripley, D. & O'Steen, B. (2009). E-learning methodologies in practice: similarities and differences between North American countries and New Zealand. *Human Resource Development International,* (12)2, 209-224. DOI: 10.1080/13678860902764134.

Lincoln, E., & Guba, E. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage Publications.

Lyons, K. (1992). Telling Stories from the Field? A discussion of an ethnographic approach to researching the teaching of Physical Education. In A. Sparkes (Ed.),

Research in Physical Education and sport: Exploring alternative visions (pp.248-270). London, England: Falmer Press.

Macdonald, D. (2011). Like a fish in water: Physical Education policy and practice in the era of neoliberal globalization. *Quest, 63,* 36-45.

Macdonald, D. (2015). Teacher-as-knowledge-broker in a futures-oriented health and physical education. *Sport, Education and Society, 20*(1), 27-41. DOI:10.1080/13573322.2014.935320.

Macdonald, D., Johnson, R. & Leow, A. (2014). Health education and Health promotion. Beyond cells and bells. . In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: critical perspectives* (pp.35-50). London, England: Taylor & Francis.

Macdonald, D., Hay, P. & Williams, B. (2008). Should you buy? Neo-liberalism, neo HPE, and your neo-job. *Physical Educator – Journal of Physical Education New Zealand, 41*(3), 6-13.

Macdonald, D., & Penney, D. (2009). Contemporary issues and future agendas for Health and Physical Education. In M. Dinan-Thompson (Ed.), *Health & Physical Education. Issues for curriculum in Australia and New Zealand* (pp. 248-260). South Melbourne, Australia: Oxford University Press.

Macnab, A., Gagnon, F., & Stewart, D. (2014). Health promoting schools: consensus, strategies, and potential. *Health Education,* 114(3), 170-185. DOI: 10.1108/HE-11-2013-0055.

MacNeill, M., & Rail, G. (2010). The visions, voices and moves of young 'Canadians': exploring diversity, subjectivity and cultural constructions of fitness and health. In J. Wright & D. Macdonald (Eds.), *Young people, physical activity and the everyday* (pp.175-194). London, England: Routledge.

MacPhail, A., Kirk, D., & Eley, D. (2007). Listening to Young People's Voices: Youth Sports Leaders Advice on Facilitating Participation in Sport. *European Physical Education Review, 9*(1), 57-73. DOI: 10.1177/1356336X03009001180.

Maddison, R., Ni Mhurchu, C., Jiang, Y., Vander Hoorn, S., Turley, M., Olds, T, …Denny, S. (2010). A national survey of physical activity behaviour: Preliminary results from the Mission-on evaluation in New Zealand. *Journal of Science and Medicine in Sport, 12*(2), 62-63. DOI:10.1016/j.jsams.2009.10.129.

Maddon, R. (2010). Being ethnographic: A guide to the theory and practice of ethnography. London, England: Sage Publications.

Martin, K. (2010). Brain Boost: Sport and physical activity enhance children's learning. Retrieved 11 November, 2010, from (http://www.dsr.wa.gov.au/brain-boost-sport-and-physical-activity-enhance-childrens-learning).

Mason, J. (1996). *Qualitative researching.* London, England: Sage Publications.

McCuaig, L., & Hay, P. (2013). Towards an understanding of fidelity within the context of school-based health education. *Critical Public Health (24)*2. 143-158. DOI: 10.1080/09581596.2013.840718.

McCuaig, L., Quennerstedt, M., & Macdonald, D. (2013). A salutogenic, strengths-based approach as a theory to guide HPE curriculum change. *Asia-Pacific Journal of Health, Sport and Physical Education, (4)*2,109-125. DOI:10.1080/18377122.2013.801105.

McCuaig, L., & Tinning, R. (2010). HPE and the moral governance of p/leasurable bodies. *Sport, Education and Society, (15)*1, 39-61. DOI: 10.1080/13573320903461087.

McDermott, L. (2011). 'Thrash yourself Thursday': the production of the 'healthy' child through a fitness-based PE practice. *Sport, Education and Society*, 17(3), 405-429. DOI:10.1080./13573322.2011.608942.

McMahon, J., & Penney, D. (2010). *Living by fat numbers: Exposure and effect of corporealism in a sporting culture.* Refereed paper presented at the AARE Conference, Hamilton, New Zealand.

McMahon, J., Penney, D., & DinanThompson, M. (2011). 'Body practices – exposure and effect of a sporting culture?' Stories from three Australian swimmers. *Sport, Education and Society, (17)*2, 181-206. DOI:10.1080/13573322.2011.607949.

McMahon, J., & Penney, D. (2011). Empowering swimmers and their bodies in and through research. *Qualitative Research in Sport, Exercise and Health, (3)*2, 130-151.

McPhee, J., Duncan, S., Schofield, G., & Zinn, C. (2010). Healthy homework pilot study: Qualitative findings from a physical activity and nutrition intervention for primary-aged children. *Journal of Science and Medicine in Sport, 13*(1), 12-13.

Miles, M. B, & Huberman, A. M. (1994). *Qualitative data analysis. An expanded sourcebook.* London, England: Sage Publications.

Ministry of Education (1993). *The New Zealand Curriculum Framework.* Wellington: Learning Media.

Ministry of Education (1996). *Draft Health and Physical Education in the New Zealand Curriculum.* Wellington, New Zealand: Learning Media.

Ministry of Education (1999). *Health and Physical Education in the New Zealand Curriculum.* Wellington, New Zealand: Learning Media.

Ministry of Education (2007). *The New Zealand Curriculum.* Wellington, New Zealand: Learning Media.

Ministry of Health (2008). *A portrait of Health: Key Results of the 2006/7 New Zealand Health Survey*. Wellington, New Zealand: Ministry of Health.

Mittelmark, M. R. & Bull, T. (2013). The salutogenic model of health in health promotion research. *Global Health Promotion, 1757-9759, 20*(2), 30-38. DOI: 10.1177/1757975913486684.

Mohammadi, N. K., Rowling, L., & Nutbeam, D. (2010). Acknowledging educational perspectives on health promoting schools. *Health Education, (110)*4, 240-251. DOI: 10.1108/09654281011052619.

Morgan, P., & Hansen, V. (2007). Recommendations to improve primary school Physical Education: Classroom teacher's perspective. *The Journal of Educational Research, 101*(2), 99-108. DOI 10.3200/JOER.101.2.99-112.

Mrkusic, A. M. (2012). School engagement in the Project Energize health intervention programme. 'What works, what does not work, what next?' (Unpublished master's thesis). AUT University, Auckland, New Zealand.

Nihiser, A., Lee, S., Wechsler, H., McKenna, M., Odom, E., Reinold, C., …Grummer-Strawn, L. (2009). BMI measurement in schools. *Pediatrics, 124*(1), S89-S97. DOI:10.1542/peds.2008-3586L.

Numer, M & Spencer, R. (2015). Bring your own device technology: Preliminary results from a mixed methods study to explore student experience of in-class response systems in post-secondary education. *Journal of Systemics, Cybernetics and Informatics, 13*(1), 1-6.

Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st Century. *Health Promotion International, (15)*3, 259-267. DOI: 10.1093/heapro/15.3.259.

Nutbeam, D. (2008). The evolving concept of health literacy. *Social Science & Medicine, 67,* 2072-2078. DOI:10.1016/j.socscimed.2008.09.050.

Nutbeam, D. (2009). Defining and measuring health literacy: what can we learn from literacy studies? *International Journal of Public Health, 54,* 303-305. DOI: 10.1007/s00038-009-0050-x.

Oliver, K. L., & Lalik, R. (2004). Critical inquiry on the body in girls' Physical Education classes: A critical poststructural perspective. *Journal of Teaching in Physical Education, 23*(2), 162-195.

Ovens, A., & Powell, D. (2011). Minding the body in physical education. In S. Brown (Ed.), *Issues and controversies in Physical Education: Policy, power, and pedagogy* (pp.150-159). Auckland, New Zealand: Pearson.

Penney, D. (2007). Health and Physical Education and the development of a national curriculum in Australia. Policies, position and prospects. *ACHPER Healthy Lifestyles Journal, 54*(3/4), 17-23.

Penney, D. (2008). Playing a political game and playing for position: Policy and curriculum development in Health and Physical Education. *European Physical Education Review, 4*(1), 1-18. DOI: 10.1177/1356336X07085708.

Penney, D. (2013). From policy to pedagogy: prudence and precariousness; actors and artefacts. *Asia-Pacific Journal of Health, Sport and Physical Education, (4)*2, 189-197. DOI:10.1080/18377122.2013.808154.

Penney, D., Brooker, R., Hay, P., & Gillespie, L. (2009). Curriculum, pedagogy and assessment: three message systems of schooling and dimensions of quality physical education. *Sport, Education and Society, 14(*4), 421-442. DOI: 10.1080/13573320903217125.

Penney, D., & Harris, J. (2004). The body and health in policy: representations and recontextualisation. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.96-112)*. London, England: Routledge.

Penney, D., & Jess, M. (2010). Physical education and physically actives lives: a lifelong approach to curriculum development. *Sport, Education and Society, 9(*2), 269-287. DOI: 10.1080/1357332042000233985.

Penney, D., Petrie, K. & Fellows, S. (2015). HPE in Aotearoa New Zealand: the reconfiguration of policy and pedagogic relations and privatisation of curriculum and pedagogy. *Sport, Education and Society, 20*(1), 42-56. DOI: 10.1080/13573322.2014.9475566.

Penney, D., Pope, C., lisahunter., Phillips, S., & Dewar, P. (2013). *Physical Education and sport in primary schools: Final report.* Hamilton, New Zealand: University of Waikato.

Petrie, K. (2010). Creating confident, motivated teachers of physical education in primary schools. *European Physical Education Review, 16(*1), 47-64. DOI: 10.1177/1356336X10369200.

Petrie, K. (2011). An Enduring Issue: Who should teach physical education in New Zealand primary schools? *Journal of Physical Education, 42*(1), 12-17.

Petrie, K. (2012). Enabling or limiting: the role of pre-packaged curriculum resources in shaping teacher learning. *Asia-Pacific Journal of Health, Sport and Physical Education, 3*(1), 17-34. DOI:10.1080/18377122.2012.666196.

Petrie, K., Burrows, L., Cosgriff, M., Keown, S., Naera, J., Diggan, D & Devcich, J. (2013). *Everybody Counts? Reimaging Health and Physical Education in Primary Schools.* Wellington, New Zealand: Ministry of Education. Retrieved from (http://www.tlri.org.nz/sites/default/files/projects/9290-summary report_0.pdf0020).

Petrie, K., Jones, A., & McKim, A. (2007). *Effective professional learning in physical activity.* Summary report. Wellington, New Zealand: Ministry of Education.

Petrie, K., & lisahunter. (2011). Primary teachers, policy and Physical Education. *European Physical Education Review, 17*(3), 325-339. DOI: 10.1177/1356336X11416729.

Petrie, K., Penney, D., & Fellows, S. (2014). Health and Physical Education in Aotearoa New Zealand: an open market and open doors? *Asia-Pacific Journal of Health, Sport and Physical Education, 5(*1), 19-38. DOI:10.1080/18377122.2014.867791.

Pinhas, L., McVey, G., Walker, K. S., Norris, M., Katzman, D., & Collier, S. (2013). Trading health for a healthy weight: The uncharted side of health weights initiatives. *Eating Disorders,* 21, 109-116. DOI: 10.1080/10640266.2013.761082

Pope, C. (2006). Interpretive perspectives in Physical Education research. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The handbook of Physical Education* (pp.21-36). London, England: Sage Publications.

Pope, C. (2014). The jagged edge and the changing shape of Health and Physical Education in Aotearoa New Zealand. *Physical Education and Sport Pedagogy, 10(*5), 500-511. DOI:10.1080/17408989.2013.837440.

Powell, D. (2015). Assembling the privatisation of physical education and the 'inexpert' teacher. *Sport, Education and Society, (20)*1, 73-88. DOI:10.1080/13573322.2014.941796.

Powell, D., & Fitzpatrick, K. (2015). 'Getting fit basically just means, like, nonfat': Children's lessons in fitness and fatness. *Sport, Education and Society*, *(20)*4, 463-484. DOI: 10.1080/13573322.2013.777661.

Powell, D., & Gard, M. (2014). The governmentality of childhood obesity: Coco-Cola, public health and primary schools. *Discourse: Studies in the Cultural Politics of Education.* DOI:10.1080/01596306.2014.905045

Prain, V., & Hickey, C. (1995). Using discourse analysis to change Physical Education. *Quest, 47*(1), 76-90.

Pringle, R., & Pringle, D. (2012). Competing obesity discourses and critical challenges for health and physical educators. *Sport, Education and Society, 17*(2), 143-161. DOI:10.1080/1357322.2011.607947.

Quennerstedt, M. (2008). Exploring the relation between physical activity and health – a salutogenic approach to Physical Education. *Sport, Education and Society, (13)*3, 267-283DOI: 10.1080/13573320802200594.

Quennerstedt, M. (2011). 'Warning: Physical Education can seriously harm your health!' – but it all depends on your health perspective! In S. Brown (Ed.), *Issues and controversies in Physical Education: Policy, power, and pedagogy* (pp. 46-56). Auckland, New Zealand: Pearson.

Quennerstedt, M., Burrows, L., & Maivorsdotter, N. (2010). From teaching young people to be healthy to learning health. *Urbildning & Demokrah, 19*(2), 97-112.

Quennerstedt, M., & Ohman, M. (2014). Salutogenic approaches to health and the body. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: critical perspectives* (pp.190-203). London, England: Taylor & Francis.

Reeve, S., & Bell, P. (2009). Children's self-documentation and understanding of the concepts 'Healthy' and 'Unhealthy'. *International Journal of Science Education, 31*(14), 1953-1974. DOI: 10.1080/09500690802311146.

Rich, E. (2010a). Obesity assemblages and surveillance in schools. *International Journal of Qualitative Studies in Education, 23*(7), 803-821.DOI:10.1080/09518398.2010.529474.

Rich, E. (2010b). Body pedagogies, education and health – editorial. *Sport, Education and Society, (15)*2, 147-150. DOI: 10.1080/13573321003683760.

Rich, E. (2011). 'I see her being obesed!': Public pedagogy, reality media and the obesity crisis. *Health, 15*(1), 3-21. DOI: 10.1177/1363459309358127.

Rich, E. (2012). Beyond school boundaries: new health imperatives, families and schools. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 635-654. DOI:10.1080/01596306.2012.696498.

Rich, E., & Evans, J. (2005). "Fat ethics': the obesity discourse and body politics. *Social Theory & Health, 3*, 341-358.

Rich, E., & Evans, J. (2009). Performative health in schools: Welfare policy, neoliberalism and social reproduction. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'obesity epidemic'* (pp. 157-172). London, England: Routledge.

Rich, E., Holroyd, R., & Evans, J. (2004). 'Hungry to be noticed': Young women, anorexia and schooling. In J. Evans, B. Davies & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of physical education and sport* (pp. 173-190). London, England: Routledge.

Richards, C. (2012). Playing under surveillance: gender, performance and the conduct of the self in a primary school playground. *British Journal of Sociology of Education, 33*(3), 373-390. DOI:10.1080/01425692.2012.659457.

Robinson, K. (2013, May). *How to escape education's Death Valley* [Audio podcast]. Retrieved from http://www.ted.com, 24 November 2014.

Ross, B. (2008). Faking Physical Education. *New Zealand Physical Educator, 41*(3), 62-66.

Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research, 10*(2), 199-228. DOI: 10.1177/1468794109356739.

Rovegno, I., & Dolly, J. P. (2006). Constructivist perspectives on learning. In D. Kirk, M. O'Sullivan & D. Macdonald (Eds.), *The handbook of research in Physical Education* (pp.242-261). Thousand Oaks, CA; London: Sage Publications.

Rowling L., & Jeffreys, V. (2006). Capturing complexity: integrating health and education research to inform health-promoting schools policy and practice. *Health Education Journal, 21*(5), 705-714. DOI:10.1093/her/cy1089.

Rush, E., Reed, P., McLennan, S., Coppinger, T., Simmons, D., & Graham, D. (2012). A school-based obesity control programme: Project Energize. Two-year outcomes. *British Journal of Nutrition,* 107, 581-587. DOI: 10.1017/S000711451003151.

Rush, E., Obolonkin, V., McLennan, S., Graham, D., Harris, J., Mernagh, P. & Weston, A. (2014). Lifetime cost effectiveness of a through-school nutrition and physical activity programme: Project Energize. *Obesity Research and Clinical Practice, 8*(2), e115-122.

Ryan, P. M. (2004). *The Reed Dictionary of Modern Māori .* Auckland, New Zealand: Reed.

Sadovnik, A. (2001) Profiles of famous educators: Basil Bernstein (1924-2000). *Prospects. Vol XXXI*(4), December, 607-620.

Safron, M., Cislak, A., Gasoar, T., & Luszczynska, A. (2011). Effects of achool-based interventions targeting obesity-related behaviours and body weight change: A systematic umbrella review. *Behavioural Medicine, 37*(1), 15-25. DOI:10.1080/8964289.2010.543194.

Sanchez-Jankowski, M. (2002). Representation, responsibility and reliability in participant-observation. In T. May (Ed.), *Qualitative Research in Action* (pp.144-160). London, England: Sage Publications.

Sandford R., & Rich, E. (2006). Learners and popular culture. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The Handbook of Physical Education* (pp.275-291). London, England: Sage Publications.

Sands, R. R. (2002). *Sport ethnography.* Leeds, England: Human Kinetics.

Savage, C., Macfarlane, S., Macfarlane, A., Fickel, L., & Te Hemi, H. (2014). Huakina mai: a kaupapa Māori approach to relationship and behaviour support. *The Australian Journal of Indigenous Education, 43*(2), 165-174. DOI: 10.1017/jie.2014.23.

Seale, C., Cavers, D., & Dixon-Woods, M. (2006). Commodification of body parts: By medicine or by media? *Body & Society, 12*(25), 25-42. DOI: 10.1177/1357034X06061192.

Seghers, J., de Martelaer, K., & Cardon, G. (2009). Young people's health as a challenge for Physical Education in schools in the twenty-first century: the case of Flanders (Belgium). *Physical Education and Sport Pedagogy, 14*(4), 407-420. DOI: 10.1080/1740898090272937.

Shilling, C. (1993). *The body and social theory.* London, England: Sage Publications.

Shilling, C. (2004). Educating bodies: Schooling and the constitution of society. In J. Evans, B. Davies & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.xv-xxii). London, England: Routledge.

Shilling, C. (2008). Foreword: body pedagogies, society and schooling. In J. Evans, E. Rich, D. Davies, & R. Allwood, *Education, disordered eating and obesity discourse. Fat fabrications* (pp. ix-xv). London, England: Routledge.

Shilling, C. (2010). Exploring the society-body-school nexus: theoretical and methodology issues in the study of body pedagogics. *Sport, Education and Society, 15*(2), 151-167. DOI: 10.1080/13573321003683786.

Shulman, L. S. (1987). "Knowledge and teaching: Foundations of the new reform". *Harvard Educational Review*, *57*, 1–22.

Simovska, V. (2012). What do health-promoting schools promote? *Health Education, 122*(2), 84-87. DOI: 10.108/09654281211214527.

Smith, A. (2007). Children and young people's participation rights in education. *International Journal of Children's Rights,* (15), 147-164. DOI: 10.1163/092755607X181739.

Soto, L. D., & Swadener, B. B. (2005). *Power and voice in research with children.* New York, NY: Peter Lang.

Soto, M. S., & White, J. (2010). School health initiatives and childhood obesity: BMI screening and reporting. *Policy, Politics & Nursing Practice, 11*(2), 108-114. DOI: 10.1177/1527154410374218.

Sparkes, A. C. (1992). 'Writing and the textual construction of realities: some challenges for alternative paradigms research in physical education'. In A. Sparkes (Ed.), *Research in Physical Education and Sport: Exploring alternative visions* (pp. 271-297). London, England: Falmer Press.

Sparkes, A. C. (2004). From performance to impairment: a patchwork of embodied memories. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.157-172). London, England: Routledge.

Sparkes, A. C. (2007). Embodiment, academics, and the audit culture: a story seeking consideration. *Qualitative Research*, 7, 521-550.

Sparkes, A. C. (2009). Ethnography and the senses: challenges and possibilities. *Qualitative Research in Sport and Exercise, 1*(1), 21-35.

Sport New Zealand. (2014). *Activity guidelines for young people.* Wellington, New Zealand: Sport New Zealand. Retrieved from (http://sportnz.org.nz/young-people/Guidelines).

St Leger, L. (2000). Reducing the barriers to the expansion of health-promoting schools by focusing on teachers. *Health Education, (100)*2, 81-87.

St Leger, L. (2001). Schools, health literacy and public health: possibilities and challenges. *Health Promotion International, (16)*2, 197-205.

St Leger, L. (2004). What's the place of schools in promoting health? Are we too optimistic? *Health Promotion International, (19)*4, 405-408. DOI:10.1093/heapro/dah401.

St Leger, L., & Young, I. M. (2009). Creating the document 'Promoting health in schools: from evidence to action'. *Global Health Promotion (16)*4. 69-71.

Svendsen, A. M. (2014). Get Moving! A comparison of ideas about body, health and physical activity in materials produced for health education in the Danish primary school. *Sport, Education and Society, (19)*8, 1014-1033. DOI:10.1080/13573322.2012.735651.

Tasker, G. (1996/7). For whose benefit? The politics of developing a health education curriculum. *Delta, 48*(2) *49*(1), 187-202.

Tasker, G. (2004). Health Education: Contributing to a just society through curriculum change. In A. O'Neill, C. J. Andres & O. Roger (Eds.), *Reshaping culture, knowledge and learning: Policy and content in the New Zealand curriculum framework* (pp. 203-223). Palmerston North, New Zealand: Dunmore Press.

Taylor, R., Farmer, V., Cameron, S., Meredith-Jones, K., Williams, S., & Mann, J. (2011). School playgrounds and physical activity policies as predictors of school and home time activity. *International Journal of Behavioural Nutrition and Physical Activity, (8)*38. Retrieved from (http://www.ijbnpa.org/content/8/1/38).

Tinning, R. (1985). Physical Education and the cult of slenderness: a critique. *ACHPER National Journal,* 107, 10-14.

Tinning, R. (2000). Seeking a realistic contribution: Considering Physical Education within HPE in New Zealand and Australia. *Journal of Physical Education New Zealand, 33*(3), 8-21.

Tinning, R. (2009). Thinking about thinking bodies and moving minds in the context of recent HPE curriculum initiatives in New Zealand. *The New Zealand Physical Educator, 42*(2), 9-13.

Tinning, R. (2010). Pedagogy and human movement; theory, practice, research. Oxon, England: Routledge.

Tinning, R. (2014). Getting *which* message across? The (H)PE teacher as health educator. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: Critical perspectives* (pp. 204-219). London, England: Taylor & Francis.

Tinning, R. (2015). Commentary on research into learning in physical education: towards a mature field of knowledge. *Sport, Education and Society, 20*(5), 676-690. DOI:10.1080/13573322.2014.994491.

Trost, S. (2006). Public Health and Physical Education. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *The handbook of Physical Education.* (pp. 163-187). London, England: Sage Publications.

Trout, J. & Graber K. (2009). Perceptions of overweight students concerning their experiences in Physical Education. *Journal of Teaching in Physical Education*, *28*, 272-292.

Tuihana School, (2012). *Student Achievement Strategy*. Unpublished charter. Auckland, New Zealand

Vander Schee, C. & Boyles, D. (2010). 'Exergaming,' corporate interests and the crisis discourse of childhood obesity. *Sport, Education and Society, (15)*2. 169-185. DOI: 10.1080/13573321003683828.

Vidich, A.J., & Lyman, S.M. (1994). 'Qualitative methods. Their history in sociology and anthropology'. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp.23-59). Thousand Oaks, CA: Sage Publications.

Walford, G. (2007). *Educational ethnography*. London, England: TLRP. Retrieved from (http://www.bera.ac.uk/historical-methods-applied-to-higher-education-policies-and-practices/).

Walford, G. (2008). *How to do educational ethnography*. London, England: Tufnell Press.

Ward, G, & Quennerstedt, M. (2015). Knowing in primary physical education in the UK: negotiating movement culture. *Sport, Education and Society, 20*(5), 588-603. DOI:10.1080/13573322.2014.975114.

Webb, L., Quennerstedt, M., & Ohman, M. (2008). Healthy bodies: construction of the body and Health in Physical Education. *Sport, Education and Society, 13*(4), 353-372. DOI: 10.1080/13573320802444960.

Welch, R., McMahon, S., & Wright, J. (2012). The medicalisation of food pedagogies in primary schools and popular culture: a case for awakening subjugated knowledges. *Discourse: Studies in the Cultural Politics of Education, (33)*5, 713-728. DOI:10.1080/01596306.2012.696501.

Williams, M. (2002). Generalisation in interpretive research. In T. May (Ed.), *Qualitative Research in Action* (pp.125-143). London, England: Sage Publications.

Williams, B. J., Hay, P. J., & Macdonald, D. (2011). The outsourcing of health, sport and physical educational work: A state of play. *Physical Education and Sport Pedagogy,* 16(4), 399-415.

Williams, B. J., & Macdonald, D. (2015). Explaining outsourcing in health, sport and physical education. *Sport, Education and Society, (20)*1, 57-72. DOI:10.1080/13573322.2014.914902.

Williams, S. M., & Hannon, J. C. (2013). Physical Education homework that involves the family. *Strategies: A Journal for Physical and Sport Educators, 26*(3), 3-8.

World Health Organisation (1986). *Ottawa Charter for Health Promotion.* Retrieved from (http://www.who.int/healthpromotion/conferences/previous/ottawa/en/).

World Health Organisation (2013a). *Health topics: Obesity.* Retrieved from (http://www.who.int/topics/obesity/en/).

World Health Organisation (2013b). *Global strategy on diet, physical activity and health.* Retrieved from (http://www.ttp://www.who.int/dietphysicalactivity/childhood_what/en/).

Wrench, A., & Garrett, R. (2014). Health literacies: pedagogies and understandings of bodies. *Asia-Pacific Journal of Health, Sport and Physical Education, 5*(3), 233-247.

Wright, J. (2004a). Post-structural methodologies: the body, schooling and health. In J. Evans, B. Davies, & J. Wright (Eds.), *Body knowledge and control: Studies in the sociology of Physical Education and Health* (pp.19-32). London, England: Routledge.

Wright, J. (2004b). Critical inquiry and problem-solving in physical education. In J. Wright, D. MacDonald & L. Burrows (Eds.), *Critical Inquiry and problem-solving in Physical Education* (pp.3-15). London, England: Routledge

Wright, J. (2009). Biopower, biopedagogies and the obesity epidemic. In J. Wright & V. Harwood (Eds.), *Biopolitics of the "obesity epidemic": Governing the body* (pp. 1–14). New York, NY: Routledge.

Wright, J. (2014). Beyond body fascism: The place for health education. In K. Fitzpatrick & R. Tinning (Eds.), *Health Education: Critical perspectives* (pp.233-248). London, England: Taylor & Francis.

Wright, J., & Burrows, L. (2004). Being healthy: The discursive construction of health in New Zealand children's responses to the National Education Monitoring Project. *Discourse: Studies in the Cultural Politics of Education, 25,* 211-230. DOI: 10/1080/01596300410001692157.

Wright, J., Burrows, L., & Rich, E. (2012). Health imperatives in primary schools across three countries: intersections of class, culture and subjectivity. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 673-691. DOI:10.1080/01596306.2012.696500.

Glossary of terms

Aotearoa	The Māori name for New Zealand
Attitudes and Values	Attitudes and values as described in HPEINZC should be promoted through HPE learning programmes: positive and responsible attitude to their own holistic wellbeing (Hauora); respect for the rights of other people; care and concern for people in their community and environment and a sense of social justice (Ministry of Education, 1999).
Careers NZ	A crown entity established under the Education Act (1989). Careers NZ provides a careers system connecting education and training with employment.
Critical pedagogy	A diverse body of research (sometimes with resulting action), aimed at empowering the powerless and transforming existing social inequalities, with the understanding that schools are institutions that have important culture, political and economic functions.
Decile	Decile ranking is used by the New Zealand Ministry of Education to determine the school community's socio-economic status. This then influences funding from the government. The lower the decile, the more government funding is available, since it is deemed that the local community would not be able to contribute as much money in areas like student fees and financial support (donations) for the school.
Discourse/s	The language and meanings or the communication of ideas through formal and informal processes, including ideas, actions, beliefs and practices that systematically form the substance of which they address.
ERO	Education Review Office. A New Zealand government agency, independent of the Ministry of Education that reviews and evaluates schools.
Funskills	An activity programme focused on developing fundamental movement skills
Hauora	A Māori concept with wide ranging meanings and uses. In HPEINZ it is represented by Mason Durie's (1994) te whare tapu wha model, that includes the dimensions taha tinana (physical), taha waiora (spiritual), taha hinengaro (mental/emotional) or taha whanau (social), each one influencing and supporting the others like the structure of a house (te whare tapu wha).
Health and Physical Education (HPE)	A learning area that integrates physical education, health education and personal development to reflect the dynamic and

	multidimensional nature of health, and to recognise the significance of physical activity and personal skills in the lives of individuals and groups in contemporary society.
Healthism	The belief that health can be unproblematically achieved through individual effort and discipline, directed mainly at regulating the size and shape of the body. This belief does not take into account the effects on individual health or environment, or external factors such as advertising, societal practices or family practices.
Health promotion	The WHO (1986) Ottawa Charter defines this as the process of enabling people to increase control over their health in attempts to improve overall health. Successful health promotion requires multiple initiatives directed across individual, community, social, environmental and political levels.
Health promotion (in education)	Health promotion is described in HPEINZC as a process that helps to create supportive physical and emotional environments in classrooms, whole schools, communities and society (Ministry of Education, 1999).
Hinengaro	A Māori term meaning mental and emotional wellbeing as a dimension of hauora
HPEINZC	Health and Physical Education in the New Zealand Curriculum (Ministry of Education, 1999). This original curriculum document has been incorporated in the general document The New Zealand Curriculum (Ministry of Education, 2007)
Inspiration	A software application that enables the user to use mapping to visualise and develop ideas, understand and retain concepts whilst planning and organising written work.
Karakia	A Māori term used to invoke spiritual guidance and protection. Karakia are generally used to increase the spiritual goodwill of a gathering, so as to increase the likelihood of a favourable outcome.
Kaupapa Māori	A Māori philosophy, strategy or theme.
Kete	A Māori word for basket or kit.
Ketes of Knowledge	The Ketes of Knowledge are part of Māori legend and hold conceptual knowledge for Māori . They can be defined as kete tuatea (basket of light spiritual realities, realities beyond space and time), kete aronui (basket of what we see, our natural world around us), kete tuauri (basket of darkness, possibilities that lie beyond our sense of perception).
Ki-o-rahi	Ki-o-rahi is a traditional Māori ball game played with two teams.

Kiwisport	A modified sport initiative funded by SportNZ and delivered by RST's to primary schools to engage children in sport.
Marae	A marae is the significant place for a local Māori community with buildings for social and sacred gatherings
Matua	A Māori word for male teacher
Life Activity Project	An Australian Research Council funded research project over 7 years, involving 8 secondary schools in three eastern states focusing on the role of physical activity and related values associated with health.
Milk in Schools	Milk in Schools' is an initiative by a NZ company (Fonterra) to supply daily free milk to children in all decile 1-3 schools.
Mission-On	A $67 million package of 10 initiatives designed to explicitly target the eating and exercise dispositions of New Zealand's 0-24 year olds.
NAG	National Administration Guidelines are a legislative requirement under the New Zealand Education Act (1989) for school administration.
NZQA	New Zealand Qualifications Authority is a government agency responsible for setting policy and managing assessment practice throughout all levels of education
NUD*ST	A predecessor to the NVivo software programme used by researchers. It was designed to facilitate common qualitative techniques for organising, analysing and sharing data.
NVivo	A software programme used by researchers. It is designed to facilitate common qualitative techniques for organising, analysing and sharing data.
Ottawa Charter	The Ottawa Charter for Health Promotion (WHO, 1986) is the name of an agreement containing a series of actions among international organisations, national governments and local communities to achieve the goal of "Health for all" by the year 2000 and beyond through better health promotion.
Pedagogical content knowledge	The blending of content (curriculum) and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction.
Pepeha	A Māori word for a presentation of your whakapapa (genealogy) and background about where you come from. This is often done on a marae.

Primary school	A school in New Zealand catering to students between the ages of 5 to 12/13 years. (Alternatively called elementary in the USA)
RST	Regional Sports Trust. A regional organisation affiliated to SportNZ who provides sport and recreation support to the local community.
Sociocultural Perspective	A sociocultural perspective is a way of examining health and physical activity issues that highlights social (power relations, political and economic factors, and dominant and subordinate groups) and cultural (shared ways of thinking and acting such as ideas, beliefs, values and behaviours) aspects and influences.
Socioecological Perspective	A socio-ecological perspective as described in HPEINZC is having a view of the social and environmental factors that affect health and wellbeing (Ministry of Education, 1999).
SportNZ/SPARC	A New Zealand state owned enterprise tasked with engaging adults and young people in sport and recreation and putting more winners on the world stage.
Tai Chi	A Chinese martial art practised for both its defense training and its health benefits. It is especially known for being practised with what most people would categorise as slow movement.
Tangi	A Māori term for a funeral, often held on a marae.
Te Whare Tapu Wha	A Māori model of health which compares hauora to the four walls of a whare (house), where each wall represents one of the dimensions of hauora.
Teacher aide	A teacher aide is an adult who supports the teacher, focusing on children's learning in the classroom. This is different to a 'parent helper' who undertakes administration tasks in the classroom.
Tikanga	A Māori word for protocol or ritual.
TKI	Te Kete Ipurangi is a New Zealand Ministry of Education web based repository focused on The New Zealand Curriculum (2007).
Up-N-Go	A trade name for an energy food and an alternative breakfast food.
Weet-Bix	A trade name for a breakfast product consisting of rectangular shapes of dry shaved wheat.
Whaea	A Māori word for Mother/Aunty-like.
Whakatauki	A Māori name for proverb or maxim.

Whanau   A Māori term for family (including extended family)

Appendix A. Information & Consent forms

Body Pedagogies and the Healthy Homework project

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'

Researcher: Denise Atkins

PhD Supervisor: Dr Lynn Kidman

Parent/Caregiver/Legal guardian consent form

<u>Consent</u>

If you agree to you and your child taking part, please tick below and sign your name on the bottom of this form. When both this form and your child's information and assent form are completed, please return them to the teacher and school.

○ I have read and understood the information provided about this research project in the Information Sheet

○ I have read through the child information and assent form with my child.

○ I have had an opportunity to ask questions and to have them answered.

○ I understand that notes will be taken during class and that they will also be audio-taped and transcribed

○ I understand that activities and student interaction within the class may be audio-taped as part of the learning environment of the three participants. No video recording or visual images of children will be taken.

○ I understand that I may decide to stop my child being part of the study at any time.

○ I consent for my child to be part of the study.

○ I agree to be part of this study should my child be one of the three randomly selected participants and give consent to be interviewed or engage in informal conversations with the researcher.

I wish to receive a summary of the findings: ○Yes   ○No (please tick one)

Your child's name   Date

_____   _____
Your name   Your signature

My Contact Details:

Denise Atkins

AUT University

Ph: 921 9999 ext 7616.

Email: denise.atkins@aut.ac.nz

Note: The parent/caregiver should retain a copy of this form

Body Pedagogies and the Healthy Homework project

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'.

Researcher: Denise Atkins

PhD Supervisor: Dr Lynn Kidman

Parent/Caregiver/Legal guardian information sheet

Dear Sir/Madam

My name is Denise Atkins. I am a researcher at AUT University studying for a PhD. Your school is participating in the 'Healthy Homework' (HH) project, a new programme developed by AUT University to promote physical activity and healthy eating outside of school. As a result of this, I would like to invite your child to participate in my research study, which is contributing to the completion of my PhD thesis. I am interested in finding out how the Healthy Homework project impacts on how a child views his or her body and what they do with that understanding.

Please read this information sheet before signing the consent form.

What is the purpose of this research?

My study will complement the Healthy Homework project through examining the impact such an intervention has on how children see their bodies and their selves. Finding out about such things takes time and involves some long-term data gathering. To establish trust and to find out how children understand their selves, as a researcher, I will act in assisting the classroom teacher with any tasks they designate during timetabled class time, as well as in the school during play and lunchtimes. I intend to be in the role of a 'teacher aide' and contribute to classroom and school life for one day per week, for a period of up to two years.

What are the benefits?

Results from this research will add to better understanding the effects of health interventions in schools. This research study will contribute to my completion of a PhD at AUT University.

Why is my child being invited to participate in this research?

As the Healthy Homework module is being taught in your class/school, and if you agree to participate in the project, I would like to invite your child to be part of this research study which will contribute to a broader understanding of the impact health interventions have on how young people see themselves and their bodies.

What will happen in this research?

The children in your son or daughter's class will be part of group that will contribute to my observations on the effects of the HH intervention on three selected participants. My study will specifically focus on the interaction of these three participants within their class and peer group, and more importantly the comments, activity or foci made by themselves or others on their body image or bodily performance during the school day. The data gathering will involve me observing, taking notes, engaging in informal conversation and recording audio material of anything relevant to my study on children's perception and experience of the Healthy Homework intervention. It will **not** involve any video recording or visual images of the children.

A full report of my study will be available to you at the conclusion of my PhD in December 2016.

I would also like you, as a parent/legal guardian to consent to being part of the informal conversations and semi-structured interviews should you give consent for your child to be part of my study **and** he/she be selected as one of the three participants. This would only involve one 30 minute interview, at a time and place convenient for you.

What are the risks / discomforts?

It is not anticipated that your child will encounter any greater risk than that of a normal school day as all research will be conducted during the course of the school day.

How will these discomforts and risks be alleviated?

Consent to be part of this research study is voluntary and you and your child can withdraw from the study at any time. All names will be kept out of any audio recordings of the child and pseudonyms will be applied to the participants from day one for records and reporting of data. The school, all participants and students in the classroom will be confidential and anonymous.

How will privacy be protected?

All participants who consent from the class completing the Healthy Homework module will be considered part of the classroom learning environment. The three selected participants for in-depth study will remain anonymous to you, the classroom teacher and other class participants. All records of this study will be kept private. Research records will be kept in a locked file. Data from this study will be retained by AUT University and will be stored for six years and permanently destroyed after this period.

What are the costs of participating in this research?

There are no financial costs of participation.

What opportunity do I have to consider this invitation?

You, as a parent, may also be a participant in this study if you agree to consent to your child taking part as a member of the class, and if your child is one of the three randomly selected student participants. Please return the signed consent and child assent forms to

either me or the classroom teacher by xx (date). Please note that your child's participation in this study is entirely voluntary. Whether or not you allow your child to participate will not affect his/her or your own current or future relations with the school or AUT University. If you decide to allow participation, you are free to withdraw your child from the study at any time. Should you decide to withdraw your child from the study, any data I may already have collected will not be used without your consent.

<u>What do I do if I have concerns about this research?</u>

Any concerns regarding the nature of this project should be notified in the first instance to me (contact details are at the end of this information sheet) or to my principal PhD supervisor, Dr Lynn Kidman. Lynn is a senior lecturer at AUT University and can be contacted on 09 921 9999 extn 6678. Email lynn.kidman@aut.ac.nz

Concerns regarding the conduct of the research should be made to the Executive Secretary, AUTEC, Dr Rosemary Godbold, Phone +64 9 921 9999 extn: 6902. Email ethics@aut.ac.nz

Thank you.

Regards, *Denise*

My Contact Details:

Denise Atkins, AUT University. Phone: 921 9999 ext 7616.

Body Pedagogies and the Healthy Homework project

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'

Researcher: Denise Atkins

PhD Supervisor: Dr Lynn Kidman

Teacher / Principal consent form

<u>Consent</u>

If you consent to taking part, please tick below and sign your name on the bottom of this form and give it to me when convenient at the beginning of the term.

○   I have read and understood the information provided about this research project in the Information Sheet.

○   I have had an opportunity to ask questions and to have them answered.

○   I understand that notes will be taken during class and that they may also be audio-recorded and transcribed.

○   As a teacher in this research, I understand that I and the class may be audio-recorded during classroom activities, as part of the three participants' learning environment.

○   I understand that I may decide withdraw from the study at any time.

    I understand that this study will take two years.

○   I agree to be part of this study and give consent to engage in informal conversations with the researcher as the need arises, over the period of the study.

I wish to receive a summary of the findings: ○Yes   ○No (please tick one)

_____   _____

Your name   Signature

_____Date

My Contact Details:

Denise Atkins, AUT University

Ph: 921 9999 ext 7616.   Email: denise.atkins@aut.ac.nz

Note: The teacher should retain a copy of this form

Body Pedagogies and the Healthy Homework project – Full study

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'

Researcher: Denise Atkins

PhD Supervisor: Dr Lynn Kidman

Teacher /Principal information form

Hi there

My name is Denise Atkins. I am a researcher at AUT University studying for a PhD. Your school is participating in the 'Healthy Homework' (HH) project, a new programme developed by AUT University to promote physical activity and healthy eating outside of school. As a result, I would like to invite you and your class to participate in my research study, which is a contributing to the completion of my PhD thesis. Yours and your class's involvement is entirely voluntary. If you agree, it will allow me the opportunity to undertake this research study, as I am interested in finding out how the Healthy Homework intervention impacts on how a child views his or her body and what they do with that understanding.

<u>What is the purpose of this research?</u>

My study will complement the Healthy Homework project through examining the impact such an intervention has on how children see their bodies and their selves. Finding out about such things takes time and involves some long-term data gathering. To establish trust and to find out how children understand their selves, as a researcher, I will be a participant observer, whilst assisting you (the classroom teacher) with any tasks you designate during timetabled class time, as well as in the school during play and lunchtimes. I intend to be in the role of a 'teacher aide' and contribute to classroom and school life for one day per week, for a period of two years.

<u>What are the benefits?</u>

Results from this research will add to better understanding the effects of health interventions in schools. This research study will contribute to my completion of a PhD at AUT University.

<u>Why am I being invited to participate in this research?</u>

As the Healthy Homework module is being taught in your class/school, and you have agreed to participate in the project, I would like to invite you to be part of this research study which will contribute to a broader understanding of the impact health interventions have on how young people see themselves and their bodies.

You and the other children in your class will be part of group who will contribute to my observations on the effects of the HH intervention on **three** selected participants (within the class). My study will specifically focus on the interaction of these three selected participants within their class and peer group, and more importantly the comments, activity or foci made by them or others on their body image or bodily performance during the school day. The data gathering will involve observation, taking notes, engaging in informal conversations, recording audio material of anything relevant to my study on children's perception and experience of the Healthy Homework intervention. It will **not** involve any video recording or visual images of you or the children.

I would also like you, as the teacher to consent to being part of my (the researcher's) informal conversations, should you give consent to be part of this study. These informal conversations would only occur as opportunities arise on which there is a focus of the children's body perceptions, during the course of my research study whilst in your school.

A full report of my study will be available to you at the conclusion of my PhD in December 2016.

What are the risks / discomforts?

It is not anticipated that you will encounter any greater risk than that of a normal school day as all research will be conducted during the course of the school day.

How will these discomforts and risks be alleviated?

Consent to be part of this research study is voluntary and you can withdraw from the study at any time. All names will be kept out of the recording of the individual and pseudonyms will be applied to the participants from day one for records and reporting of data. The school, all participants and students in the classroom will be confidential and anonymous.

How will privacy be protected and the three in-depth participants be chosen?

All participants who consent from the class completing the Healthy Homework module will be considered part of the classroom learning environment. The three selected participants for in-depth study will be chosen from the consenting class participants. These children will remain anonymous to you (the classroom teacher) and other class participants so that we don't draw attention to them. For the research, it is essential to ensure the social and cultural context of the learning environment is kept as close to normal as possible. The Principal and I (the researcher) will be aware of the three selected participants' identity because we wish to keep them in the same class for the consecutive year. All records of this study will be kept private. Research records will be kept in a locked file. Data from this study will be retained by AUT University and will be stored for six years and permanently destroyed after this period.

What are the costs of participating in this research?

There are no financial costs of participation.

What opportunity do I have to consider this invitation?

Please return the signed consent form to me by xx (date). Please note that your participation in this study is entirely voluntary. Whether or not you participate will not affect your own current or future relations within the school or AUT University. If you decide to consent to participate, you are free to withdraw from the study at any time.

Should you decide to withdraw from the study, any data I may already have collected will not be used without your consent.

<u>What do I do if I have concerns about this research</u>?

Any concerns regarding the nature of this project should be notified in the first instance to me (contact details are at the end of this information sheet) or to my principal PhD supervisor, Dr Lynn Kidman. Lynn is a senior lecturer at AUT University and can be contacted on 09 921 9999 extn 6678. Email lynn.kidman@aut.ac.nz Concerns regarding the conduct of the research should be made to the Executive Secretary, AUTEC, Dr Rosemary Godbold, Phone +64 9 921 9999 extn: 6902. Email ethics@aut.ac.nz

Thank you. Regards, Denise

My Contact Details: Denise Atkins AUT University Phone: 921 9999 ext 7616 Email: denise.atkins@aut.ac.nz

Child assent and information form

AUT
UNIVERSITY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

Body Pedagogies and the healthy homework project

Information Sheet and Assent Form for Children in the Full Study

(Parent/caregivers please read to children)

This form will be kept for a period of 6 years

Hi there – my name is Denise.

I am interested to find out how the Healthy Homework project helps you to understand activity and how your body works. To help with my study, I will be trying to find this out by spending some time in the next few weeks in your classroom and school.

I will be observing interesting things and helping your teacher as well, when I am in your class.

I may use my iphone or a digital recorder to record things, and writ down your thoughts and ideas.

I will never use your name for anything in this research and I will keep all the notes and information safe. You can ask us about my work whenever you want to. Let me know how you feel about this by colouring in or circling one of these words -

Happy
Fine
Not Sure
Worried

If you are not sure or worried, come and talk to myself about it or ask your teacher or your parents/guardians.

Please circle **YES** if you would like to be a part of my study

Please circle **NO** if you do not want to do this

Please circle **MAYBE** if you are not sure. If you cannot decide that is fine because you can tell me or your teacher or your parents/caregivers that you changed your mind.

Here is my photo – I look forward to being in your class in 2012/2013. ☺

Thank you for completing this form – please write your name here

(signature)

(Date)

If you feel that you understand what the project is about, please give this form back to me or your teacher.

Thank you, Denise ☺

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 Supervisor, *enter name, email address, and a work phone number*.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Dr Rosemary Godbold, Phone +64 9 921 9999 ext 8044. Email ethics@aut.ac.nz

Appendix B. Criteria Sampling

Criteria used (with priority)

	Criteria	Descriptor
1	Consent	Subjects need assent and parental/care giver consent. All forms completed
2	Permanence	Subjects need to be a member of the school community for the period of study (2 years). This was discussed with the Principal
3	Engagement with class, teacher and participant observer	Subjects need to be engaged enough in class to interact with other participants
4	Opportunity for participant observer to engage with parents	Subjects need to have parental/care giver consent Agreed (√) on form
5	Gender	Girls and boy ratio proportional to class percentage. Therefore, 1 boy and 2 girls selected
6	Ethnicity	Proportional to children in the class. NZ/European, Māori , Samoan, Pasifika, Asian, Other

Appendix C. Observation protocols

AUT UNIVERSITY
TE WĀNANGA AROMUI O TAMAKI MAKAU RAU

Observation Protocols

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'

Researcher: Denise Atkins

Observation Instruments: notebook, audio recorder, visual logger, camera, video recorder

How people will be recruited?

The observed people will be participants who have full information of the project and their parent/caregivers and themselves have signed consent and assent forms. The participants are the Healthy Homework (HH) class and the teacher, and in particular for my focused ethnography - three children and their parents/caregivers who have been randomly selected from this class. All participants will be recruited through a voluntary consent process.

How people will be informed about the observation?

At the beginning of the data collection, I will be introduced to the teacher and class. Included within the class will be the three participants. I will be a participant observer and a "teacher aide" in the participants' classroom for one day per week during data collection.

How people will consent to the observation?

The class, teacher and parents/caregivers will all receive information sheets and consent and assent forms from all participants will be signed.

What will be observed and what data will be collected?

The researcher will examine through observation, how children see their bodies and their selves after the HH intervention – that is, bodily issues such as how the body is perceived through its performance (ability to participate and perform physical tasks) and how it is perceived by its image, in terms of perfection. I will examine what, if any, the biomedical type of intervention (like HH) has on influencing the social and cultural constructs that make up a child's learning environment in relation to these body perceptions. I will observe children in the classroom, on the playground and during classroom lessons.

How the data will be collected?

The data will be collected using field notes. This could include:

- collection of policy documents contributing to the HH project
- virtual class diary/blogs (from the class as part of the HH project website)
- homework books
- researcher's diaries (observations – visual and audio, reflections, field notes)
- informal conversations and semi-structured interviews with parents/caregivers and the teacher

It will not involve any video recording or visual images of children.

How any deception involved will be managed?

No deception is involved. All participants are fully informed and will have signed consent and assent forms.

The data collection instrument.

No empirical standardised instruments will be used. The data collected will be from unstructured participant observation of the body pedagogies exhibited by the participants.

Participant observation involves "establishing a place in some natural setting on a relatively long-term basis in order to investigate, experience and represent the social life and social processes that occur in that setting" (Emerson et al. 2001: p.352). In this case, it is the learning environment of the student participants, as in education, ethnography can help to understand the teaching and learning processes and the social worlds that contribute to understanding behaviour, values and meanings of given individuals within their cultural context (Walford, 2007).

Appendix D. Indicative questions for interviews

AUT
UNIVERSITY
TE WĀNANGA AROMUI O TAMAKI MAKAU RAU

Indicative questions for Parent/caregiver & Teacher/Principal Interviews

Project Title: Body pedagogies – an examination of a health intervention 'Healthy Homework'

Researcher: Denise Atkins

Date:

Semi-structured interviews

I cannot state the exact questions due to the responsive and dynamic nature of ethnographic research. However, it is likely the following questions will guide me.

Parent/Caregiver/Legal guardian:

- What do you know about the Healthy Homework (HH) project?
- What has your son/daughter been sharing with you about the HH module?
- How have you been involved with the HH module?
- Which specific HH programme homework task/s have you taken part in recently and why?
- What is the learning for your child as a direct result of the HH programme?
- Describe what impact you think the HH is having on your child or other members of your family
- What comments has your child made recently to do with?
- Body image – size, shape
- Physical performance – ability, effort, results etc
- Can you describe a time when these were made and to whom? Please provide some details
- What changes in your child's behaviour have you noticed recently to do with?
- Body image – size, shape
- Physical performance – ability, effort, results etc
- Can you describe a time when these were made and to whom? Please provide some details
- Share what you think your child understands about how their body looks and works in relation to healthy eating and physical activity
- What are the benefits and challenges for your son/daughter as a result of them being part of the HH project?
- What are the benefits and challenges for you and your family as a result of your child being part of the HH project?

- Share some of the ways that you see your child demonstrating their knowledge and understanding of their body physically and how they see their body and their self
- Has the HH intervention impacted on any other aspects of your life, your child's life or your family's lives?

Follow up semi-structured interview questions to be undertaken (up to the end of the second year)

- What has your son/daughter been sharing with you recently about the HH project?
- Have you been involved with the HH project this term? Share your experiences.
- What have you/your family been doing (specific tasks or activities) or have taken part in recently, as a result of the HH project and why?
- Describe any ongoing learning for your child as a direct result of the HH programme
- Describe what impact you think the HH is having or continues to have on your child or other members of your family
- What comments has your child made recently to do with?
- Body image – size, shape
- Physical performance – ability, effort, results etc
- Can you describe a time when these were made and to whom? Please provide some details
- What changes in your child's behaviour have you noticed recently to do with?
- Body image – size, shape
- Physical performance – ability, effort, results etc
- Can you describe a time when these were made and to whom? Please provide some details
- Share what you think your child understands now about how their body looks and works in relation to healthy eating and physical activity
- Is there any change from last term?
- What are the benefits and challenges for your son/daughter as a result of them being part of the HH project?
- What are the benefits and challenges for you and your family as a result of your child being part of the HH project?
- Share some of the ways that you see your child demonstrating their knowledge and understanding of their body physically and how they see their body and their self
- Has the HH intervention impacted on any other aspects of your life, your child's life or your family's lives?

Teacher/Principal:

I cannot state the exact questions due to the responsive and dynamic nature of ethnographic research. However, it is likely the following questions will guide me.

- What made you agree to be involved in the HH programme?
- So did you choose it because it fitted with your school direction and programme – you know your strategic focus or was it an opportunity and did your change you change your focus to accommodate it?
- How were you personally involved in the HH as a teacher/ principal? I have interviewed other staff. But how have you as a teacher/principal been involved in the HH programme?
- I appreciate it was only an 8 week programme and there was some follow up data collected. Looking back now over that time that I have been here. Have you noticed any impact – I am thinking school-wide here, that it might have had – on the children?
- Have you heard students make any comment to do with body image, you know size and shape or their physical performance. How their whole physicality, how they act and perform? So I will ask the first one – size and shape first. Either direct or indirect.
- Can I just ask more about that? So as a result of them being weighed and measured, do you think that has had any influence on their perception of size and shape?
- One of the things I am looking at was as a result of the HH intervention, has it really made them more conscious of body size and shape and how view that or how they conduct themselves, in terms of their physicality. And that could include performance, it could include stage presence or just confidence or anything that could help shape them understanding who they are.
- In terms of the school's wide focus "Being healthy" in 2012 and "Being human" in 2013 did you see an alignment with some of the work that had gone on in the HH programme?
- Did you notice anything come through as a result of this via parents and community? Has there been any noticeable shift or change?
- And have you had any positive or negative feedback from parents at all about the learning that is going on?
- Is there any expectation around continuing to focus around healthy eating and physical activity?
- So have you noticed any other changes with the students as a result of them being more aware of their bodies needs and how they are able to use this in a positive or negative way?
- Any increase in sports teams or dance or kapa haka or anything like that?
- What about challenges? Both with the implementation of HH and the ongoing follow up, or resulting changing behaviours of children?
- Did any of them make any comments to you?
- As the students I looked at were the younger of that group, do you think it had any impact on them in the same way it would have on the older children? What about the year5/6 children?
- Has the HH intervention impacted on any other aspects of classroom, school or family life that you know of?
- Was there any intention on your part to do more work on fitness or PE in classroom time?

- Has any of that come from the students voicing their desire and coming up with ideas themselves?
- One of the staff was very interested in meditation and that had a unique focus in 2013. Was that instigated by you in terms of filling a gap for the children's understanding of themselves or was that purely instigated by the teacher themselves?
- One of the things that I noticed was a daily tai chi type of activity using Mtikanga and kaupapa (protocols) by a teacher (in 2012). I am wondering how you see that fitting in terms of the HH programme and the whole school health focus of your school?
- Any ideas for any future focus on health outcomes for your children in the school?
- Do you have any other comments you would like to ask about my project which was certainly very student focused.
- Any other comments you would like to make about my research or project?

Appendix E. Matter of Emerging Themes
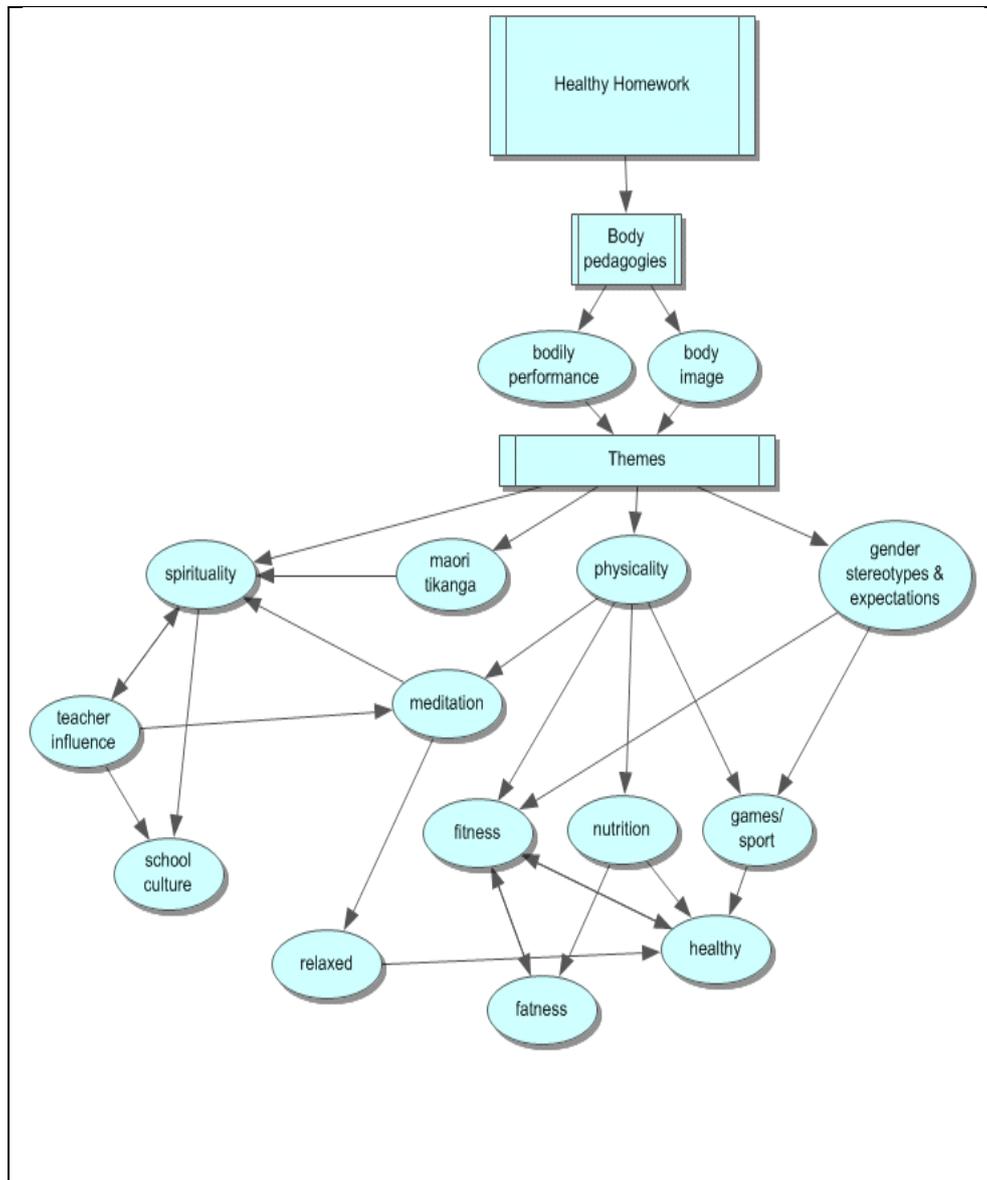
Appendix F. Nodes and sub-nodes from data in NVivo programme

Adult influence

   media

Parent & home influence

   school influence (including curriculum)

Teacher influence

   tikanga Māori

WD influence

Bad food

   fat

   school lunch

Bodies and activity

   messages

Fatness

   hidden messages

Play

  stated messages

Thin.skinny

Exercise & energy

   fitness

Food

   sharing food

Friendships

Healthy (including HH)

Peer influence

    class mates

    friends

    school mates

    siblings

Play

    free play

School culture

Playground & equipment

    whole school

    sport

    competition

  scheduled curriculum time