2013

Tracing contemporary healthscapes: pre-service primary teachers' subjectivities in relation to health and the body

Rosemary Kate Welch
University of Wollongong

Tracing contemporary healthscapes:

Pre-service primary teachers' subjectivities in relation to health and the body

A thesis submitted in fulfillment of the
requirements for the award of the degree

Doctor of Philosophy

from

University of Wollongong

by

Rosemary Kate Welch

B.Ed (Phys. and Health Ed.) Honours, UOW (2007)

The Faculty of Education

2013

Certification

I, Rosemary Welch, declare that this thesis, *Tracing contemporary healthscapes: Pre-service primary teachers' subjectivities in relation to health and the body*, submitted in fulfillment of the requirements for the award of Doctor of Philosophy, in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for the qualification at any other academic institution.

Rosemary Welch
16th January 2013

Published works and presentations by the author relevant to this thesis

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*, 35(5), 1-16.

Welch, R. (2012). Is Parrhesia enough… how do we encourage pedagogical acts of health 'education' as distinct from 'promotion'? *Australian Association of Research in Education (AARE),* The University of Sydney, December 2012.

Welch, R., & Wright, J. (2011). Tracing discourses of health and the body: Exploring pre-service primary teachers' constructions of 'healthy' bodies. *Asia-Pacific Journal of Teacher Education*, 39(3), 199-210.

Welch, R. (2011). Pre-service primary generalist teachers' subjectivities of health and the body: Biographies and technologies of the self. *Australian Association of Research in Education (AARE)*, Hobart, November, 2011.

Welch, R. (2010). 'We don't want to do the students a disservice': Teacher education and the case for multiple perspectives. *Australian Association of Research in Education (AARE)*, University of Melbourne, November, 2010.

Welch, R. (2009). 'Health' and popular culture: Pre-service teachers' discursive and lived experiences. *International Sociology of Sport Association (ISSA)*, Utrecht University, Netherlands, July, 2009.

Welch, R. (2009). Theorising pre-service primary-school teachers' constructions of health and the body. *Australian Association of Research in Education (AARE)*, Australian National University, Canberra, December, 2009.

Abstract

This thesis engages poststructural theory, drawing from the work of Michel Foucault, to explore how discourses of health and the body manifest in Pre-service Primary Generalist Teachers' (PPGT) constructions of self and others. Multiple methodological tools have been utilised to describe the participants' knowledge, beliefs and values in relation to health and the body, including biographical narratives, poetic vignettes, discourse positions and descriptive statistics. The empirical material of this study comprises 136 surveys and 23 interviews with both bachelor and postgraduate students enrolled in the final year(s) of a primary teacher education degree from two universities in Australia, as well as interviews with five H-PE teacher educators. While PPGTs are the principal subjects of this study, it is somewhat problematic to situate them as a discrete group. Thus, the interviews and surveys are augmented with web-based texts, policy documents and popular media articles and images. These are utilised to describe the 'socialscape' of heath; what I have termed, 'contemporary healthscapes'.

In recent years there has been a mounting body of work mapping 'educational' initiatives and policies concerned with health imperatives and obesity discourse (Evans, 2006; Evans, Davies, & Rich, 2008; Gard & Wright, 2005; Harwood, 2009; Leahy, 2009; Leow, 2011; Rich, 2010; Wright, 2009; Wright & Harwood, 2009). These scholars have each pointed to the wider biopolitical agenda of social governance and mediation of 'health' that are storied into existence in children and young peoples' lives. Characterised as 'regulative' and 'surveillant', health promotion practices and policies emergent in schools over the past decade are consequential to the ways children come to know themselves as 'fat'/'thin', or 'un/healthy' (Leahy, 2009). Thus children's sense of self and embodiment are tied up in prevailing messages about an ethic of duty to oneself, often enveloped in their responsibility for exercise and diet as a means to be 'healthy', 'thin' or 'sculpted'. In this climate, teachers and schools are central to the types of 'biopedagogical' work available to children - not only through enactments of H-PE curriculum, but also through informal messages embedded in school practices and initiatives, such as 'healthy' canteens.

From the analysis, three discourse positions emerged in relation to PPGTs' meanings of health and the body. These encompass positions of 'agreement', 'disagreement' and 'negotiation'. The analysis demonstrates how many of the PPGTs in this study had

investments in health as a corporeal project of minimising risk and eating less and exercising more. In doing so, these participants underplayed the complexity and diversity of social, historical and political aspects of health and the body, and instead associated health with individual responsibility, scientificity and medical risk. However, not all of the participants subscribed to health imperatives in essentialist ways. Some drew on alternative knowledge/s in their constructions of health and others negotiated different knowledge, yet these instances were few and far between. This thesis also offers a viewpoint for understanding how PPGTs arrive at particular discourse positions in relation to health and the body. It was found that the circulation of truths through engagements with family and friends, media and schooling experiences shaped the ways the participants framed 'health' and the body. Often what was considered trustworthy, or authoritative, across these various social relationships were accounts of health based in a doctrine and anxieties about individual responsibility for health and the body.

Contributing to contemporary literature in the dynamic field of health, from a sociology of education perspective, this thesis demonstrates how some becoming teachers' preexisting content knowledge that they bring with them to teacher education, is often met with a similar way of 'knowing' from coursework. For the most part, teacher education barely featured in participant responses as a source of health knowledge but tended to align with what they already 'knew'. With limited time in primary teacher education specifically dedicated to H-PE related coursework, there is little space for challenging taken for granted truths about health and the body and differentiating educative as distinct from promotional/ risk-based approaches to teaching health. The analysis demonstrates how 'alternative' meanings of health are likely to be subjugated beneath the surface of the 'sayable' and 'doable'. It is likely that dominant discourses, such as the 'obesity epidemic' will discursively shape these PPGTs' pedagogical intentions in educational spaces. By tracing these patterns of subjectivity, I prompt the need for the field of H-PE to consider future lines of flight in generalist teacher training, and perhaps more importantly, consider future developments in primary school health education curriculum, initiatives and resources. In particular, as a field, we need to find ways to support alternative forms of pedagogical work and resources that encourage PPGTs and children to explore meanings of health beyond those heavily imbued with risk based discourses and 'health' aesthetics.

Acknowledgements

There are a number of people who in different ways have made it possible for me complete this thesis. For their artistry of research supervision, my gratitude goes to Jan Wright and Valerie Harwood. Immense appreciation goes to Jan for 'taking me on', being so generous with her time and sharing her vast knowledge and experience through detailed feedback. I thank both Jan and Valerie for being patient with my writing idiosyncrasies and exploration of ideas as I have sought to grapple with theoretical application and analysis. Thank you to Valerie for her encouragement of philosophical explorations that have strengthened my thinking and writing. Ken Cliff was also a tremendous support as co-supervisor at the inception of this project. He has been an ongoing source of encouragement and timely chats in relation to H-PE scholarship. I would like to thank Lisette Burrows, John Evans, Gabrielle O'Flynn, Mary Lou Rasmussen, Deana Leahy and Michael Gard for welcoming me into the sociology of education academic community (at AARE conferences and other encounters) and, Maria Tamboukou, from the University of London, who shared her theoretical wisdom as part of a memorable narrative network writing retreat in Cairns (supported by Pauline Lysaght and the Faculty of Education). Together, as well respected academics, your encouragement and questions have no doubt propelled me along. I would like to thank the Dean of Education, Professor Paul Chandler, who helped bring about an Australian Postgraduate Award (APA) scholarship in support of this research. Of course it is also necessary to thank the pre-service teachers and teacher educators who volunteered their time, as without them I would have not had empirical material to work with. I also want to thank those who helped with participant recruitment, in particular, Wayne Cotton, who provided generous and timely help at one of the participant recruitment sites. A special shout out to my fellow HDR comrades: Jonnell Uptin, Samantha McMahon, Nici Humphry, Stine Frydendal-Nielsen, Malin Osterlind, Naurmi Toyama, Heather Buchan, Kay Prcevich, Michelle Eady, Kathryn Harden-Thew and Sharron Holdsworth. As budding researchers we have shared a lot in common: coffee breaks, 'TARG' sessions, conferences, writing days, annual HDR reports, MS Word formatting, EndNote and NVivo, ethics submissions, teaching and marking, journal submissions, challenging the status quo, and a certain energy drink. Your chats, humour, friendship and mutual/ contrasting understandings have been ever so valuable throughout the PhD process. A special thank you to Catherine Hartung for being a source of encouragement, vivacity

and theoretical musings. It was by chance that we were located in the same office and by no mistake you've become a dear friend from near and afar. I am very fortunate to have wonderful friends who have offered various support and encouragement (the following list is in no way proportional to my appreciation): Susan Connelly, Mick Connelly, Sarah Dignam, Marcellus Dignam, Monica Bernacki, Clare McMahon, Pip Johnson, Marnie Tomczyk, Heidi Smart, Ali Evans, Kristina Van Oosterum, Stacy Taranto, Linda Parnham, Catha Lammers and Laura Alfrey. A special thank you also here to Leonie Mitchell, Ray Mitchell and Kathryn Welch. I am enormously grateful to my parents and family to whom I dedicate this thesis. My father's unwavering passion for education and the discussions that tend to leave us at the dinner table (unaccompanied by anyone that was previously with us), have provided invaluable insight. A heartfelt thanks goes to my mother for her gentle wisdom, constant support, encouragement and concern for my wellbeing. Sue, for encouraging me; Tom, for reminding me that 'philosophy is saying what is not being said'; Estella, for your creative ways and belly resonating stories; Mark, for the music sessions and last minute printing help; Mel, for helping me join the dots with history; and, Brendan for the tasty coffee, emotional sensibilities and IT support. Lastly, I am particularly indebted to Daniel Mitchell who has offered unwavering love, support and cups of well-steeped tea - thank you so very much.

List of tables

List of figures

List of appendices

Special names or abbreviations

AARE	Australian Association for Research in Education
ACARA	Australian Curriculum Assessment and Reporting Authority
AHPSA	Australian Health Promoting Schools Association
B.Ed	Bachelor of Education
BMI	Body Mass Index
DEC	The Department of Education and Communities (formerly DET)
GDE	Graduate Diploma in Education
GS	Game Sense
HBPE	Health Based Physical Education
H-PETE	Health and Physical Education Teacher Education
HPSF	Health Promoting School Framework
H-PE	Health and Physical Education
HRF	Health Related Fitness
MT	Masters of Teaching
NHMRC	National Health and Medical Research Council
NSW	New South Wales
NSWIT	New South Wales Institute of Teachers
PCK	Pedagogical Content Knowledge
PEx	Professional Experience
PPGT	Pre-service Primary Generalist Teacher
WHO	World Health Organisation
WSA	Whole School Approach

Table of Contents

Chapter 1

Assembling the Research

Background and rationale

Theoretical framework and methodology

Reading this thesis

1.1 Background and rationale

> People know what they do; frequently they know why they do what they do; but what they don't know is what they do does.
>
> *(Foucault, 1989 | Madness and Civilization: A History of Insanity in the Age of Reason)*

This thesis offers a set of vantage points to reflect on Pre-service Primary Generalist Teachers' (PPGT) knowledge and beliefs in relation to health and the body. The identification of the ways PPGTs position their selves and position others in relation to discourses of health and obesity is at the core of this thesis. In what follows, I provide a representation of different PPGTs positions in relation to health and body knowledge at a time when they are close to completion of their initial teacher training and about to undertake the work of teaching in schools. Patterns of knowledge production are traced by analysing cultural and institutional texts, policies and programs, interventions and popular media available to PPGTs from which to draw their values, beliefs and attitudes. I refer to 'contemporary healthscapes' throughout this thesis as the patterns of health and body concern permeating Western democratic societies and imbued with medico-scientific certainty and healthism. By highlighting the different generative knowledge mediums, I suggest how we might work with these in primary education and teacher training to disrupt taken for granted notions of health and the body. A Foucauldian based epistemology of subjectivity and the self provide the main theoretical tools guiding this exploration. On the whole, in light of the opening quote, I explore what PPGTs 'know' in order to theorise what they might 'do' in enactments of health education, and what this then 'does'. This is not to suggest that we can 'know' what the effects of pedagogical intentions are, but rather the premise of this thesis is that the knowledge and beliefs becoming teachers espouse in relation to health is likely to infiltrate their pedagogical work in schools. Verloop and her collegues (Verloop, Van Driel & Meijer, 2001, p.446), argue that 'components of knowledge, beliefs, conceptions and intuitions are inextricably intertwined' with teachers' practical knowledge and teacher behaviours. As such, it becomes important to know what graduating primary teachers know and believe about health and the body. In conclusion, I discuss the capacity of teacher education programs and the field of Health and Physical Education (H-PE) to foster pedagogical work that examines the power relations of discourses about the healthy child citizen circulating in contemporary social and educational spaces.

This project was initially imagined out of a small but growing body of literature challenging the medico-scientific truths of obesity discourse underpinning school H-PE and health practices (Burrows & Wright, 2007; Evans, 2006; Gard & Wright, 2001; Kirk, 2006; Rich & Evans, 2005). This literature, through deconstructing the moral panic of overweight and obesity in our social landscape, challenges us to consider the unintended effects of utilising schools, particularly through H-PE, as a solution to the 'problem'. Scholars engaged in this work, distinguish the deployment of overweight and obesity interventions in schools as somewhat paradoxical to the project of health education. The manifestation of this thinking has resulted in books, journal articles and conferences such as 'The Big Fat Truth'[1], all contributing to a dialogue largely problematising a focus on weight as a rationale, intended or not, for 'health' education (Rich, Monaghan, & Aphramor, 2011). Furthermore this literature has pushed for policy, schools and teachers to reconsider the complexity of health and obesity and the science behind it (Seear, Fraser, Wright, Maher, & Petersen, 2010), in contrast to recycling taken for granted truths of individual responsibilisation for food and physical activity. This conversation is what inspired the study of pre-service teachers' meanings of health and the conjunctions of power-knowledge in their perspectives. Thus, this study is set against a backdrop of primary education and the effects particular pedagogical intentions have for young people's sense of self and health.

While my intention is not to discredit the importance of physical activity and nutritional education for children in schools, the way these topics materialize in, and the rationale in research and educational practice, is a contested space informed by competing ideas (Pringle & Pringle, 2012). However too often these competing ideas are not given equal space in social and educational spaces. Rather, ideas associated with health focus on the physical body, which draws on the bio/psychological sciences and obesity discourse rather than on a socio-critical perspective. Given the power of these ways of knowing, the question arises as to how they impart meanings of health and the body to generalist primary teachers. While there is significant literature on teacher education programs, professional experiences, pedagogical methods and programming (Bloomfield, 2010; Garrett & Wrench, 2008; Hsieh, 2010; Kosnik & Beck, 2009; Morin, 2003; Rodman, 2010; Ryan, 2011; Swabey, Castleton, & Penney, 2010) there remains relatively little specific research on PPGTs and their meanings of health. Rather, much of the research

[1] The Big Fat Truth Symposium, 1-3 Feburary 2010, University of Otago, Dunedin.

in the field has focused on the areas of beginning generalist teachers' intentions to teach *physical* education (see for example Callea, Spittle, O'Meare, & Casey, 2008; Falkner, Reeves, & Chedzoy, 2004; Garrett & Wrench, 2008; Gilfillan, 2003; Light & Georgakis, 2005; Morgan & Bourke, 2005; Rossi, 1997) and pre-service *specialist* physical and health education teachers (Ayers & Housner, 2008; Backman, 2008; Brown, 2005; Capel & Blair, 2007; Dowling, 2008; Fernandez-Balboa, 2009; Garrett, Wrench, & Piltz, 2007; Rossi, Sirna, & Tinning, 2008; Sicilia-Camacho & Fernandez-Balboa, 2009; Tinning, 2004b). Studies have also examined the health imperatives of obesity discourse in relation to i) secondary specialist teachers and Physical Education Teacher Education (PETE) and ii) primary teachers' and students' knowledge and subjectivities (see special issue of *Discourse: Studies in the Cultural Politics of Education*, December 2012). At the inception of the research, and still now, there is little empirical research on how pre-service primary teachers' knowledge and beliefs in relation to health is shaped before they enter schools – what they bring to their teaching and how this is influenced by their histories/biographies and their experience of teacher training.

While most research on primary school health education and children's health has been conducted from epidemiological and psychological perspectives (e.g. Gorely, Marshall, & Biddle, 2004; Hardus, van Vuuren, Crawford, & Worsley, 2003; Jansen et al., 2008; Naylor, Macdonald, Zebedee, Reed, & McKay, 2006; NSW Department of Health, 2003a; Rogers & Motyka, 2009; Spiegel & Foulk, 2006; Story, Kaphingst, & French, 2006; Zahner et al., 2006), this thesis offers an alternative investigation from a socio-critical perspective. The work described here is indebted to other researchers who have adopted poststructural and socio-critical approaches in H-PE. Poststructural theories, emergent across the social sciences in the late 60s and 70s first in France and then in the Anglo-Saxon world, allow us to consider the way texts, in the form of spoken and written, produce particular subjects, subjectivities and social relations (Wright, 2006). They also help to shed light on the ways power is embedded in knowledge and how discourses can be contested or reproduced in different places, spaces and time. By drawing on Foucauldian theory it is possible to understand the structures that work to operationalise discursive meanings of health, particularly those that place individuals at risk of ill health and underplay the constitutive social context. Others in the field of H-PE adopting a poststructural framework (and similar ontological perspectives) have drawn on the interplay of narrative elements in the analysis of stories of health as

increasingly dominated by body performance and perfection (e.g. Evans, Rich, & Holroyd, 2004; Webb, Quennerstedt, & Öhman, 2008; Wrench & Garrett, 2008; Wright, 2004a). These scholars have pointed to the wider biopolitical agenda of social governance and mediation of 'health' in children and young peoples' lives. Characterised as 'regulative' and 'surveillant', the practices and policies which have emerged in schools are said to influence the ways children come to know themselves as 'fat'/'thin', or 'healthy'/'unhealthy' (Leahy, 2009; Rich, 2010). Thus children's sense of self and embodiment is tied up in prevailing messages about an ethic of duty to oneself, often enveloped in responsibility for exercise and diet as a means to be 'healthy' or 'thin'. Poststructuralism, as a theoretical guide, then, offers a way to identify the differences and consonances in discursive formations of health and the body.

In the case of this study, a poststructural methodology has been applied to understand how PPGTs (rather than young people) traverse the terrain of health and body knowledge. Through in-depth interviews and surveys with PPGTs near the end of their degree, this thesis will demonstrate the complex ways individuals negotiate, take up and resist discourses of health and the body. In particular, Foucault's notion of power relations has been harnessed to make sense of 'health' as a cultural idea and how individuals see themselves as part of health and body 'truths'.

For this study, PPGTs of both undergraduate and postgraduate primary education courses from two different teacher education institutions were selected. The different PPGTs were chosen because I was interested in the different sets of 'truths' available in different teacher education programs, along with how the issue of health imperatives and obesity might be framed in different ways, if at all. In doing so I seek to provide teacher educators, student teachers and policy makers with new understandings of the role lived histories of schooling, teacher education, media, family and social relations play in PPGTs' perspectives on health.

Before proceeding I would like to define the 'generalist' teacher. The primary teacher is called a 'generalist', 'elementary' or 'classroom teacher' in Australia, New Zealand and UK and Canada in that they are expected to teach across the curriculum (Faulkner et al., 2008). The 'generalist' as compared to the specialist H-PE teacher is the primary (or elementary) classroom teacher who may have the responsibility for teaching H-PE as

well as, in NSW, the Key Learning Areas (KLA[2]) of English, Mathematics, Science and Technology, Human Society and Its Environment (HSIE), Creative Arts and Languages (NSW Department of Education and Communities, 2011). In most cases, a primary teacher will have undertaken one or two compulsory university coursework subjects dedicated to H-PE throughout their teacher training. A handful of PPGTs might also complete a H-PE elective as part of their degree. H-PE, of course, takes varied forms in practice, where different schools may have particular arrangements such as outsourcing deliverers of PE, or a generalist 'consultant' teacher takes care of the HPE planning within the school. While there have been increasing accounts of 'specialists' and outside providers being brought in to teach 'PE' in primary schools (Ardzejewska, 2009; Macdonald, Hay, & Williams, 2008), for the majority of schooling in NSW, where this study took place, generalists continue to be responsible for H-PE curriculum. There is an ongoing debate as to whether having specialists is the best model to deliver H-PE (Fletcher, 2011), with political lobbying from time to time to include more specialist H-PE teachers in primary schools in Australia (Ardzejewska, McMaugh, & Coutts, 2010).

Another clarification I would like to make at this early point in the thesis is the subject area I refer to as 'H-PE'. Throughout this thesis I have applied the acronym HPE with a hyphen to refer to the collective curriculum in Australian schools that group these two learning areas of 'Health' and 'Physical Education'. Most of the literature that addresses primary/elementary H-PE speaks specifically to the 'PE' aspects of the subject, making the distinction between the two areas difficult (e.g. Callea, et al., 2008; Clarke, 2000; Faire, 2002; Garrett, et al., 2007; Morgan & Bourke, 2008; Pill, 2007; Sloan, 2010; Wright, Konza, Hearne, & Okely, 2007). McCuaig (2008) in her genealogical thesis of H-PE found that there was no clear evidence to delineate these subject fields. Accordingly, she applied the hyphenated H-PE. In this study, 'H-PE' is used as part of sensitivity towards this contested nature of the subject area, but also because my main focus is on 'Health' education, most specifically. 'HPE' does not capture this important differentiation or in NSW does it acknowledge the inclusion of 'Personal Development' in the NSW subject area 'PDHPE'.

[2] KLA is the term used in NSW education to refer to the subject area or learning area.

1.1.1 Contemporary healthscapes and schooling

Schooling health

Schools have long been enmeshed in the production of 'civilizing' children's bodies for healthy and productive citizenry (Kirk, 1998). However what constitutes 'health' and productivity has shifted over time. As Shilling (2004: xv) states, "'civilized" standards are not neutral or universal, but reflect the specific norms and expectations of societies at particular stages in their development'. From the 1880s to 1950s schools provided a site of physical training, medical inspection and sport as a means to mould healthy bodies for modernity, a project exemplary of what Foucault coined the 'disciplinary society' (Kirk, 1998). Kirk, along with others (Welshman, 1996), identifies these historically located practices, through mapping the emergence of school practices in the nineteenth and early twentieth century that sought to regulate children's bodies to meet the institutional imperatives of school order.

In contemporary accounts of schooling, it is apparent that a shift towards intensified discourses of 'healthism' and 'weight regulating' agendas of 'civilising' children's bodies has gathered momentum. The notion of 'healthism' comes from Crawford's (1980) coinage of the term at the beginning of the 80s to describe the belief that individual actions lead to particular types of bodies or 'health' outcomes. Gard and Kirk (2007) have since re-visited Kirk's initial analysis of physical education as a site for 'schooling bodies' and 'healthy' citizenship to include the more recent concern over an 'obesity crisis' as a contemporary impetus to the many interventionist practices in schools, where individual responsibility has extended from not merely one's illness and disease but to include one's weight. They turn to Foucault to locate these changes in shifts of corporeal power since the 19th century. Others have also provided accounts of such 'anti-obesity' phenomenon contouring the 'health' landscape of schools (Burrows & Wright, 2007; Cliff & Wright, 2010; Australian Government Department of Health and Ageing, 2004; Evans, Davies, et al., 2008; Gard & Wright, 2009; Kirk, 2006; NSW Department of Health, 2003b; Tinning, 2008). Instantiations of health education have become increasingly concerned with obesity discourse and the importance of physical activity and nutritional education as a means to safeguard against children gaining weight (see for example Davidson, 2007; Spiegel & Foulk, 2006).

A major focus of the current Primary PDHPE syllabus in NSW is the need to provide children with the information about the risks of non/participation in physical activity and un/healthy food consumption in order to lead 'healthy lifestyles' (Board of Studies New South Wales, 2007). This focus, as others have pointed out (Gard & Fry, 1997; Gard & Leahy, 2009) is informed by medico-scientific knowledge that seeks to intervene in children's 'health' behaviour and prevent and cure 'obesity'. The inclusion of H-PE in schools has been prefaced on declining physical skill levels, lack of fitness and increased obesity levels of children. The formal linking of the H-PE subject area to 'obesity' prevention can be traced, in one instance, to the 1997 draft PDHPE syllabus in NSW which was informed by the 1992 Senate Inquiry into Physical Education (Commonwealth of Australia, 1992). The syllabus states:

> the 1992 Senate Inquiry into Physical Education and Sport found that Australian children were less fit, less physically coordinated and skilled, more often obese, and spent less time in physical activity than children in previous times. These trends are of great concern as they impact on the health and wellbeing of young people and translate into future reduction of health standards in the adult population… Research shows a clear link between inactivity and increased risk of conditions… Active lifestyles need to be developed from an early age and maintained at each stage of development (Board of Studies New South Wales, 1997: 4).

This text provides an example of one early instantiation of the relationship between school health education and it's role in 'curing' obesity. It is however significant example in that it is part of a mandated curricular document and is extended upon in the current curriculum document (see page 107 for reference to the 1999 syllabus). It is interesting to note the use of the word 'obese', rather than 'obesity' in the text; since the late 90s it seems 'obesity' is used frequently as a noun in relation to children, and by association has the tendency to be a form of 'disease' labeling.

Gard (2011) writes how a rise of public health agenda through health imperatives in schools has taken place particularly throughout the last decade. Thus it is now well documented that in recent times there has been an increased focus on Australian (and Westernised) schooling practices to promote physical activity and healthy eating with the aim of preventing childhood overweight and obesity (Davidson, 2007; McDermott, 2011). The problem here lies with the disproportional emphasis placed on moralising heath and the corporeal body at the expense of other forms of health knowledge production.

Primary teachers, as part of a wider public health assemblage on cultivating children's 'health' through H-PE have been positioned as important agents in fostering children's involvement in physical activity and nutritional education in schools. Despite the relatively unchartered knowledge of primary teachers and pre-service teachers beliefs, values and attitudes in relation to 'health', there are widespread calls for them to participate actively in 'healthy' schooling. The World Health Organisation for instance states:

> Health promotion for school personnel is important because teachers and other staff need to be aware of and responsible for the messages they give as role models to students and others. Furthermore, evidence suggests that promoting the health of school staff by encouraging physical activity and healthy diet may improve staff productivity and mood, and reduce medical/insurance expenses. (World Health Organisation, 2008: 22)

This example is one of many attempts to position teachers and school personnel as key health promoters of exercise and nutritional messages to children. This statement extends beyond the project of the child to include the adults and their productivity to modeling a 'healthy' self in schools. In this contemporary healthscape individuals have been described as bio-citizens, who are 'a product of an era of escalating anxiety in the public imagination about the international pandemic of overweight and obesity' (Halse, 2009:45). The focus on health in this context has unfolded in accord with the proliferation of value placed on the productivity and regulation of healthy citizens and in particular, to ward off obesity.

The project of civilising 'healthy' bodies through schooling, as Burrows & Wright (2001) highlight, have had the tendency to conceptualise childhood from humanist approaches that focus on developmental discourses. What this has meant in relation to recent health agendas is that children have been expected to take on, and be responsible agents of individualised notions of health ideals. This is apparent in the interventionalist practices that target schools as a space to enact child 'health saving' agendas. Out of these conceptualizations of the child and the contemporary healthscape, a myriad of curricular and adjunct initiatives often motivated by governmental health imperatives have materialized in schools. For instance interventions such as 'Physical Activity Across the Curriculum' aim to 'promote 90 minutes per week of moderate to vigorous intensity physically active academic lessons delivered by classroom teachers' (Donnelly et al., 2009; Gibson et al., 2008). There appears to be ongoing calls in various guises to support

teachers and other staff to implement health promotion strategies and agendas (Heart Foundation, 2007; Sallis et al., 2012; Waters et al., 2011). These are often in the form of 'blanket' approaches that fail to acknowledge class based experiences of embodiment and tend to contribute to normalised ways of thinking about the body (Warin, Turner, Moore, & Davies, 2008). This trend has also suffused polices of overweight and obesity, as Evans and colleagues claim,

> At best, class, gender and other social categories find expression as independent research variables, merely to be acknowledged as relevant, before being ignored. Health inequalities are thus represented as appearing as if by accident in the social world, the product of individual or corporate default rather than inhering either in Government (in)action or vested class interests and values (Evans, Davies, et al., 2008: 120).

If we accept that early learning experiences for children are central to their social, emotional and cognitive skills (Solmon & Lee, 2008), as well as their sense of self in relation to health and the body (Burns, 1993; Burrows & Wright, 2004), then primary school Health and Physical Education (H-PE)[3] is a consequential practice. This means the knowledge production teachers' support, in what they do and say, is a practice of consequence to children's health knowledge. This does not imply a disregard for other influences on children's learning outside and through the school setting, but that the enactment of curriculum is a project of significant responsibility. The teacher is one of the most important factors in students' learning (Solmon & Lee, 2008). Drawing on others (Britzman, 2003; Loughran, 2006), personal experiences of teachers are entangled in their knowledge, understandings and practice of the teaching process. Because of this, generalists' epistemological orientations to H-PE are crucial to the ways health curriculum is conceived of and constituted in the primary school.

Current states of play: H-PE curriculum in the primary school

Accounts of H-PE, particularly PE in the primary school give the impression that there is much slippage in the enactment of curriculum. Across Australia at least, there is considerable variation across the states and territories in the ways 'levels, bands, stages, standards, indicators, descriptors and criteria' (Dinan-Thompson, 2009: 44) are acted out. In addition there are also reports of primary H-PE being marginalized in the primary school and in teacher education as a 'non-core' learning area (Macdonald & Penney, 2009). Added to this, generalists are said to lack pedagogical and content knowledge in H-PE (Commonwealth of Australia, 1992; Gard & Fry, 1997; Hickey, 1992; Webster,

[3] H-PE is formally known as Personal Development Health and Physical Education (PDHPE) in NSW Primary schools.

2001). Accounts of unsatisfactory levels of preparation during university studies also contribute to the overall conviction that primary H-PE 'leaves much to be desired' (Tinning, Kirk, & Evans, 1993: viii). At the same primary teachers are often feel the pressure of being responsibilised as a key mechanism for dealing with children's health problems (Angus, Olney, & Ainley, 2007).

Tinning, Kirk and Evans (1993) in their text 'Learning to Teach Physical Education' describe how many generalist teachers subscribe to 'ad-hoc' approaches to PE, where teaching outcomes depend on the individual teacher's commitment or enthusiasm for the subject. Drawing on others (for example Kirk, Gore, & Colquhoun, 1989) they state that for many generalist teachers PE is a means to relax the students or 'blow the cobwebs out' for more academic or classroom based learning activities. In light of these accounts, there appears a gap between the outcomes desired by curriculum documents and the motivations and resources drawn on by pedagogues to teach its content. In a more recent study Morgan and Hansen (2008a) found similar approaches of generalist primary teachers to PE. Of the thirty-eight primary schools involved, their interviews with classroom teachers found generalist teachers' beliefs of PE to be oriented around fitness benefits, enhancement of leaning and behaviour in the classroom and the improvement of social skills. They argue for a more 'educational' approach to PE in primary schools, contending that the reasons provided by their participants for teaching PE were of little 'educational value' (p.205).

While there is much agreement in the literature and amongst specialist practitioners that generalist primary teachers often devalue the subject area of Health and Physical Education, paradoxically there is also evidence to suggest that teachers are invested in the health of young people, especially the prevention of perceived health risks such as overweight and obesity. *The Weight of Opinion study* reported on the commonplace practices of staff in pre-schools seeing physical activity and nutrition education as part of their 'core mission as early childhood educators' (Pagnini, Wilkenfeld, King, Booth, & Booth, 2006: 15). This was also apparent in Morgan and Hansen's study, mentioned above, and most vividly depicted by a participant whose response points to the perceived value of the H-PE subject area for preventing diseases such as cardiovascular disease and diabetes:

> I mean with all these reports coming out about obesity… we need to be doing more about it because down the line we're gunna have all these overweight people that can't do anything… you know having heart attacks (teacher 31: p.201)

This perspective is hardly surprising given the social amplification of health risks associated with overweight and obesity, which saturate media and policy government strategies in relation to children's health. With H-PE increasingly cited as a space to monitor and enforce what has been called the 'new public health' agenda (Petersen and Lupton, 1996), teachers are vested with the responsibility of producing students who can take care of their bodies and health, students who Tinning and Glasby (2002) refer to as 'self-regulating', 'self-surveilling', 'healthy active citizens'. As part of this, H-PE is reported to have elevated to curriculum status as far as time goes:

> It could be argued that, in effect, Health and Physical Education has been elevated to core subject status following introduction of the requirement for 120 minutes of physical activity per week. Teachers reported this subject had the greatest time allocation after English and Mathematics (Angus, et al., 2007: 22).

At the same time, if we turn to accounts of H-PE generalist teachers as unskilled, or 'ad-hoc' in their assemblages[4] of H-PE and in need of more support and resources, there is a vast disjunction between the expectations and desires for them to be key players in keeping young people 'fit and healthy' and their skills, knowledge and experience to enact this.

Beyond responsibilities for the formal H-PE curriculum, the primary school teacher is also central to an 'informal' or 'hidden' health related curriculum that goes beyond the H-PE syllabus (Bain, 1990a, 2009; Nutt & Clarke, 2002; Solmon & Lee, 2008), including the tendency to position physical activity and nutritional education as a 'cure' for overweight (Azzarito, 2007; Pyle et al., 2006). For instance, through everyday speech, particular knowledges and understandings, in this case about 'health', can be generated (Drewery, 2005). Given that many primary teachers have little teacher training coursework allocated to H-PE, the question arises as to where they get their understandings of health. If we consider the current focus on healthy and productive citizenry in schools and social constructions of health, this is a significant problem for research to address. In other words, what knowledge informs primary teachers informal and formal practices about

4 'Assemblage' is used here, albeit loosely, as it is used in Deleuze and Guattari's work 'dealing with the play of contingency and structure, organisation and change'. It is not just what it is – an assemblage, but what it can do. An assemblage can include material objects, but also discourses and non-corporeal relations. The later referred to by Deleuze and Guattari as a 'collective assemblage of enunciation' (Macgregor Wise, 2011: 91). Assemblage is explained in more detail later in this chapter.

health in relation to their students? Thus the ways teachers engage with knowledge in relation to health and the body in schoolscapes has become an important field of inquiry. This problem has gradually been picked up in the H-PE literature (Burrows & Wright, 2004; Rich, 2010) however there has been little investigation into pre-service teachers knowledge, values and beliefs.

Pre-service teachers and the contemporary healthscape

In a socio-political context where thin bodies are celebrated and fat bodies represent ill health, moral failure and a lack of control, it is important to understand how PPGTs, as a discrete group, navigate health and body knowledges. This is particularly pertinent given the increasing focus on lifestyle media, entertainment and popular culture such as *The Biggest Loser*, *Honey We're Killing the Kids*, *Teen Fit Camp*, *Eat to Save Your Life* or *Supersize Me* on controlling and monitoring one's health and body against perceived risks. Reality television as Rich (2011a; 2011b) points out, has emerged as a form of edutainment and contributes to the moral positioning of individuals, social classes and groups as particular moral subjects. Such shows have been examined for the ways they invoke lifestyle expert instructional narratives (Rich 2011a; Biressi & Nunn, 2008). The technologies encouraged by these shows mark the bodies and bodily practices of children and adults as either abject, and offer ways to 'cleanse' or make them proper (Kendrick, 2008). These shows play a significant pedagogical role in symbolically representing the 'obesity epidemic' and how individuals and families should be responsible and productive in self-management of weight and lifestyle. In this wider social context, a significant purpose of teacher education is to equip graduating teachers with skills, competency and knowledge to teach well. However there are limitations to the resources that can facilitate this purpose and policy makers continue to question how teacher education makes a difference (Darling-Hammond, Wei, & Johnson, 2009). In particular, there is concern over 'curriculum squeezing' of H-PE out of teacher education programs (Smith & Philpot, 2011). One argument is that there is not enough coursework time for generalists to become skilled and confident to teach H-PE (Triegaardt, 2007). Others point to pre-service teachers' prior experiences and socialisations as presenting challenges for preparing them with desired knowledge and attitudes towards 'quality teaching'[5]. Different communities of practice, for instance, such as school staffrooms and peer

5 'Quality teaching' is used in this sense to consider particularly the elements of critical analysis, content knowledge as part of a set of other elements that make up 'quality teaching' in documents such as the NSW institute of teachers quality teaching standards. This is placed in quotation marks in order to demonstrate different epistemologies of 'quality teaching' agendas in teacher education (Gore, 2001; Wang, Odell, Klecka, Spalding, & Lin, 2010).

groups foster particular types of identity and knowledge formation (Sirna, Tinning, & Rossi, 2008). Kosnik and Beck (2009) suggest pre-service teachers get most of their content knowledge outside of teacher education. They emphasise the importance of prior experience and dispositions of teachers, rather than the belief that teacher education can develop and create 'quality teachers'. Some scholars have even argued that course recruitment may be more important than the courses themselves (Kennedy, Ahn, & Choi, 2008).

In contrast, the potential of teacher education programs to successfully generate knowledge, understanding, beliefs and attitudes, within a broader agenda of quality teaching is also well documented in the literature (Darling-Hammond, 2005, 2006b; Philpot & Smith, 2011). For Tinning (2004a), teacher education has been considered a space for 'hope and happening' in challenging social constructions of the body. He envisages that this might take place through a different form of teacher education to that conceived within the discourses of sport and science, or at least where these discourses are not privileged in status over social and educational perspectives.

I have briefly drawn particular attention to the debate in the literature over what teacher education 'can' and 'can't' do and the desires for what it can achieve for quality teaching. Notwithstanding these 'hopes', the problems of H-PE as a marginalized subject area in primary teacher education programs remain, and thus it has received very little time for developing pre-teachers health knowledge and understandings of embodied identities. This inadequate time to develop knowledge in teacher education, leaves considerable space for pre-service teachers to constitute their meanings of health promoted through popular discourses elsewhere (Rich, 2011b; Silk, Francombe, & Bachelor, 2011), or, from their own school experiences of health education (Sinkinson & Hughes, 2007).

Individuals' exposure and entanglement in health knowledge through 'public' pedagogies is well documented (Harris, 1995; Lupton, 1995; Rich, 2011b). Discourses taken up/produced by popular media and government health campaigns often overplay ideas of risk avoidance and the individual management of health. For instance, the Australian Government Campaign 'How do you measure up?' is an example of the type of hegemonic health discourse that positions individuals as being at risk of ill health when they lack control over their lifestyle and hence their bodies. According to the Health

Minister (at the time), Nicola Roxon, the $30 million dollar campaign 'is really about measuring risk'. The opening campaign preamble reads as follows:

> 1 in 2 Australian adults are overweight. And, irrespective of your height or build, if your waistline is getting bigger it could mean that you are at increased risk of chronic diseases like some cancers, heart disease and type 2 diabetes (Commonwealth of Australia, 2008).

Drawing on Beck's (1992) work on risk societies, Gard and Wright (2001, p.539) argue that 'obesity has been constructed as an undesirable side effect of modern Western life and adds to the growing list of risks that this kind of life is charged with generating'. Individuals' behaviour, such as their diet, physical activity and sedentary lifestyles exemplify the growing list of risk factors that are criticized for their causation of weight gain (Biddle, Gorely, Marshall, Murdey, & Cameron, 2004; Gard & Wright, 2005). The campaign 'Measure up' exemplifies this normalisation of individuals' responsibility for their weight. If we consider the stamp of authority with which government has over the publics concern for the issue of 'obesity' (Hardus, et al., 2003) this campaign likely to have had a lasting impression on individuals knowledge. Dovetailing these sets of 'truths', modern life is often described as lived within 'obesogenic' environments where calorie rich foods are over-consumed and sedentary lifestyles prevail (Carter & Swinburn, 2004; Swinburn, Egger, & Raza, 1999). Yet, 'against suggestions that the food industry, the car culture, consumer society and other socio-cultural factors play a role in the development of 'obesogenic environment'… people centered explanations that are well suited to the media dominate' (Rail, 2009: 142). Some have even gone as far as to link individuals' lack of control to the depletion of the earth's resources and global warming (Egger & Swinburn, 2011). In such a context, individuals who can manage their consumption, resist temptation and thus control their weight are deemed to be 'healthy', 'good citizens', and those who cannot, are considered 'unhealthy', 'lazy' and immoral. PPGTs are unlikely to be immune to such socially moralised discourses of 'health'. However this is likely to be mediated by their individual experiences and contexts. As James and Hockey (2007) point out individuals are receptive to different social health imperatives:

> concepts of health and illness, rather than being fixed and objective descriptions of somatic states, take on a fluidity of meaning with different sets of social relations varying in and between the different social contexts of everyday life (Hockey, 2007: 36).

While we can assume that PPGTs' meanings of health are shaped by social contexts of everyday life, there is no empirical work examining how they mediate dominant truths of weight and risk that permeate the contemporary healthscape.

1.1.2 Teacher education and the 'generalist' and 'specialist' teacher

Research on H-PE teacher education, provides very little recommendation of 'generalist' teachers and their training, rather, scholarship has involved specialist pre-service teachers (Dowling, 2006; Matanin & Collier, 2003; Placek et al., 1995; Rossi, et al., 2008). By way of different dispositions and degree choices, it seems primary teachers bring with them different values and beliefs to specialists. For instance specialist H-PE teachers have been identified as entering the profession out of a 'love of sports' and prior success with movement (Dowling, 2006; Fernandez-Balboa & Muros, 2006). Others have demonstrated how specialists' beliefs are shaped by acculturation, professional socialisation and organisational socialisation in the field of H-PE (Sirna, et al., 2008; Sirna, Tinning, & Rossi, 2010). 'Socialisation', in this instance, is identified as: 'all kinds of socialisation that initially influence a person to enter the field of physical education and later are responsible for their perceptions and actions as teacher educator and teachers' (Lawson, 1983: 7). Teacher 'socialisation' in H-PE is thought to have a significant role in the ways dominant discourses and normalised practices of exclusion and gender inequity are reproduced (Rossi, Sirna & Tinning, 2008; Tinning; 2004b). In contrast to specialists, generalists are more likely to have a 'non-sporty' disposition than their specialist counterparts (Morgan, et al., 2005; Randall & Maeda, 2010). For instance Garrett and Wrench's (2007) study that investigated pre-service generalists subjectivities in relation to sport, physical education and physical activity indicated that that the PPGTs' experiences and understandings of physical education and activity were significantly shaped by socialising encounters. These experiences were characterised by narrow definitions of 'sporty' or 'non sporty', competition, and being physically exposed in public displays of traditional forms of movement (Garrett & Wrench, 2007). At the same time, these discourses are likely to be a contributing factor to many specialists' choice of degree and teaching area.

There are studies that have examined the backgrounds and interests of generalist teachers. Saltmarsh and McMaugh (2010), for instance, found that primary teachers, in the Australian context, are often motivated to teach in 'order to give back to the community'. In this same study it was also found that the participants perceived the

teaching profession to have a higher status than their previous forms of employment or backgrounds. In another study, Montecinos and Nielsen (1997) found PPGTs to have 'a love of children' and wanted to make a positive difference to the lives of children. Another recently study from Norway found that generalist teachers reflections of their future role as teachers was one of being a 'caring' teacher and student focused in order to help children reach their potential (Lyngsnes, 2012). In each of these different examples form the literature, it seems there is a social justice agenda at play in primary teachers intentions for entering a primary teaching degree.

There were a few other reasons why generalists chose to enter the profession. In a Slovenian study, Krecic and Grmek (2005) found the reasons primary teachers chose teaching in addition to altruistic desires to help others, was: for material investments such as holidays and job security; self realization in the form of personal and professional growth; aspirations or 'stereotypes' of the profession related to family, gender or academic study; and 'alternative' reasons, for instance, those who 'fell into the degree'. Krecic and Grmek (2005) also found there was an interest among student teachers to function purposefully in society and use their talents and abilities such as music, art and dancing. Saltmarsh and McMaugh (2010) found that their older students tended to be more highly motivated about the work of teaching in teacher education coursework than their younger peers.

In the case of 'health' as distinct from 'physical education', there is little exploration, from what I can find, by way of PPGTs' meanings and experiences of health. Accordingly, other than the research described in this thesis, and a paper that emerged as part of this study (Welch and Wright, 2011), there is very little that offers a contribution to the conversation about pre-service generalist teachers' backgrounds and beliefs specifically in relation to health and the body. Such an inquiry is considered particularly important in contemporary healthscapes where primary schools are targeted for the governing of healthy child citizens and teachers are given responsibility for health education curriculum.

In recent times there has been a call for more research on teachers' knowledge and the ways in which they construct their knowledge, as scholars have suggested that the beliefs and experiences teachers hold serve as 'filters' through which their learning takes place

(Borko & Putnam, 1996). Similarly, Rovegno (2003) argues teachers' knowledge significantly affects their teaching and learning. Carter (1990, cited in Tsangaridou, 2006: 506) suggests that 'for the most part, attention to teacher education has traditionally been focused on what teachers need to know and how they can be trained, rather than actually what they know and how that knowledge is acquired'. Given that teachers through their formal and informal teaching practices can play a key role in the transmission of particular 'body pedagogies' associated with body size and appearance, body regulation and monitoring (Evans & Davies, 2004a), it is important to find out what pre-service primary teachers' meanings of health are, and the ways in which the current contemporary health imperatives have shaped these meanings. This is because it is assumed that an individual's actions and decisions are strongly influenced by their sense of self as well and the meanings they bring to bear on their surroundings (Britzman, 2009; Mansfield, 2000; Tsangaridou, 2007). The meanings and understandings that people have of their surroundings orchestrate their subjectivity in multiple, contradictory and changing ways (Davies, 1992). In light of the ongoing role generalist teachers are going to have in children's health education with the roll out of a new H-PE National Curriculum, primary teachers will need to engage in content knowledge about the social and cultural aspects of the body. This is of particular importance if we consider the current developments of the new Australian HPE curriculum, which states:

> A twenty-first century curriculum also recognises the importance of the body within and across cultures and groups. It acknowledges how the body is shaped, exercised, nourished, supplemented, portrayed and interpreted for a range of personal, social, cultural, and economic purposes (ACARA, 2012: 3).

Thus, the knowledge and beliefs of PPGTs in relation to health and the body is significant given their role in curriculum and schooling children in the future.

1.1.3 Research questions

The core arguments I formulate in this thesis are in response to two major research questions and three sub questions. These questions have been crafted with sensitivity to the Foucauldian theoretical framing of this study:

Question One

What are the major discourses of health and the body that are available to pre-service primary generalist (HPE) teachers?

Question Two

How are discourses of health and the body manifest in PPGTs' constructions of self and others?

i. What are the key discourse positions in relation to health and the body that PPGTs take up and negotiate?
ii. How do discursive truths, lived histories and practices of the self contribute to PPGTs' subjectivities in relation to health and the body?
iii. What are PPGTs' perspectives on the enactment of H-PE in the primary school?

Research question one prompts an investigation into the discourses of health and the body that are (re)produced in the social healthscape and educational experiences of PPGTs. To do this, drawing on Foucauldian analytics, in chapter three I map a *dispositif* of obesity and health imperatives. This includes tracing both discursive and non-discursive relational elements that circulate in popular culture, teacher education programs, family and other social sites of knowledge production and experience. In order to answer the first question I undertake an analysis of cultural texts from popular media and the web, as well as policy documents related to health and obesity. This literature is augmented in chapter four with an analysis of interviews with teacher educators from the two institutional sites. The interviews were conducted in order to explore how the teacher educators were positioned in relation to discourses of health as well as to ascertain the types of exposure the PPGT participants were likely to have had to material that deals with topics of health and the body.

The second research question is addressed in chapters five and six through an analysis of data from survey responses and interviews with students in their final years of their teacher education degrees at two universities: Moore University and Cavendish University (pseudonyms). Students from both undergraduate and postgraduate courses were selected in order to account for contextual differences in both teacher education programs and to allow for a robust understanding of different PPGTs' meanings of health. From the analysis of open-ended survey responses and interview texts the notion of discourse positions was utilised to depict the different ways the PPGTs described the relationship between health and the body. As an extension of this analytical foundation,

Foucault's notion of subjectivity and Deleuze's analysis of 'the fold' helped to locate the ways individuals come to know about health through micro practices of the self.

1.2 Theoretical framework and methodology

In this section I describe the process of making decisions and committing to a research design and methodology that was best fitted not only to the research questions, but also the underpinning theoretical concerns. This section will provide a rational and give reason for the research questions, informing theory, participants, institutional sites and the procedure for data collection and analysis.

This study originated from a need to understand how PPGTs constitute their subjectivities within the power relations of knowledge about health, bodies and teaching of children. A poststructural inspired methodology of discourse analysis was applied to address the stated aims. In the *Handbook of Physical Education*, Wright (2006) argues that poststructural and postmodern perspectives often have an emancipatory purpose by making visible the ways in which power and knowledge operate to privilege certain practices and forms of subjectivity. Given the importance of understanding the social reality of PPGTs in this research, I have framed this study within the parameters of poststructural methodologies. Through this approach, discourse analysis of empirical data and cultural texts provides a means through which we can understand PPGTs' subjectivity. By drawing on a Foucauldian perspective, I take particular interest in the contingencies and disruptions of PPGTs' subject positions in relation to dominant discourses of health.

Research investigating the enactment of discourses of health and the body emerged through socio-critical H-PE research agendas in the 1980-90s. This trend in H-PE literature was generated from theoretical and empirical insights to understand the types of knowledge that are produced and who produces them. Scholars who have contributed to a 'critically' inspired agenda in H-PE scholarship include David Kirk, Jan Wright, Richard Tinning, John Evans and Doune Macdonald. The various projects of these scholars and those who have followed them have raised questions about the power relations associated with gender, sexuality, and ideologies of health and the body in H-PE spaces. Gaining momentum through the 1990s, this scholarship has made way for a range of more recent studies that are interested in the socio-political context in which ideas about children, health, bodies, gender, (dis)ability and schooling are produced (e.g.

Burrows, 2010b; Cliff & Wright, 2010; Fitzgerald, 2005; Gard & Leahy, 2009; O'Flynn & Bendix Petersen, 2007; Rich, 2011a). It is within this evolving field of research, along with other poststructural educational and sociological studies dealing with present day problems, that this thesis is situated.

'Poststructuralism' as a term is often used to represent the grouping of theoretical developments by predominantly French intellectuals in the 1960s and 70s. These intellectuals responded to both constructs of structuralism and phenomenology that had dominated the relationship of theory to knowledge prior to the mid 20th century (Baert & Carreira Da Silva, 2010; Colebrook, 2002). Poststructuralism, takes as its character the ability to challenge the relationship of theory and knowledge and to create multiple interpretations, particularly conflicting ones. Philosophers such as Jacques Derrida, Michael Foucault, Jacques Lacan, Gilles Deleuze, Judith Butler and Julia Kristeva have been loosely associated with inquiry which seeks a more complex foundation for knowledge. In particular they have been concerned with knowledge as a source of liberation in its departure from knowledge as pure experience (phenomenology) or systemic structures (structuralism) (Besley & Peters, 2007; Colebrook, 2002). Whilst Foucault and other theorists who are frequently associated with the 'poststrucutural' turn did not identify as 'poststructuralists' themselves (and resisted being labeled as a particular type of theorist), they are all often collectively referred to as 'poststructuralists' (or at times Continental philosophers), because of their commitment to find inconsistencies in the ways texts represent 'truths' (O'Farrell, 2005). In particular, these theorists highlight the pivotal role of readers for the ways they apply their own cultural biases and assumptions when reading a text. Loosely this notion has been referred to as the 'death of the author' - coined by Barthes, it contributed to Foucault's contention that the author is an 'ideological production'; i.e. 'what is an author?' (Foucault, 2006: 287). The premise of this contention was to bring into question accepted categories of knowledge. In the case of this thesis, it is considered to have an ongoing bearing for deconstructing the power relations of health imperatives operating in PPGTs' constructions of health.

This thesis is intentionally positioned within the ontological and epistemological parameters of poststructuralism by virtue of acknowledging that selves are neither 'substances with determinate properties nor egoic structures that accrue personal

histories in predictably orderly ways' (Lorraine, 1999: ix). Rather, this thesis draws on the tenets of 'Foucauldian genealogy' to situate the past as constitutive of the self in the present and on Deleuze and Guattari's (1987) notion of 'becoming' to consider the assemblage of historically conditioned processes in the present.

Foucault's relevance in educational research has proved valuable for challenging taken for granted categories and concepts (Lather, 2004). Foucauldian perspectives of the self in particular have been utilised in the social sciences and educational research since the 1990s (Baker & Heyning, 2004). One of the strengths of this approach is that it comes with an analytical tradition (Wright, 2004b) that has been applied to empirical research in education for some time (see for example Gore, 1991 and Wright, 1996).

Much of Deleuze's theoretical work was spent 'showing a force of life beyond everyday function, such as the force and value of change and becoming: not a becoming *for* some preconceived end, but a becoming for the sake of change itself' (Colebrook, 2002:14)[6]. In short, poststructuralism, with the theoretical resources of Foucault and Deleuze, offers an alternative approach to objective notions of truth and humanistic ways of thinking about the self (Weedon, 1987). By following these lines of thought, they allow me to examine the instability of the ways language, culture and political systems represent 'truths' about the body and health that are not only in a state of mutating or becoming (as Deleuze would conceive) but also at times dangerous to individuals' sense of self. For instance the surveillent practices of measuring bodies (BMI, weight and waist lines) and focusing on the virtues of 'healthy' bodily practices (exercise and low calorie nutrition) can contribute to individuals' problematic relationships with weight, food consumption (guilt, shame), exercise, the body and a slim aesthetic (Bordo, 2003; Halse, Honey, & Broughtwood, 2007; Rich, 2010). In one case, pediatricians have specifically problematized obesity discourses in school programs for their relationship to eating disorders (C.S. Mott Children's Hospital, 2012).

The 'political' or power-knowledge discourses in relation to health and the body are considered central to PPGTs' meanings of health – they form, what Foucault (drawing on Kant) refers to as the very 'limits and conditions of possibility' available to speak and

6 It is not surprising then, that Deleuze considered himself to be an empiricist and vitalist - both projects with sensibilities to the heuristic nature of learning and life. A 'vitalist' subscribes to the notion that origin and phenomenon of life are dependant on a force or principle distinct from purely chemical or physical forces (Colebrook, 2002).

know the 'truth' (O'Farrell, 2005). In this sense the constitutive limits of discourse constrain what knowledge can be 'known' and produced. For Foucault these relationships are formed by power and subordination that are present everywhere in the micro and macro practices of all societies. Language is the key mechanism by which the macro context forms the individual: 'subjectivity is made by the relationships that form the human context' (Mansfield, 2000: 52). This is an important epistemological starting point for the research described in this thesis. A poststructural framework has been chosen in order to explicate the contradictions and interpretations of the pre-service teachers' production of health and body knowledge in interview and survey texts. Central to this analysis is a notion of discursive truths as constitutive of selves, in this case PPGTs, with the individual self seen to be a mediator of truth. This approach draws on others who adopt methods of discourse analysis to challenge taken for granted truths or 'opinions' about health and the body in Australian and other industrialised democratic countries (see for instance Burrows & Wright, 2007; Evans & Rich, 2011; Monaghan, 2007; Wray & Deery, 2008; Wright, O'Flynn, & Macdonald, 2006).

Discourse analysis provides a means to identify patterns of regularity in texts (language use) as they are 'constitutive of discourses and to show how discourses in turn constitute aspect of society and the people within it' (Taylor, 2001: 9). The nature of knowledge, then, is seen as discursively constructed where the relationship between power-knowledge is entangled in the production of selves and texts. As Wright states 'it is through discourses that meanings, subjects and subjectivities are formed'. In order to empirically investigate this, Wright (2006) suggests that all forms of 'meaning production' including 'lived experience' can be treated as texts used for discourse analysis. In so doing, this method relies heavily upon my reflections as the author. The identification of forms of power and relationships to truths of health and the body depend upon my interpretations of discourse in the texts.

1.2.1 Research design

The research design was predominantly a qualitative approach with some descriptive statistics to help identify patterns in PPGTs' meanings of health. Like other studies, in-depth semi-structured interviews were used to provide rich empirical material for discourse analysis of 'knowable' discourses and the ways in which individuals take up particular knowledges (Driver, 2008; Sirna, et al., 2008). Surveys were used to gain a picture across a large number of PPGTs' meanings of health. The main purpose of this approach was to achieve analytical generalizations (Leech, 2005) of the empirical material useful to tease out through more in-depth discourse analysis (Alvesson & Karreman, 2011). There were a number of key elements to the collection of empirical material:

(i) Collection of institutional documentation and contemporary cultural popular media and social texts;

(ii) The adoption of two sites and the recruitment of postgraduate and undergraduate students in primary teacher education degrees;

(iii) An evolving process where pilot interviews (n=5) were conducted to inform the survey and interview questions for the main study;

(iv) Recruitment of survey participants online (n=136);

(v) Main interviews with selected survey participants (n=17); and

(vi) Interviews with teacher educators (n=5) and the collection of institutional texts.

Cultural and institutional texts

The collection of contextual texts was a key source of empirical material for the analysis of the contemporary healthscape within which PPGTs live and make meaning. Texts were selected to provide representations of health that are both alternative and dominant to the Australian social milieu to allow for an examination of the contradictory and persuasive discourses that position people and practices as 'un/healthy'. The contextual data comprised of both institutional course material and public media throughout the year that the surveys and interviews took place. Texts included government health policies and programs, school initiatives and resources, health generated initiatives and programs, popular media and culture, for example, television shows, adverts in magazines, websites and newspaper articles. The 'institutional' data collection comprised subject outlines and assessment tasks, with further information drawn from the interviews with teacher educators. Further to this, some historical texts were utilised and

are described in chapter four to consider the shifts in meanings of health and the body over time. The analysis of these different texts seeks to understand the present manifestations of health discourses with consideration for the past. The analysis and inclusion of these resources are discussed in more detail in chapters three and four.

The participants (PPGTs, teacher educators)

The participants in this study consisted of both undergraduate and 'postgraduate' primary education students from the two separate teacher education institutions: 'Moore University' and 'Cavendish University'. In most cases participants from the bachelor degrees were younger in age and often completing their first degree, whereas the postgraduate education students had already completed at least one degree from outside the education field. Both of the 'undergraduate' courses at each of the institutions were four year Bachelor of Education (Primary) degrees whereas the postgraduate courses comprised a one year Graduate Diploma of Education (GDE) (Primary) at Moore University and a two-year Masters of Teaching (Primary) at Cavendish University. By recruiting these various groups, the participant base covered most of the options for completing a primary education degree in Australia. The participants were aged between 20 and 40 and have been assigned pseudonyms throughout this thesis.

A survey and semi-structured interviews were used to collect data from Sites A and B. One-hundred and thirty-six participants completed the online survey and 23 participants took part in semi-structured interviews. Six of these interviews were conducted as 'pilot' interviews with PPGTs from the cohort of the year preceding those PPGTs who provided the data from the 17 'main' interviews and 136 surveys. The table below provides a breakdown of participants in chronological order (top down) of data collection:

Table 1. Data collection and participant overview

Empirical material	Moore University	Cavendish University	Total
Pilot pre-service teacher interviews	6	0	6
Online survey	79	57	136
Main pre-service primary interviews	10	7	17
Teacher educator interviews	3	2	5

To complement the analysis of the institutional documents teacher educators were also invited to participate in an interview. Course lecturers from the compulsory physical and health education subjects and any electives in H-PE from each of the institutions were

recruited. While I aimed to interview the lecturers who taught the H-PE coursework to the PPGTs surveyed and interviewed, this was not always possible, largely because some lecturers had retired or moved on from the university in the space between teaching the course and the time of data collection.

The Survey

The survey took place after the preliminary (pilot) interviews and was designed to extend the scope of the study to a larger and more diverse population of students than that represented by students who were interviewed. It was administered online, through an institutional generated email with the permission of the Head of School at each Site and the Human Research Ethics Committee at my institution (HE09/061). A link to the *SurveyMonkey* website, where the survey was hosted was included in the email. It was thought that administering the survey this way would allow for maximum potential of participant recruitment. The 'target' population group, i.e. the maximum number of possible participants, was made up of 272 PPGTs from Moore University and 188 from Cavendish University, a total of 460. Of these potential PPGT participants, 30% completed the survey, i.e. 136 out of 460. As anticipated, female participants were overrepresented in the cohort, given the ratio of females to males enrolled in the four courses, with 114 female students and 22 male students completing the survey. The gender ratio is representative of not only the target sample group but is also consistent with reports of more females choosing to study primary teaching (Szwed, 2010; Zarina, 2012).

Those participating in the survey were either in the third or fourth and final year of their primary teacher education degrees. The survey was used to elicit the PPGTs' meanings of 'health' across the data set and identify themes and discourse positions to follow up in the interviews. Likert scales were used to elicit responses to attitudinal questions such as, 'do you think someone's size or shape has anything to do with their health?' Open-ended short answer questions that asked the respondents to explain their Likert ratings were also included to provide data for a discourse analysis of participants' responses. The participants responded in detail to most of the questions, providing around two sentences of text. Survey questions prompted for responses to questions such as 'how would you define a healthy person', 'what would you do to improve your health', 'does a person's size and shape have anything to do with their health?', 'what sources of information do you think have developed or influenced your understanding of health or

health related practices?' and 'do you think teachers and schools should play a role in addressing childhood obesity?' (See Appendix 8 for a full copy of the survey). In the analysis, I was mindful that some of these questions lend themselves to interpretations of health that are concerned with individual rather than social interpretations of health. While this survey design provides ample depth of material for my research questions, a further study could be made specifically into PPGTs' understandings of the social aspects of people's health.

The survey was designed to identify the PPGTs' understandings of health, food, physical activity and body shape, and the sources from which they derived their understandings (popular culture including that of social media, government initiatives and course work). The survey was partially modeled on that used for an ARC social science linkage project (see Harwood, 2012; De Pian 2012 for description) with primary and high school students. Likert scales on health practices and 'body image' were also adapted from Zali Yager's (2007) doctoral research with pre-service physical and health education teachers[7]. These scales were included in the survey to explore food and exercise interests of the pre-service teachers in relation to shape and weight concerns and their vested interest in exercise. While statistical assistance was sought from the University before it was administered, the survey return rate was not strong enough for correlations of variables to be provided from the survey. Descriptive statistics did however allow for tracing patterns of beliefs and discourse positions of health across a large number of participants. Lastly, the survey, while providing both quantitative and qualitative empirical material was also used as a purposive collection tool to identify potential recruits for the main interview sample.

Because the survey was able to reach a larger number of participants who were invited to respond in a more distanced way to the researcher, it assisted as an important source of data in addition to the in-depth interviews. Inevitably in the interview, particular power relations were at play that inflected the types of responses produced. This is not to say that the survey did not also elicit a form of power relations through language and design/ layout of the interface, however it provided a tool free from the face-to-face relations of

7 Attitudinal Likert scale questions were drawn from Yager's adaptations of: (i)'Eating disorder examination Shape and Weight concerns' (Fairburn & Beglin, 1994; Yager, 2007); (ii) Dutch Eating Behaviours Questionnaire Restricted Eating Scale (van Strien, Frijters, Bergers, & Defares, 1986; Yager, 2007); and (iii) the Obligatory Exercise Questionnaire (Pasman & Thompson, 1988; Yager, 2007).

the interview. This presents an interesting variation of breadth to the data set (Brandl-Bredenbeck & Kampfe, 2012).

The interviews

There were three clusters of interviews as part of the study:

a. Pilot interviews with pre-service teachers;
b. Main interviews with pre-service teachers; and
c. Teacher educator interviews.

Pilot interviews were utilised at Moore University to trial the interview questions and develop my experience as an interviewer on this topic. This allowed for a refinement of interview questions, the practice of interview techniques and development of survey questions for the main study. Each pilot interview lasted between 40-60 minutes and followed a semi-structured format. The key themes addressed included: meanings of health; the influences on the PPGTs' meanings of health; and specific understandings of obesity and the body in relation to health and children. This latter topic was intentionally left until the end of the interview so that it would not influence more general responses to questions of health with the notion of obesity or weight related 'health'. Participants were recruited in lecture time and via email through the good will of the lecturers. I had some initial difficulty recruiting participants, and so only five PPGTs participated in a pilot interview. However this sufficed for a discourse analysis of the texts, providing enough material to inform the survey and the later 'main' interviews. Two male and three female PPGTs participated in a pilot interview, only one of whom was a Bachelor of Education student, the others were GDE students.

The PPGTs were recruited for interviews via an email from contact information they supplied at the end of the online survey. Responses to the request, 'could you give an hour of your time for a survey?' allowed me to identify 17 PPGTs from both Sites A and B who were willing to take part in a semi-structured interview. The selection of interview participants was designed to represent the demographic make up of the courses. Gender, cultural background, age and previous undergraduate qualification(s) (for post-graduate participants) were taken into account when selecting interview participants. The interviews set out to explore the participants' understandings of health and contemporary health issues, the role of food choices and physical activity in health, their role as teachers of physical and health education in the near future, their perceived knowledge of current

health initiatives aimed at young people and media representations of health (see Appendix 4 for guiding interview questions).

Interviews were prearranged by email and scheduled in a way that would best fit with participants' academic timetables, taking into account the logistics of students' professional experience commitments and assessments at different times throughout the university year. Follow up interviews were conducted with three of the 'main' interview participants at Moore University. This was intended to allow for further probing of the concepts initiated in the first interview, with the aim of adding to the richness and thus saturation of data (Leech, 2005). However after three follow-up interviews it was apparent that some themes of health and the body had already emerged and it was unnecessary to proceed with more.

Each of the 23 (pilot and main) interviews were transcribed and entered into the data analysis program QSR NVivo (Windows, version 9), which provided a tool to code the interviews and identify emergent themes. Six male and 17 female agreed to take part in semi-structured interviews. The interviews went for between 45 to 115 minutes, with the variance largely between pilot interviews (closer to 45 minutes) and main interviews (closer to 70 minutes). Most of the interviews lasted around 60 minutes.

Analysis of empirical material

The analysis of surveys entailed aggregating responses for each Likert scale and coding open ended responses in Microsoft Xcel to ascertain the frequency, similarities and differences in the participants responses. The analysis of interviews involved listening to the audio recording whilst re-reading hard copies of transcriptions to become familiar with the data (Carabine, 2001). It was helpful, drawing on Honan's (2007) methodological approach, to treat participants responses as *rhizomatic*[8] flows constructed in a moment of time and thus in process. Applied here, this means that texts were not considered as 'truth' per se, but rather constructs of discourse at the time of the interview and connected to other discursive narratives. Empirical investigations adopting a similar poststructural approach have enabled other researchers to consider research problems of gender differences (Flintoff, 2008; Flintoff & Scraton, 2001; Larsson, Fagrell, & Redelius, 2007), class differences (Azzarito & Solomon, 2005), body

8 A rhizome (and its 'rhizomatic' usage) as taken from Deleuze and Guattari: 'Any point of a rhizome can be connected to anything other, and must be.... A rhizome ceaselessly establishes connections between semiotic chains, organisations of power, and circumstances relative to the arts, social sciences, and social struggles' (1987: 7).

pedagogies (Evans et al., 2008), teenage pregnancy (Luttrell, 2011) and eating disorders (Evans, Rich, Davies, & Allwood, 2008; Halse, et al., 2007; Malson, 1998) (Halse et al., 2007; Malson, 1998). 'Empirical material' in these and other studies is seen as discursively created in a particular time, place and space. Central to this analytical technique is the capacity to read multiple truths, rather than uncovering an essential truth. By default with this comes a plentitude of questions and lines of analysis that can be asked. As Alvesson and Skoldberg (2006: 276) contends 'empirical material should be seen as an argument in efforts to make a case for a particular way of understanding social reality, in the context of a never-ending debate'. Thus in the process of analysis, I did not seek to explain or construct 'true' identities, beliefs and attitudes of the pre-service teachers, rather I sought to identify the participants' subject positions in relation to meanings of health and the body, particularly in light of the 'conditions of possibility' of contemporary healthscapes.

From a close reading of the data, key overarching coding themes emerged in relation to the participants' responses in relation to health and the body. The themes from the interviews and surveys fell under the broad coding themes of: meanings of health and the body; knowledge sources; changes in meanings of health over time; biography and lived experiences (including school, family, friends, popular cultural); schools, teaching and children; and discourses of overweight and obesity. The emergent themes were then used as the basis for seeking theoretical understanding. In particular, the notion of discourse positions, and subjectivities in relation to health and the body became useful vehicles for describing the emergent themes. Additionally, poetic transcripts were utilised as a method of analysis and in chapter six a form of dissemination of the research themes. As a methodological tool, poetic vignettes allow for a different form of meaning communication that extends beyond the capabilities of discourse analysis. Sparkes and Templin (1992: 124), it seems, first forged out a space for poetic vignettes in sport and physical activity research, stating, 'poetic vignettes… under certain circumstances, can have the potential to generate understanding in a way that is different from the more traditional forms of representation'. The methods of analysis are discussed in more detail in chapter four, five and six specific to the empirical material being described.

1.3 Reading this thesis

In her coauthored chapter on dissertation writing, McLachlan writes, 'what will your plate say about you' (Burrows, McLachlan & Spowart, 2012: 354) providing a metaphor of the thesis in relation to the arrangement of a culinary dish. Calling for an appreciation

of the artistic and creative pursuit of knowledge making, she and the other authors write, 'the traditional format is no longer the orthodoxy ... for physical education research... accessing examiners who think outside of the conventional thesis square will be crucial for those wanting to break free from tradition' (Burrows, McLachlan, & Spowart, 2012: 349). I begin with reference to Burrows et al. work here in order to situate my own thinking and methods in assembling this thesis. Straddling both conventional (such as descriptive statistics) and somewhat 'fringe' (e.g. poetic vignettes) methods I have aimed to present a rich and useful analysis of PPGTs' knowledge in relation to health and the body. Decisions have been made around what to include, what to leave out, what to emphasise, what to background, how to classify different literature, and how to arrange the narrative of the thesis.

The organisation of this dissertation has been designed for the reader to make active connections between the individuals' lived histories and social formations of health and the body. The second chapter begins this project by establishing theory of the self and subjectivities as it is applied in this thesis. The theoretical tools of power-knowledge, subjectivity and practices of the self are discussed. The third chapter traces a dispositif of obesity and health imperatives. Discourses of health and the body in both schooling and contemporary healthscapes that submit individuals to particular ways of knowing are unpacked. Both of these contexts – school and culture while not discrete, are important to this study given schooling is the context in which the PPGTs will teach and 'contemporary healthscapes' are where the PPGTs experience 'health' more personally. Chapter four provides an overview of the two institutional sites of teacher education and the context within which the PPGTs were given opportunities to formulate knowledge of health and the body in relation to the H-PE learning area. Subject outlines and interviews with teacher educators account for the empirical material analysed in this chapter. Chapter five is the first of two principal analysis chapters addressing the PPGTs' meanings of health and discourse positions in relation to health and the body. Chapter six takes a narrative approach to discourse and deploys poetic vignettes of different individuals who fall in and between three thematic discourse positions in relation to health and the body; agreement, disagreement and negotiation. Extending upon discourse positions, developed as an analytical tool in chapter five, Deleuze's notion of the fold and Foucault's notion of technologies of the self are drawn on in chapter six to further understand the complexities of individuals' entanglement in multiple discourses

beyond discourse positions. Chapter seven brings together the knowledge presented in this thesis and provides a discussion which points to how we might 'act' through pedagogical practice in teacher education. A discussion of differentiating health 'education' from health 'promotion' is put forward raising questions for the field to consider.

1.3.1 Epistemological orientation: an autobiographical note

> I was saying simply this: perhaps everything is not as simple as one believes (Foucault, 1974: 619)

Macdonald et al. (2002) provides a snapshot of contemporary physical and health education research and points to the widespread agreement that a theoretical perspective connotes a philosophical stance; a view of the world that broadly informs the research process through making assumptions explicit. Theory is deeply rooted in human thought, thus this research venture is ideologically and epistemologically positioned and can be read as a political contribution to knowledge. I do not see this thesis as the only way to theorise PPGTs' meanings of health or a blueprint for practice. In accord with Foucault, I simply seek to challenge taken for granted truths that are presented as beyond question; in so doing I take heart in his premise, 'the role of the intellectual does not consist in telling others what they must do. By what right would he (sic) do so? ... it is, through the analyses that he carries out in his own field, to question over and over again what is postulated as self-evident' (Foucault, 1989: 305). I have come to reflect on this thesis as an *assemblage* to reflexively consider the flows of power-knowledge that operate through the connections of knowledge drawn on by me as the researcher. Drawing from Deleuze and Guattari:

> An assemblage, in its multiplicity, necessarily acts on semiotic flows, material flows, and social flows simultaneously (independently of any recapitulation that may be made of it in a scientific or theoretical corpus). There is no longer a tripartite division between a field of reality (the world) and a field of representation (the book) and a field of subjectivity (the author). Rather, an assemblage establishes connections between certain multiplicities drawn from each of these orders, so that a book has no sequel nor the world as its object nor one or several authors as its subject (1987: 22-23).

As part of challenging taken for granted truths, one must reinstatntiate the flows of discourses being critiqued. I have found this to be an ongoing struggle through my canditature for two reasons. Firstly the frequency with which the words 'weight' and 'obesity' have been typed, thought about and spoken of, particularly given my personal interest in not wanting to isolate out the 'other' but rather to find spaces of

deterritorialisation[9] of the abject 'unhealthy', 'fat' individual, in order to open up new possibilities for (embodied) subjectivity. Secondly, 'semiotic', 'material' and 'social' flows associated with obesity discourse are reproduced in this very thesis itself. Even if understood and calculated in social discourse with a critical lens, the dominance of this taken for granted discourse continually presents challenges as a researcher 'swimming against a tide' of health imperative truths. Truths which I have, and seen others, experience. What has flowed unabated through the time it has taken to complete this research project are myriad newspaper articles, reality shows and social commentary, as well as student teachers' discussion in classes I have tutored, about weight, fat, bodies and 'health'; narratives that I would call 'dangerous' when taken up in educational practices of primary schools. Collectively these have propelled my motivations for the importance of this inquiry. These intentions and assumptions, as others in the field of H-PE scholarship have pointed out, underpin any research (Flintoff & Webb, 2012). At times I have taken comfort in Wright's (2006) contention that poststructural and postmodern perspectives have the potential for emancipatory purposes by making visible the ways in which power and knowledge operate to privilege certain practices and forms of subjectivity. I adopt this approach, taking into account Biesta's caution (2008: 202), that emancipation is not a form of freeing oneself from or escaping power, but rather, one that 'allows for a different power-knowledge constellation – a different way of being and doing'. In this sense, there is a social justice agenda (Parkes, Gore, & Elsworth, 2010) and an alternative approach to 'health' that I bring to the omnipresent preoccupations with weight and physical health in our social landscape. Simply, my view is that if we could harness the energy wasted on weight and 'health' talk and direct it into more productive and innovative health education projects, children would ideally have more holistic and critical perspectives of 'health' and the body. For instance, while I admit this is not a straightforward task, tucked away aspects of health such as spirituality or interdisciplinary projects with the arts and languages, for instance could open up new possibilities of flows of knowledge beyond narrow perspectives of health.

Undoubtedly writing this thesis has been a transformative process. Bloomfield (2006, cited in Hastings & Letts, 2006) recognises the interrelatedness of method and analysis and the transformative potential of that relationship. Drawing on Dorothy Smith,

9 Deterritorialisation is used here borrowing Deleuze and Guattari use of the concept in Anti Oedipus (Deleuze & Guattari, 1985) as a casual link to the process of directly challenging the dominance of obesity discourse power relations.

Bloomfield describes how the 'power of the discursive practices of the academy and sociological research […] served to conceal her standpoint as a researcher' (Hastings & Letts, 2006: 1). Similar to Smith throughout this thesis every attempt has been made to self-consciously critique with the help of others, be it books, or conversation with colleagues, the topic under investigation. While this has lead to often 'invisible' work as part of this thesis, it has strengthened my understanding of the utility of different theories and approaches to empirical research, and ultimately the study here.

The intention of this thesis is to provoke readers to see themselves in the work. Overtime some of this knowledge has been firmly set into the fabric of peoples' thinking in H-PE studies or understandings of health and how best to achieve it. In this context familiarity makes them seem 'right', 'ethical' and 'best practice'. However, drawing on Evans and colleagues (2008) it is important to acknowledge the complex political struggles and power relations in everyday life:

> rarely in the course of our own partial and incomplete research have we come close to documenting the complexity of human subjectivity and its socio-political contingencies… honest acknowledgment of the limitations of one's own research in addressing the dynamics and intersections of subjectivity may, indeed, be necessary precursor to assessing how well others, including those producing official policy texts, address 'intersectionality', if at all, thereby limiting their capacity to embrace and deal effectively with the complexities of people's lives (Evans, et al., 2008: 128)

Further to this thinking is the role of the individual - the agency as often described, not in the sense of its own single entity, but a collective word that refers to much time consuming thought, reflection or contemplation in the Arendtian sense (1978), where solitude encourages reflection and can give rise to an antidote for conformism. As Gunaratnam (2003) argues, reflecting on the complexities, ambiguities and contradictions of doing research is undoubtedly a 'messy' business. However, sharing others' views of the need for a critical take on body pedagogies and discourses of obesity in schooling (Evans, 2003; Kirk, 2006; Leahy, 2009; Rich, 2011a; Yager & O'Dea, 2005), this study forges a critical gap for teacher education programs, pedagogues and policy to address.

Chapter 2

Theorising the self

Introduction: locating theories of subjectivity and the self

Power-knowledge, the *dispositif* and discourse

The hermeneutics of the self and embodied histories

2.1 Introduction: locating theories of subjectivity and the self

Throughout this thesis, theories of the self are considered useful for situating the stories PPGTs tell about themselves and others within the wider social, political and historical structures of knowledge. They offer an opening into the ways individuals position themselves, against and with others, through language, social truths and experience. Thus, 'the self' is enmeshed in the power-knowledge matrices of 'the social'.

The purpose of this chapter is to discuss theories of the self and subjectivity and their relevance for understanding the ways pre-service teachers navigate the social structures and 'ideological complexes' (Hodge and Kress, 1993) of health and the body. The premise underpinning this endeavor, like similar projects, is that subjectivities are thought to inform teachers' curricular decisions and pedagogical practices (Macdonald & Kirk, 1999; O'Connor & Macdonald, 2002; Sirna, et al., 2010). One constructive way of approaching the self is through the notion of subjectivity, in particular, the ways subjectivity is informed by multiple knowledge structures underlying the production of truths in a particular time and place. A knowledge structure is identified and referred to by Foucault (1970) in *The Order of Things* as an 'episteme' or the 'conditions of possibility' that constrain and limit the history of knowledge (O'Farrell, 2005). In brief, it is the patterns of similarity and difference and the rules that underlie inclusion and exclusion of knowledge and social discourse. These concepts I will give more attention to later in this chapter, however to draw out how I am theorising the relationship between knowledge structures and subjectivity, I borrow McLeod and Yates (2006: 87) description. They use a similar theoretical approach to that developed in this thesis and describe subjectivity in the following way:

> discourses make available subject positions, provide resources for self making, regulate/normative ideals, incite certain ways of being, and can also structure the very techniques available for fashioning the self. But subjectivity is embodied and emotional – desires, dreams and ambivalence – and accumulating life histories shape how subject positions are negotiated and subjectively is fashioned (McLeod & Yates, 2006: 87).

By using this quote, I want to draw particular attention to the embodied, emotional and accumulating life histories that shape the self. The self is incited into ways of knowing by discursive truths, however, this is mediated by the individual's complex pre-existing embodied experiences and accumulation of beliefs. Following these lines of thought, consideration can be given to the social and individual practices of both the embodied

realities and the discursive social and cultural constructions of health and the body, spoken and written by the PPGTs in this study. These two undercurrents (the social and individual) can be referred to as the 'outside' (macro discursive social formations) and 'inside' or (micro embodied realities) of the 'self'. Each of these themes form the basis for this chapter. First, I will take a few paragraphs to situate how the self, or subjectivity, is being theorised in this thesis among other ways of knowing.

Since the discipline of philosophy emerged, the 'problem of subjectivity' has entertained philosophical enquiries from both social and psychological traditions into consciousness and experience concerning 'knowledge, action and ethics' (Besley & Peters, 2007: 3). While I do not expand on the terms, 'knowledge', 'actions' and 'ethics' here, these elements make up theorisations and analytics of the self, selfhood and identity. Atkins (2005) has grouped theories of the self into six loose categories that are useful for broadly differentiating ontologies of the self: (i) early modern philosophy (Descartes, Locke, Hume); (ii) later modern philosophy (Kant, Hegel, Nietzsche); (iii) phenomenology and existentialism (Sartre, Merleau-Ponty, Heidegger); (iv) analytic philosophy (Frankfurt, Parfit, Williams); (v) post-structuralism (Freud, Foucault, Ricoeur); and (vi) feminist philosophy (de Beauvoir, Butler, Irigaray, Mackenzie). While these are not the only way of organising and naming theoretical traditions, the theories epistemologically situated in each of these categories present diverse and at times conflicting notions of the self. These different theories span from, what can be called, modernist (including humanist, enlightenment and Freudian) perspectives to postmodernist (Foucault, Kristeva, Deleuze and Guattari) viewpoints (Mansfield, 2000).

Modernist perspectives are informed by the belief that there are absolute principles for humanity or personhood. According to Peters and Marshall (1995), cultural and political interests of a 'knowable' and predictable self are said to propel this assumption - even if we haven't uncovered the 'truth' yet. One of the limitations of this way of thinking is that the self is thought to have an innate or true self. This leaves the social structures that shape selves underplayed or ignored. On the other hand, postmodernist perspectives have refuted the idea of a fixed and knowable self and directed their attention to understanding the infinite field of differences that can shape humanity. Nietzsche's (2003) sentiment, 'as far as ourselves are concerned we are not "knowers"', can be aligned with this postmodernist position, because the self is seen as a social actor of

knowledge, rather than 'holding knowledge'. Similarly, this is what Foucault espouses, when he states that there are no 'universal necessities in human existence' (Foucault, 1988: 11). From an epistemological standpoint, 'modernist' perspectives of the self are more likely to use a metaphysical approach to knowledge assuming an overriding theory that can eventually be derived or measured, whereas 'postmodernist' perspectives are likely to use a genealogical method to uncover how we represent ourselves within historical inconsistencies and antagonisms of 'truth' (Mansfield, 2000).

A postmodern perspective is more specifically associated with a 'deconstructionist' paradigm (Lather, 2006) which includes postmodern, poststructural and posthumanist - 'post' methodologies. As part of a 'deconstructionist' theoretical approach, poststructuralism is the preferred term; as it is more widely used in educational research throughout Australia, Europe, the UK and New Zealand (Wright, 2006). Further to this, poststructuralism has a propensity to be closely associated with the work of Derrida and Foucault, whereas postmodernism is a widely adopted term in the fields of architecture, art and science to define the 'aftermath of modernism' (Appignanesi & Garratt, 2006). From the poststructural position adopted here, no one theory can provide a complete reading of the self, rather different perspectives offer a window of opportunity to understand individual selfhood. A poststructural perspective is useful because it directs attention to the ways PPGTs negotiate cultural discussions of health and the body, and how these competing ideas, what can be called 'a clash of discourses' (Lather, 2006: 41), sculpt individual experiences. In particular, it allows me to emphasise the fragmentary, composite, changing and multiple nature of PPGTs' selfhood in relation to health and the body. These ideas of the self, particularly in the educational context, have largely stemmed from the work of Foucault (Parkes, et al., 2010).

Foucault's later writings and lectures about the self offer a complex set of tools to understand the individual as involved in mediating both social and governing truths. Among the many opportunities for application of his analytics, Foucault himself described his work as a 'tool box' and encouraged diverse audiences to 'rummage' and 'use' his ideas:

> I would like my books to be a kind of tool box which others can rummage through to find a tool which they can use however they wish in their own area… I would like [my work] to be useful to an educator, a warden, a magistrate, a

> conscientious objector. I don't write for an audience I write for users, not readers (Foucault, 1974: 423-4, cited in O'Farrell, 2004).

Because I am interested in the intersections of the self and the social in this thesis, there are two overarching themes in Foucault's 'tool box' that I draw on for investigating PPGTs' meanings of health and the body. The first is power relations. In particular, the mechanisms in discourse and the relations that are manifest in PPGTs' talk about health and the body. Power itself is not something owned or unchanging in its nature; rather it is a relation between individuals and groups. Discourses are made available and maintained and transformed through relationships between social, economic and political interests and mediated, for example, through institutions and mediascapes. These power relations constitute the complex sets of truths that exist at every level of the social body. Power in this logic guides our thoughts and actions and is closely related to knowledge formation, so much so that Foucault deployed the term power-knowledge not as a means to signify knowledge as power, but that both power and knowledge 'generate each other in endless cycles' (O'Farrell, 2005: 67). In this thesis, power is used in a methodological sense to analyse the relationships of knowledge between the self and the social.

The second theme in Foucault's work that I use is his concept of 'practices of the self' or 'care of the self' from his lectures on *The Hermeneutics of the Subject* (Foucault, 2005). This is deployed to understand how individuals interpret truths within episteme(s) of knowledge. Foucault's 1982 lectures on the hermeneutics of the subject have only recently been published as a full volume in French (2001) and English (2005), along with his 1983 lectures collectively translated as *Fearless Speech* (2001). Together these collections offer insights into his analyses of the formation of the self through self-reflection and the ways individuals negotiate truths. As others have shown, Foucault developed an 'analytics', rather than a theory (Deacon, 2003) of self-formation. Through *The Hermeneutics of the Subject* and *Fearless Speech*, in his later work, Foucault examines ethical systems from the Ancient Greeks to the thought of imperial Rome. These elements in Foucault's work deal with the 'autonomy and interrelationship of governmental and ethical practices… and the relation between these practices of self-formation, on the one hand, and political subjectification, on the other' (Dean, 1994: 145). In other words self-reflection (as an ethical practice) contributes to the agentic aspect, or freedom, of the self – a self that is located in a nexus of political

subjectification. In brief, 'practices of the self' is about how individuals see themselves and their identities 'in an infinite, multiple series of different subjectivities that will never have an end' (Foucault, 2000a: 276). One advantage of applying practices of the self as a methodological tool is that it allows me to understand how individuals can be modified through practice in discourse.

Other theoretical insights in Foucault's 'tool box' beyond power, knowledge and practices of the self are drawn on in this thesis, however these are used to understand more specific aspects of power relations and the self. Biopower, games of truth, *dispositif* and *parrhesia* form the additional theories from Foucault's 'tool-box' that will be brought into play. These are introduced where relevant and each provides insights into self-formation and the potential for individuals to be aware of power relations that form the thinkable, sayable and doable in everyday life.

While the two overarching themes from Foucault's work I draw on, relations of power and practices of the self, form the bulk of the work of Foucault's utilised in this thesis, I was left with questions about how these interact at the micro level of the self, and how lived histories and temporality shape memory and experience, in particular, the complexity of the ways the self acts and speaks differently in different circumstances. Reading others (e.g. Avalos & Winslade, 2010; St. Pierre, 2001; Tamboukou, 2010), I became interested in Deleuze's notion of the 'fold, foldings and unfoldings'. In particular, I was interested in how the fold, as St. Pierre (1997: 411) writes, 'seemed to describe the conflation of the subject-object and inside-outside binaries'. Deleuze's (1993) interpretation of Foucault's notion of subjectivisation, or how we become the persons we are, argues that subjectification is primarily an ongoing process of folding the outside world in: 'the act of pleating or folding is thus the doubling-up, the refolding, the bending-onto-itself of the line of the outside in order to constitute the inside/outside – the modes of the self' (Probyn, 1993: 129).

Others in educational research have applied Deleuze's notion of the fold as well as Foucault's work on power knowledge and the self, to understand how we are positioned and folded by power relations (see for example Avalos & Winslade, 2010; St. Pierre, 2001). Thus, in addition to Foucault's theories of power knowledge and practices of the self, I draw on Deleuze's notion of the fold to understand the micro practices of lived

histories and how mental activity is situated in reality. Mental activity is defined in this sense as unfolding 'in response to forces around it' thus acting upon received knowledge, discourses and practices (Due, 2007: 5). Writing about his students Deleuze explains, 'nobody took in everything, but everyone took in what they needed or wanted, what they could use' (Deleuze, 1995: 139). In this study, I use Deleuze's notion of 'folding, unfolding and refolding' (Deleuze, 2011a: 137) as a way of thinking. It allows one to consider how students, in this case PPGTs, take in particular knowledges and not others, it also allows for a disrupting of the interiority/exteriority binary of the self and the humanist (or modernist) notion of the developing self as a 'process of development towards a pre-determined potential [or 'telos']' (Avalos and Winsdale, 2010: 71).

Adopting the analytics and theories of power-knowledge, practices of the self and foldings allows me to interpret the lived experience of PPGTs and the ways these experiences of the outside (discourse, knowledge and the spatial environment) become part of the self foldings and unfoldings. From a poststructural perspective, the interest is not in separating the self and the social, but rather to understand the range of possibilities and differences that manifest in individuals' ways of knowing and the connections between how individuals see themselves within the sets of truths available to know and speak the truth. The project of this thesis is to consider the self in more detail, in order to understand how some PPGTs take up particular truths and reject others. In the following sections, I will expand upon the theories and analytics of these two areas, power relations (power-knowledge, the dispositive and discourse) and the self (the hermeneutics of the self, foldings and embodied histories).

2.2 Power-knowledge, the *dispositif* and discourse

The term 'discourse' is defined and employed in many different ways. Sara Mills (1997: 1) writes that it has become a concept of 'common currency' in a variety of ways in different disciplines, and often left undefined. From a Foucauldian perspective, and one which provides relevance for this project, the concept of power is implicit to discourse (Hall, 2001). Discourse, as a concept, represents a dynamic set of relations that limit at a particular time how something can be 'known'. Foucault emphasized the complexity of discourse as not a straightforward or fixed concept but rather a relational concept that 'form(s) the objects of which they speak… Discourses are not about objects; they constitute them and in the practice of doing so conceal their own intervention' (Foucault, 1972: 49). Thus, discourses are deeply implicated in the process of meaning making.

Foucault discusses in *The Archeology of Knowledge* how his application and expansion of the word discourse has been in a range of ways, 'treating it sometimes as the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as a regulated practice that accounts for a certain number of statements' (Foucault, 1972: 80). Therefore, discourse is not limited to either language or practices. In particular, through his work Foucault reflects on the often invisible, 'tight' concealment between words and things and shows the ways words and concepts make things appear to exist, rather than as effects of practices. This is a key concept to his theory, as drawn on in this thesis. He writes in *The Archeology of Knowledge*, that the strength of 'truth-telling', or the way things appear to exist, loosens its embrace in the process of analyzing a discourse:

> I would like to show that 'discourses' in the form in which they can be heard or read, are not, as one might expect, a mere intersection of things and words: an obscure web of things, and a manifest, visible, coloured in a chain of words; … discourse is not a slender surface of contact, or confrontation between a reality and a language (langue), the intrication of a lexicon and an experience… in analysing discourses themselves, one sees the loosening of the embrace, apparently so tight, of words and things, and the emergence of a group of rules proper to discursive practice (Foucault, 1972: 48-49).

Power relations of knowledge are crucial to understanding the discourses that shape the work individuals undertake on the self. Power is envisioned as a relation or process operating in the social world, rather than something possessed by individuals - it operates within all relationships and is expressed through discourse (Foucault, 1980: 341). Foucault was able to show how power 'operates, concretely and historically, in the form of strategic relations aimed at governing subjects' (Deacon, 2003: 275). However these are 'implicit' relations between the ways individuals experience the world around them. Power relations operate:

> on the field of possibilities in which the behaviour of active subjects is able to inscribe itself. It is a set of actions; it incites, it induces, it seduces, it makes easier or more difficult; it releases or contrives, makes more probable or less; in the extreme, it constrains or forbids absolutely, but it is always a way of acting upon one or more acting subjects by virtue of their acting or being capable of action. A set of actions upon other actions (Foucault, 2000b: 341).

If we consider power as a set of discursive actions upon other actions, then individuals are subject to different possibilities for responding, or being 'induced', or 'seduced' into particular practices of the self or 'freedom'. Through a 'normative sphere', possibilities and impossibilities are continually negotiated. For Foucault, these relationships are

formed through the exercise of power in which social intelligibility is constituted and present everywhere in the micro and macro practices of all societies:

> the multiplicity of relations of force which are immanent to the domain where they operate, and are constitutive of their organization; the game which by way of continual battles and confrontations transforms them, reinforces them, inverts them (Foucault, 1974: 121-2).

Power relations could be understood as about subjectivising the subject to sets of truth. I make use of a quote from Appadurai (1996) to signal the social processes, in his case flows of media and migration, that are constitutive of a subject:

> [mediascapes provide] large and complex repertoires of images, narratives and ethnoscapes to viewers throughout the world, in which the world of commodities and the world of news and politics are profoundly mixed. What this means is that many audiences around the world experience themselves as a complicated and interconnected repertoire of print, celluloid, electronic screens and billboards. The relationships between the realistic and fictional landscapes they see are blurred (Appadurai, 2006: 35).

The social changes to the self made visible in Appadurai's account of 'mediascapes' and urban 'ethnoscapes' in everyday texts (print, celluloid, electronic screens), and the instabilities brought about by mass migration (Appadurai, 1996: 3) are relevant here because they offer a window of understanding into the ways media technologies 'interrogate subvert and transform contextual literacies' of individuals 'everyday' experience. While the central force of his work is the relational nature of knowledge and the self - shaped by discursive global flows of culture and ethnicity - the significance to this thesis is that it stands in the tradition of power relations and the self; where individuals move within and amongst pluralised discourses of health and the body. There is not sufficient scope to explore the globalised nature of health knowledge more specifically, however the pace with which migration and media present rapid changes to individuals' sense of self in Appadurai's work, can be translated to the process of self forming practices that take place in the established social tapestry of health truths available to PPGTs. Media technologies as described in Appadurai's work, for instance, present multiple threads of truth telling that shape the relations of what is knowable to an individual self.

Picking up on the relational nature of 'knowing', Foucault did not refer to power as residing with particular individuals or groups (such as media), but rather power operates through relations in reality: 'power means relations, a more or less organised, hierarchical

co-coordinated cluster of relations' (Foucault, 1980b: 198). In this sense media is a non-discursive 'practice' constituted of discursive truths. The mediascape can be understood as one such cluster of relations where PPGTs negotiate health and the body. Through this process a dialogue of discussion is opened up. Discussion itself, as Mansfield (2000) argues is at the forefront of self-constitution - forms of selfhood are made possible through antagonisms between sets of truths:

> our experience of ourselves remains forever prone to surprising disjunctions that only the fierce light of ideology or theoretical dogma convinces us can be homogenized into a single consistent thing (Mansfield, 2000: 6-7).

Subjectivities then, are dependant upon discursive and cultural formations of difference and contradiction, however some, as Mansfield (2000) articulates, can be more powerful or 'dogmatic' than others. In Appadurai's work, antagonisms, or 'agonisms' (Foucault, 1983) and disjunctions come about through cultural differences associated with global flows of people and objects. In many ways the self, in line with poststructural thinking, is understood as an unfinished, yet consistent and capable actor of mediation due to its location in a context of multiple voices. Rather than individuals having 'essential freedom', they are located in relationships of 'reciprocal incitation and struggle' (Foucault, 1983: 222). Hodge and Kress (1993) refer to this struggle of multiple 'voices' as 'ideological complexes… a functionally related set of contradictory versions of the world'.

> In order to sustain… structures of domination the dominant groups attempt to represent the world in forms that reflect their own interests, the interests of their power. But they also need to sustain the bonds of their solidarity that are the conditions of their dominance. Dominated groups are not always everywhere blinded in the operations of these structures – as they have been portrayed in Marxists accounts. They in their turn attempt to resist the effects of domination, often succeeding, in countlessly many social encounters within social structures (Hodge & Kress, 1993: 3)

The 'ideological complexes' and social structures of health and the body are central to analysing the ways PPGTs in this study construct meanings of health and the body. This is not only because of the multiple and contradictory subject positions available for participants to take up, but also the consistency with which some truths are considered more legitimate than others. The question then becomes, where does power derive from and what forms of power-knowledge shape the current healthscape? Foucault grounds his work in tracing historical truths of the present to answer this question. He argues:

> history is the violent and surreptitious appropriation of a system of rules, which in itself has no essential meaning, in order to impose a direction, to bend it to a new will, to force its participation in a new game, and to subject it to secondary rules, then the development of humanity is a series of interpretations (Foucault, 1984: 86).

The configurations of power-knowledge relations of a particular time of a particular problem can be understood in Foucault's work as an episteme. As Foucault asserts in *The Order of Things*: 'in any given culture at any given moment, there is always one episteme that defines the conditions of possibility of all knowledge' (Foucault, 1970: 168). An episteme is something that is purely discursive. Because of its discursive nature, an episteme is a relation or exercise of power. Foucault remarks:

> my problem is essentially the definition of the implicit systems in which we find ourselves prisoners; what I would like to grasp is the system of limits and exclusion which we practice with out realizing it; I would like to make the cultural unconscious apparent (Foucault, 1971: 73).

It is however possible, as Foucault acknowledged in his later writings in *The Confession of the Flesh*, for several epistemes to coexist and interact at the same time (Foucault, 1980a). Individually an episteme was named a *dispositif* in Foucault's later work, or 'apparatus'/ 'dispositive' as is it has often been translated from French (for detailed discussion see Bussolini, 2010). While the 'episteme' is a useful theoretical tool because it allows for an analysis of the taken for granted exercises of power, it is limited by its analysis of discursive structures. Rather than the theoretical concept of the episteme, the *dispositif*, includes both discursive and non-discursive cultural practices.

For this reason, I use the notion of the *dispositif* more specifically in the next chapter to consider the limits and exclusions for thinking about health and the body in contemporary healthscapes. Bussolini outlines the analytical application of the *dispositif* as:

> a tool for analyzing or understanding a multiplicity of forces in movement and contest. Indeed the way Foucault described the concept, it seems first and foremost a tool to think about power in the perpetually dynamic social field (Bussolini, 2010: 90).

I will expand more on the notion of the *dispositif* in the following chapter and demonstrate its usefulness for mapping discursive and non-discursive practices of health and the body.

To investigate the power relations of social events and how normativity is structured, we need to grasp how thoughts or beliefs are accountable for events or practices. With the help of Eckerman (1997: 154) and others (Besley, 2005; Burkitt, 2002), I was able to trace the different ways Foucault theorised modes of subjectivisation through which humans become subjects via power relations. In particular, Foucault departed from the notion of the 'docile' self that permeated his earlier descriptions of the institutions of asylums (Foucault, *Madness and Civilisation*, 1965), the clinic (Foucault, *The Birth of the Clinic*, 1973), the hospital (Foucault, *The Birth of the Clinic*, 1973), the prison (Foucault, *Discipline and Punnish,* 1979), and public health (Foucault, *Power/ Knowledge*, 1980) and turned to describe a more 'active' self in his later work (Foucault, *The History of Sexuality I*, 1981). In Foucault's former analytical methods, there was an emphasis on the self as caught up in external constraints of power relations as a historical processes. In *Discipline and Punish* Foucault writes:

> The body is also directly involved in a political field … Power relations have an immediate hold upon it; they invest it, mark it, train it, torture it, force it to carry out tasks, to perform ceremonies, to emit signs. This is directly connected to the economic system, for the body is both useful and productive. But the body as labour power is possible 'only if it is caught up in a system of subjection' (Foucault, 1977b-6).

Technologies of power have been taken up and used in productive ways in educational and HPE work. For instance Gore (1995), from what I can tell, was one of the first to utilise Foucault's work as a method in educational research. She deployed Foucault's eight techniques of power to examine the practice of power in pedagogy. Briefly these include: surveillance, normalisation, exclusion, classification, distribution, individualisation, totalisation and regulation. Gore found that each of these elements were at play in educational settings. With the addition of some of Foucault's other 'tools', Gore's analysis of power, has been taken up by others in the field of H-PE (Webb, McCaughtry, & Macdonald, 2004; Webb, Quennerstedt, & Ohman, 2008; Wright, 2000b). Kirk (2004a: 129) has also used the notion of disciplinary power to argue that practices associated with sport, 'fitness' and 'dietary regimes' project similar notions of idealised bodies.

While Foucault's earlier analytics on technologies of power are important to acknowledge, and go some length to helping us understand the self, Foucault went on to later assert that discipline is only 'one aspect of the art of governing people'. In this later

work, Foucault emphasises the importance of practices of the self, stating 'we must not understand the exercise of power as pure violence or strict coercion… (power) relations involve a set of rational techniques, and the efficiency of those techniques is due to a subtle integration of coercion technologies and self technologies' (Foucault, 1993: 203). This quote is taken from a lecture given at Dartmouth College in 1980 where Foucault 'defended' his earlier work, arguing that it did not extend to the agency of ethical self-constitution. According to Waganaar (2011: 118), Foucault 'never abandons his key insight that history is irrevocably contingent and that changes in its course are determined by conjunctions of power. It is the analyst's task to explain which forces… brought certain institutional possibilities into being and foreclosed other historical possibilities'. Foucault shows how techniques and practices drive these subjugating forces that shape the ways individuals conduct themselves.

2.3 The hermeneutics of the self and embodied histories

> I live in a world of others' words (Bakhtin, 1984: 143)
>
> To be means to communicate... To be means to be for another, and through the other, for oneself. A person has no internal sovereign territory, he (sic) is wholly and always on the boundary; looking inside himself, he looks into the eyes of another or with the eyes of another (Bakhtin, 1984: 287).

If there are infinite influences and experiences of the self, as Bakhtin implies, how are some remembered and called upon in everyday life rather than others and how do we know what reflects 'us'? What this section addresses is the agentic aspect to the self: an individual's ability to make choices, self reflect and feel an obligation to speak the 'truth'. In this section I consider the self (or subjectivity) as embodied, where work or thoughts can be 'done' and 'undone' or in Deleuzian terms, 'foldings' or 'unfoldings'. From this perspective, individuals come to 'speak as particular kinds of subjects' and 'speak themselves into being' (Poynton and Lee, 2000: 5). Relations of power are fundamental to this process, as Foucault writes, 'if one wants to analyze the genealogy of the subject in Western civilization, he has to take into account not only the techniques of domination but also techniques of the self' (Foucault, 1993: 203). However Foucault is clear that this is not about a Freudian schema for interiorisation; rather he insists we need to get rid of such, and that techniques or practices of the self are due to a 'subtle integration of coercion-technologies and self-technologies' (Atkins, 2005: 214). His

project of the self, mirrors Kant's question[10] of the present: 'what is happening now?' and 'how is it possible to know the truth?' (Besley and Peters, 2007: 6). From this starting point, Foucault uses the notion of subjectivity to describe the ways selves are inscribed and constantly in a relational process.

Subjectivity

Subjectivity is utilised as a relational process - because our sense of the self and the body are assumed to be constituted within a nexus of power-knowledge. Mansfield, writes:

> Subjectivity, refers… to an abstract or general principle that defies our separation into distinct selves and that encourages us to imagine that, or simply helps us to understand why, our interior lives inevitably seem to involve other people, either as objects of need, desire and interest or as necessary shares of common experience (Mansfield, 2000: 3).

In this cultural approach to subjectivity, individuals are both productive and interpretive of knowledge through hermeneutics of the self, with discourse constitutive of this process or dialogue. Thus when combined with social practices, discourses constitute knowledge, subjectivities and power relations (Weedon, 1987). Subjectivity, then, is constantly being reconstituted in discourse each time we speak. The individual, however, often assumes that they are the author of the ideology/'truth' or discourse that they are speaking – this is the type of subject that humanism proposes. In contrary to the notion of an individual as the source of speaking, I consider the self as an effect of language. This section embarks on the delicate nature of these micro relations at the level of the self.

Subjectivity is a 'messy', 'organic', or at least a complex, matrix of power-knowledge relations that operate through an individual. Yet as Mansfield points out (2000: 53), what holds subjectivity together, in a coherent sense, are the discourses of truth and knowledge that discern what one considers 'normal' and 'abnormal' behaviour. Forms of selfhood that are socially and individually constituted as 'normal' are more likely to be comfortable or pleasurable for an individual.

According to Besley and Peters (2007: 58), in his theorisation of subjectivity, 'Foucault was strongly influenced by arguments concerning the body and the importance of space by the phenomenological tradition of Nietzche, Heidegger, Husserl, Merleau-Ponty,

10 From his essay '*What is Enlightenment?*' (1798; cited in Besley and Peters, 2007)

Sartre and De Beavouir and by structuralist methodologies… and Marxist thinkers'. Foucault claims it is the body, soul, thoughts and conduct that are 'directly involved in the political field' of self-constitution (Foucault, 1980a: 26). Foucault's departure from the phenomenological theorists, particularly Heidegger, comes from his rejection of essentialism and the humanist subject and focuses on the historical categories of how humans become subjects. The self, then, is involved in its own self-constitution - through their thoughts and understanding of one's relation to the world. As Weedon (1987: 98) states, processes of self-constitution are never 'unaffected by the memory of previous discursive interpellations'. At the same time, discourse texts/ objects interact in the act of shaping what individuals see. Davies offers a pertinent reflection on this important distinction:

> The point of poststructuralism is not to destroy the humanist subject nor to create its binary other, the 'anti-humanist subject' (whatever that might be), but to enable us to see the subject's fictionality, whilst recognizing how powerful fictions are constituting what we take to be real (Davies, 1997: 272).

In the present study, PPGTs' subjectivities are considered in light of the dense history they bring with them to teacher education and eventually their practice of teaching, in particular how the discursive field or truth games constitute the PPGTs' subjectivities.

Embodiment as part of subjectivity

Since this study is about PPGTs' meanings of health and the body it seems important to consider experiences of embodiment as part of subjectivities. While the notion of 'subjectivity' encompasses embodied experience and Foucault provides centrally important tools to explore the ways subjectivities of health and the body are located in a particular time, place and space of discursive and material experience, there is also attention needed more specifically to the ways subjectivities are experienced through somatic selves. This can be thought of in response to Witz's argument that one needs to be careful of 'over-discursivizing bodies' (Witz, 2000: 10). Acknowledging the lived realities of participants is important to the study at hand, where PPGTs' subjectivities in relation to health and the body are formed through both discourse and materialistions of embodied experiences.

Shilling opens his edited book, *Embodying Sociology*, with the statement '[t]he idea that social norms and social actions inhere with the deepest fibers of our bodily being says much about the importance of embodiment for sociology' (Shilling, 2007: 13). At the

same time, it is an unwieldy task to analytically enter into the tensions between the materiality of the body and the discursive formation of bodies as culturally situated. Because of the difficulty in writing up the materiality of the body, I draw from Karen Barad (2007) who uses the notion of 'entanglement' to describe the self as part of power knowledge relations. There are some recent movements in the field of physical and health education scholarship, albeit small, that call for an extension beyond the notion of subjectivity, the sociology of knowledge, poststructural and social constructionist methods in the analysis of health and the body. This has been played out in discussions at Australian Association of Research in Education (AARE) conferences in the HPE Special Interest Group (SIG) as well as in a paper by Evans, Davies and Rich (2009), 'The body made flesh: embodied learning and the corporeal device'. The objective of the paper by Evans et al. (2009) was to bring the body's corporeal presence into the forefront. Together the authors kindle theoretical pursuits that acknowledge the somatic mediations of lived experience:

> the body's presence as a flesh and blood, thinking, feeling, sentient, species being, a 'body with organs' whose very presence – moving, growing, changing over time – is generative of a meaning potential to which both the self and others must respond, has remained rather a shadowy presence (Evans, et al., 2009: 392).

Given the difficulty of perusing this line of enquiry in more depth within the context of the study at hand, following Shilling (2008), I emphasise the notion of subjectivity as a 'narrative' in time, place and space along with the body as a material, developing, maturing, flesh and blood, corporeality (see Shilling, 2008). Thus, while acknowledging subjectivities in time, place and space, implicit to this are those embodied 'idiosyncrasies' to remind ourselves that subjectivities are always realised through somatic selves, changing socio-biological presences whose attributes are both sensed and seen as 'biological/corporal presences'. By mention of 'embodied', I draw attention to the somatic presence of an individual who is located within a discursive field of truths. Put briefly, embodiment, in this thesis is treated as implicit to the notion of subjectivity and individual experience is central to its formation.

Subjectification and 'the fold'

Subjectification (Subjectivation in French) of particular forms of selfhood is fundamental to understanding the ways social truths impart ways of knowing through an embodied self. Foucault defines subjectification as 'the process through which results the constitution of a subject, or more exactly, of a subjectivity which is obviously only one of

the given possibilities of organising a conscious self' (Foucault, 1996: 472). Deleuze, writing about Foucault, interprets and extends the notion of subjectivisation as a state where:

> The inside condenses the past (a long period of time) in ways that are not all continuous but instead confront it with a future that comes from outside, exchange it and re-create it. To think means to be embedded in the present-time stratum that serves as a limit: what can I see and what can I say today? But this involves thinking of the past as it is condensed in the inside, in the relation to oneself (Foucault, 1996: 98).

Not unlike Foucault, Deleuze describes the self to have the potential for ongoing social change, experience, renewal and reflection. He theorises the notion of 'the fold' as an extension of subjectification.

The foldings of lived experience are conceptually adopted in this thesis for the ways they inform subjectivities in relation to health. The notion of 'fold' comes from Deleuze's uptake of theories from two philosophers Leibniz and Foucault. For the most part, the fold or foldings provides both an interpretation of Foucault's use of the concept 'subjectification' as well as an extension beyond it, and the power-knowledge frameworks that define it, to take into account the individual's lived experience or biography. Malins (2004) describes the interrelationship between Foucault's subjectivisation and Deleuze's later concept of folding as follows:

> Subjectification, for Deleuze, is a process of folding through which the inside (our subjectivity, mind, and body) and the outside (discourse, knowledge, the spatial environment) become part of the inside and the inside always part of the outside. And it is through this folding in of the outside that we construct a self and a way of being in the world; which simultaneously folds back upon the outside (Malins, 2004: 484).

The self with its inside (embodied) and outside (power-knowledge) 'foldings', then, has a 'history which has been enacted and engaged with, not simply imposed' (Fox, 2002: 354). Deleuze describes this 'inside' and 'outside' folding as inseparable:

> The outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside: they are not something other than the outside, but precisely the inside of the outside (2011b: 80).

Deleuze offers one way of how the 'inside' thinking subject is formed through the 'folding' of cultural power - technologies of the 'outside'. He does this by distinguishing

'exteriority' from outside a person. Colebrook outlines this in her interpretation of Deleuze's book, *Foucault*:

> Thought creates 'planes of transcendence' which produce an exterior - such as the world we know, doubt or represent - and an interior - such as mind or the doubting subject. But this relation between interior and exterior relies on what remains hidden, presupposed or 'outside' rather than exterior (2002: 75).

Three elements emerge in this interpretation: the interior (embodied mind), exterior (the world we imagine) and outside (neither interior nor exterior). In a sense it is the conditions of possibility that are available which give rise to knowledge and what one can 'know', imagine and act.

Introducing the notion of the fold and practices of the self offers a theoretical cornerstone that makes it possible to ask, following others in the field (Davies and Evans, 2004), 'how is it that certain discourses of health and the body are identified as appropriate and through what mechanisms do people come to accept them as legitimate or normal?' The foldings of power-knowledge provide clues as to how we might go about understanding the complex interplay of discourse through social relationships and the lived experiences individuals bring with them to any given moment. In particular, Deleuze categorized four types of folding in his reading of Foucault's work: (i) the folding of our body, (ii) the folding force impinging on itself rather than other forces; (iii) truth enfolded in relation to us; and (iv) the ultimate folding of the line outside (Deleuze, 1995: 112-113). With Deleuze's sensibility to the irreducible foldings of the exterior and interior, subjectivity is linked to other subjects and shared relational principles of knowledge/power.

Technologies of the self

Foucault's later work on technologies of the self, or the 'active self' is immensely relevant to examining PPGTs' meanings of health this thesis. Scholars have traced how Foucault uses the notion of 'technologies' in similar way to Heidegger as a way of revealing 'truth' (Besley, 2005: 78). Foucault identifies four interrelated 'technologies' that work on the self: (i) technologies of production; (ii) technologies of sign systems; (iii) technologies of power; and (iv) technologies of the self (Besley, 2005: 78). However, most of his focus was on technologies of power (governing others) and technologies of the self (governing the self) as they constitute subjectivity. Technologies of the self is particularly useful in this thesis because it takes as its core the history of how an individual acts upon him or

herself. This is most apparent in Foucault's definition of technologies of the self as the ways individuals engage in practices in order to attain a state of happiness or perfection:

> … in all societies there is another type of technique: techniques that permit individuals to effect, by their own means, a certain number of operations on their own bodies, their own souls, their own thoughts, their own conduct, and this in a manner so as to transform themselves, modify themselves, and to attain a certain state of perfection, happiness, purity, supernatural power. Let us call these 'technologies of the self' (Foucault 1997: 177).

Technologies of the self, or care of the self, offers a generative space for theorising the process through which the constitution of subjectivities take place and the ways in which choices under certain conditions create who we become. 'Technologies of the self', also translated as 'practices' and 'techniques' of the self, are sometimes conflated with 'care of the self'. This is because Foucault, as he brought into his analysis the hermeneutics of the self, used techniques of the self as a method to frame his genealogy of sexuality. In doing so he identified the Greek maxim 'care of the self' in contrast to the Delphic moral principle 'know yourself' (see Besley, 2005 for a detailed discussion). He himself supported a return to what he explicated as 'care of the self' in contrast to 'know yourself' because the latter he argued was 'inextricably linked to subjects who can be governed' (Besley, 2005: 81). This was as much a philosophical standpoint about humanity, Foucault was making, as it was a historical analysis. The self, then, is seen to be contingent upon truth and knowledge relations and this is a process of constant (co)construction through individuals' personal histories. As Fox (1997) states, 'practices of the self mark the engagement between discourses of the social and the individual, such that power is integral to the autonomous ordering of the individual's own lives' (p.42). Individuals, then, are in a relationship with truths, and this means they have the capacity to act with some agency, however this does not imply a return to structuralist thinking, rather I use 'agency' while arguing that choice is constitutive (see Davies, 1997). The term 'agency', is also deployed drawing on the work of Barad (2007: 178) who describes it as a relationship to different truths, 'agency is a matter of intra-acting; it is an enactment, not something that someone or something has'. In this sense, the poststructural subject is constantly in process, albeit it here, theorized through technologies of the self and foldings.

By connecting his analysis of bio-power[11] to the 'history of how an individual acts upon himself', Foucault (1988) theorised technologies of the self in an innovative line of analysis from that that of his earlier work in *Discipline and Punish* (Burkitt, 2002). Rather than pursuing the notion of docile and productive bodies subjected to disciplinary technologies, Foucault states: '[p]erhaps I've focused too much on the technology of domination and power. I am more interested in the interaction between oneself and others, and the technologies of individual domination' (Foucault, 1997: 225). The pause in Foucault's work as he grappled with intellectualising the 'interior' self was picked up by Deleuze who asks:

> What happened during the fairly long silence following The History of Sexuality? Perhaps Foucault felt slightly uneasy about the book: had he not trapped himself within the concept of power relations? ... he found the impasse to be where power itself places us, in both our lives and our thoughts, as we run up against it in our smallest truths (Deleuze, 2011b: 79-78).

Particularly in his later work, Foucault explains that both technologies of power and technologies of the self produce effects that constitute the self, or subjectivity. 'The self recognises itself as a subject involved in practices of self-constitution, recognition and reflection' and this is closely linked with power or the 'exteriority' of the self (Barker, 2000: 234). While I make mention of this divergent trajectory in Foucault's later work, to situate the particular tools of his analytics relevant to this study, it is important to emphasise that this does not necessarily mean a break in his conceptual continuity (Harrer, 2005). Rather Foucault's later inquiry was involved with how the 'self constituted itself as a subject' (p.219) rather than bodies 'docile' to the social structures of order.

The later work of Foucault has been collectively referred to as an engagement with 'ethics', and, how the culture of the self, contingent on ethics as a social practice of freedom, is linked to games of truth. Ethics is a practice, and thus part of how individuals constitute themselves as moral persons through what they do. Reflection is central to Foucault's theorisation of the ethical self which entails the complex processes of self formation including concerns, practices, techniques and discourses involved in constituting the self, by which individuals 'seek to know, decipher and act on themselves'

11 A term coined by Foucault in his inquiry in the History of Sexuality I (1978), to describe the management of life and survival, of bodies and the race. 'Biopolitics' embraces 'all the specific strategies and contestations over problematisations of collective human vitality, morbidity and mortality; over the forms of knowledge, regimes of authority and practices of intervention that are desirable, legitimate and efficacious' (Rabinow & Rose, 2006: 197). This is taken up further in chapter three.

(Dean, 1994). While I do not specifically expand on 'ethics' in this chapter, it is worth noting the presence of its theorisation by Foucault in the processes of self-formation, technologies of the self, or agency. In brief, the relevance of ethics to theories of the self is in the process of self-formation and the kind of relationship one has with oneself (O'Farrell, 2005).

Foucault showed through historical analyses how up until the 16th century the threefold techniques of 'curing, leading others and governing oneself' of Greek, Hellenistic, and Roman literature was the dominant definition of governing oneself and others. After this, he then wrote that 'the return to the self has been a recurrent theme… but in fragments and scraps – in a series of successive attempts that have never been organised in the overall and continuous way that it was in Hellenistic and Roman antiquity' (Foucault, 2005: 250-1). He writes:

> in all of this you see that the practice of the self, as it appeared and was expressed in the last centuries of the so called pagan era and the first centuries of the Christian era, the self basically appeared as the aim, the end of an uncertain possibility and possibly circular journey - the dangerous journey in life (Foucault, 2005: 250).

Foucault talks of the 'present' self in a 1983 lecture, with 'almost total absence of meaning and provides examples of this through familiar expressions such as 'getting back to oneself, freeing oneself, being oneself, being authentic' (Foucault, 2005, p.251). His argument points to the absence of thought and meaning in these statements and the lack of ethic of the self, and the 'impossibility' of constituting it. He emphasizes, 'there is no first or final point of resistance to political power other than in the relationship one has to oneself' (p.252). This shift in the self, to a new art of governing the self is an ongoing project. It suggests agency and the importance of thinking for the individual's self-constitution.

Retrospective scrutiny of the self is fundamental to practices of the self. Reading and writing are two individual self-reflective practices, 'arts of the self', that can shape thoughts and practices; a means to 'the aesthetics of existence' (Besley and Peters, 2007: 14). In turn this can be 'a basis for the government of self and others' (ibid). According to Foucault, confession and self-examination are two integral practices of modern forms of individuality. Through such practices, an individual can come to 'know the self' in order to 'take care of the self'. Referred to as 'renaissance humanism', individuals are

involved in expressions of both scripted and un-scripted forms of self-representation and self-recognition; 'the pedagogy of individualism' that is negotiated through techniques of normalisation and development of moral character (Besley and Peters, 2007: 17).

Lasch's (1979) book, *The Culture of Narcissism* is said to have been influential to Foucault's later interest in technologies of the self (Besley and Peters, 2007: 8). Lasch's main argument was that the self in modern 'capitalist society based on a consumerist ethic has taken leave of its spiritual base and become replaced by self-preservation'. In particular, Lasch describes how in the late 1970s narcissism became a preoccupation of American consumerist culture. The relevance of this analytic, along with Foucault's notion of technologies of the self in antiquity is the 'significance of truth telling practices in processes of self-formation' (Besley and Peters, 2007: 11). In the first volume of *The History of Sexuality* (1978), Foucault began to theorise the self as a relational practice, an aesthetic of self formation rather than a product of technologies of domination. An aesthetic is an 'exercise of self upon the self by which one attempts to develop and transform oneself, and to attain a certain mode of being' (Foucault, 1997: 282). This notion provides a means to understand the influences and sets of truths that make possible how the PPGTs in this study come to know themselves as 'healthy' or 'unhealthy' and the techniques they adopt to 'achieve' health.

Deleuze demonstrates how Foucault in his later work points to the relations between the three dimensions of 'knowledge, power and the self which are irreducible, yet constantly imply one another' (p.94). This can be understood as sets of forces linked to and implicating other forces: forces of power-knowledge. Historicity and context, then, are central to the power-knowledge relations in a given moment where the self is located. This is a complex accumulation and exchange of power-knowledge that operates on and is mediated by a self.

In summary

In this thesis I gesture towards an analytical framework of technologies of the self, however subject positions, dispositions, foldings and teaching orientations are also brought into play in order to consider the empirical material constituted by PPGTs and teacher educators' language in relation to discourses of health and the body. My point is also that embodied experiences are interwoven in subjectivity, as bodily experiences can augment individuals' subjective limits, or 'conditions of possibility'. At different points

throughout the thesis, variations of theoretical terminology in relation to the self are deployed. For instance 'sense of self', 'subjectivity' or 'subject position' may seemingly be used interchangeably, however each is mobilized with purpose in the context of the analysis at hand. For example in chapter four 'subject position' is utilized as a more specific theoretical term, or in chapter 6 'subjectivities' is used with sensitivity to the plurality of self and as part of this, 'sense of self' is used more specifically at times.

As a point of departure, notwithstanding the folds of past and future, subjectivities are located in a particular time, place and space of discursive and material experience (Besley & Peters, 2007). Dominant truths work to discern the socially 'normal' and 'abnormal', however these are subject to change over space and time. Saltmarsh and Youdell (2004: 257) suggest we are '[m]ade subject and subjected through discourse, the subject can act with intent, but cannot ensure or secure the constitutive force of his/her discursive practices'. Overall, adopting the notion of subjectivity in the analysis of PPGTs' meanings of health allows me to examine the ways language, culture and political systems represent 'truths' about the body and health that are not only in a state of mutating or becoming, as Deleuze would conceive, but also consequential to future enactments of health education in the primary school. The notion of lived histories, and especially, technologies of the self and the fold, offer ways to consider how individuals engage differently in the idea of the self in relation to health and bodies.

Taking stock of the theororetical perspectives set out in this chapter, the structure of this thesis has been organised around tracing the key discursive truths made available to the PPGTs in this study and the ways they make sense of them: the relational processes. Specifically, chapter three maps the 'exterior' historical cultural context - sets of truths available to the PPGTs and chapter four describes the nature of teacher education programs where the PPGTs completed their H-PE coursework. In chapters five and six, I map the ways the individual PPGTs mediate truths of the cultural context. Keeping with the poststructural lens through which this study is situated, there is an implicit assumption throughout this thesis conceptualising subjectivity relative to context. The organisation of the thesis in this way is not merely a means to separate elements of the self into 'exterior' and 'interior' but to understand the relational 'interior' and 'exterior' foldings (or entanglements) of particular ways of knowing about health and the body.

Chapter 3

Tracing discourses of health and the body

Doing genealogically inspired work: mapping a *dispositif*

The present: unraveling the *dispositif* of the new health imperatives

Schooling the 'healthy' child citizen

3.1 Doing genealogically inspired work: mapping a *dispositif*

> Concepts are words in their sites. Sites include sentences, uttered or transcribed, always in a larger site of neighbourhood, institution, authority, language… To invoke a history of the concept is not to uncover its elements, but to investigate the principles that cause it to be useful – or problematic (Hacking, 2002: 69).

This chapter, and the one that follows, aim to answer the first major research question: what are the major discourses of health and the body available to PPGTs? The purpose of this chapter is to draw on inspiration from Foucauldian genealogy to unravel dominant power relations of heath and the body operating in and through contemporary healthscapes (and by association primary schools) available to the PPGTs of this study. A Foucauldian genealogical approach is undertaken to analyse the discursive and non-discursive practices of the present and seeks to identify the historical-cultural context of a *dispositif:* 'cultural practices, beliefs, understandings, aspirations, and materials in their particular cultural-historical context' (Wagenaar, 2011: 118). Inspired by Tamboukou's notion of narrative, understood 'through the structures and forces of discourse, power and history' (Tamboukou, 2008: 102), I aim to provide an act of narration that opens up a 'political space'; specifically, the political space of naturalised ways of knowing about health and the body that are (re)produced by health education and institutions, individuals or groups with vested interests in consumerist lifestyles of health and the body. I do not seek to find a new or a reductionist set of 'truths' for 'health' knowledge or primary school health education, but rather, my hope is to make the familiar strange, by opening up taken for granted knowledge and practices. In this sense I aim to make visible what Hacking (2002) refers to as 'useful' or 'problematic' elements of 21st century health discourses operating not only in social intra-actions, policy and institutions, but also in the field of primary H-PE and 'healthy' schooling (Leow, et al., 2012).

Foucauldian genealogy

A brief history of the present (or read 'genealogically inspired' work) is the choice of method in this chapter because it provides a tool to illuminate the limitations of particular systems of thought and institutional practices that may appear as universal or taken–for-granted versions of the present. The process of tracing contemporary 'healthscapes' in this chapter is guided by two philosophical questions posed by Foucault: 'what is happening now?' and 'what is this now within which we find ourselves?' (cited in Tamboukou, 1999: 202). Walshaw (2007: 13) in her book *Working with Foucault in*

Education, states, 'genealogical analyses that explore the interaction of power and knowledge within the practices and social structures of education are able to highlight the profound influence of discourse on shaping everyday life in education'. While a genealogy in the Foucauldian methodological sense, as others in the field have done (see for example, Burrows, 1999; Kirk, 1998; McCuaig, 2008) is beyond the scope of this thesis, this chapter is inspired by elements of uncovering present power and knowledge structures in order to understand contemporary healthscapes and the subject area of H-PE from which pedagogues are expected to enact educational practices. This is an important exploration, as not only is H-PE a compulsory subject in Australian primary schools, but schools provide multiple spaces where health and physical education related pedagogies meet, thereby, allowing discourses of health and the body to converge or conflict. Teachers are centrally implicated in these complex relational processes within and without schools.

Foucault describes genealogy as a form of research aimed at activating 'subjugated' historical knowledge; knowledge that has been rejected by mainstream knowledge. This approach by no means assumes to reveal a moral high ground, or essential rationality in its 'findings'. In any case the aim is to pay attention to the 'processual aspects of the web of discourse' (Foucault, 1981:70 cited in Kendal and Wickham) and in this chapter, the webbing of health and body discourses available to PPGTs. This will be achieved by mapping the enduring discourses and the structures or 'constraints' that limit the orders of knowledge in both social settings and H-PE curriculum and practices. Here the word 'practices' is used to determine the 'places where what is said and what is done, rules imposed and reasons given, the planned and the taken for granted meet and interconnect' (Foucault, 2000: 225). Taking this into consideration, this chapter is structured around how contemporary healthscapes, and by association, primary health and physical education curriculum, has come to be constituted and legitimated by health, medical, risk, fitness, sport, physical activity and body discourses. Whilst work has been done on mapping histories in the field of secondary PE (see for example Kirk, 1998), there is little research examining manifestations of H-PE in primary schooling and what constitutes modern 'relations of power' in health education. Considering Foucault's contention 'power is produced from one moment to the next' (1983: 220), mapping the present is an ongoing, evolving project. In what follows, I map the relations of power-knowledge in popular meanings of health by describing a *dispositif* of the present.

A *dispositif*

Tamboukou (1999, 2008) identifies uncovering a '*dispositif*' as the starting point of doing genealogical work. As already outlined in chapter one, a 'dispositif' has also been translated, and referred to, as an 'apparatus' or 'dispositive'. In its preferred usage here; a *dispositif* entails a strategy of both discursive and non-discursive practices, it is not an abstract theoretical scheme, but rather an analytics of cultural practices; it is an evolving synthesis of knowledge in reality. Jager and Maier (2009) write, '[d]iscourses do not exist independently; they are elements of dispositives', thus discourses are subject to change. While Foucault did not provide a great deal of commentary defining a *dispositif* (Agamben, 2009), he describes it in an interview titled *the confession of the flesh* as:

> A thoroughly heterogeneous ensemble constituting discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short the said as much as the unsaid… between these elements, whether discursive or non-discursive, there is a sort of interplay of shifts of position and modifications of function which can also vary very widely… I understand by the term 'apparatus' (dispositif) a sort of—shall we say—formation which has as its major function at a given historical moment that of responding to an urgent need. The apparatus (dispositif) thus has a dominant strategic function (Foucault, 1980a: 194-95).

Dispositives, then, in the useful language of Wagnaar (2011: 118), can be defined as 'core values of reason and rationality', 'a grid of interpretation', or 'systems of practices that bring about certain social categories and objects into being'. In setting up a *dispositif* in this chapter, I will constitute the 'problem' of dominant health and body discourses by describing systems of practices and core values of reason and rationality that enhance and maintain the exercise of power within and through contemporary healthscapes and as part of this schooling.

Following Foucault (1988), the purpose of tracing a *dispositif* is to consider historical changes over time. He explains:

> It is one of my targets to show people that a lot of things that are a part of their landscape - that people think are universal – are the result of some very precise historical changes. All my analyses are against the idea of universal necessities in human existence. They show the arbitrariness of institutions and show which space of freedom we still enjoy, and how many changes can still be made (Foucault, 1988: 11).

The usefulness of the concept *dispositif* comes from the relationship between discourse and the material and how individuals, in this case PPGTs, see themselves in relation to

core values of reason, 'that people think are universal'. This means tracing how reconstructions of health knowledge (discursive) and practices (non-discursive) materialize in individuals' recounting of their experience of their own and others' bodies. These determine the boundaries around what is available for individuals in order to constitute health pedagogies. Barad (2007: 146) writes that 'apparatuses produce differences that matter - they are boundary-making practices that are formative of matter and meaning, and productive of, and part of, the phenomena that are produced… [they] are themselves phenomena (constituted and dynamically reconstituted as part of the ongoing intra-activity of the world).' This notion of apparatus comes from Barad's (2007) extensive work on intra-relations and entanglements in matter and meaning where she brings together the materiality of meaning making by extending upon Foucault and Bohr's respective works on what represents an apparatus. In a more concrete analytical application, Jaiger and Maier (2009: 56-57) outline three elements of analysis to illuminate a *dispositif*. These include: (i) a discourse analysis of discursive practices where language and thought are examined; (ii) reconstructing knowledge of non-discursive practices that are built into actions - this is often achieved through observing people in their practices, or participating oneself; and (iii) reconstructing knowledge of materializations that are created as a result of both discursive and non-discursive practices. Importantly, a materialization is not 'fixed', but rather, knowledge helps to create it and is subject to change. For example, the meanings applied or values given to the materialization of a particular building may change through different eras, purposes, or the person interpreting its function and/or form. While there are boundaries for self constitution brought about by dispositives, Barad (2007: 147) points to their permeable nature, she writes: 'statements and subjects emerge from a field of possibilities. The field of possibilities is not static or singular but rather is a dynamic and contingent multiplicity'. A *dispositif*, such as that constituted by the new health imperatives (imperatives in relation to bodies, exercise, diet and health), is subject to change over time based on historical shifts and the changing nature of knowledge, as Jager and Maier (2009: 57) describe: 'in a society, dispositives overlap and are entangled with each other'.

Analysis in the form of a strategic *bricolage* as Foucault called it (Rabinow, 2003) is implicit to the methodology applied in this chapter. Various texts will be drawn on in in order to explore how ideas about health and the body are constituted in the present. Health related associations and conventions, school newsletters, curriculum support

documents, government policies and practices, food and physical activity initiatives and overweight and obesity interventions, each form the types of texts that can be examined as part of mapping a *dispositif*. Overall, this chapter aims to describe the current context and durability of the part consumerist body and fitness discourses play, and how we might better understand their role in PPGTs' formation of the self, and by association their pedagogical intentions, content knowledge and assemblages of health education.

3.2 The present: unravelling a *dispositif* of the new health imperatives (discourses, practices and materialisations)

By using literature and cultural texts it is possible to trace the dominant knowledges and practices of health and the body (and how these are developed, articulated and justified) that constitute what I describe as the *dispositif* of new health imperatives. The following description has been divided into two sections, the first deals with truth discourses, and the second considers 'non-discursive' practices/materialisations. There is a particular focus on obesity discourse in this analysis for its role in the *dispositif* of new health imperatives. There are many threads that overlap and are entangled as part of the new health imperatives. Some of these include, the 'new public health' and the 'healthy' biocitizen, medico-scientific rationales, healthism, lifestylism, risk and the slender ideal. I offer a quote from Baudrillard (2005) on the centrality of the body to begin this section. He suggests how the body has become the ultimate object of consumerism; collecting to it all those meanings of what it means to be a 'healthy' subject:

> In the consumer package, there is one object finer, more precious and more dazzling than any other – and even more laden with connotations than the automobile, in spite of the fact that that encapsulates them all. That object is the BODY. Its rediscovery, in a spirit of physical and sexual liberation, after a millennial age of Puritanism; its omnipresence (specifically the omnipresence of the female body …) in advertising, fashion and mass culture; the hygienic, dietetic, therapeutic cult which surrounds it, the obsession with youth, elegance, virility/femininity, treatment and regimes, and the sacrificial practices attaching to it all bear witness to the fact that the body has today become an object of salvation. It has literally taken over that moral and ideological function from the soul (Baudrillard, 2005: 277).

The emphasis on the physical body as Baudrillard has described, works to normalise weight loss practices in the popularity and quest of attaining a more desirable body. In discussing some of the major truths at play, I consider the role power, particularly biopower, plays in representing the body, health and individual responsibility in contemporary healthscapes. At times the terms 'contemporary healthscapes' and the

'*dispositif* of health imperatives' are used interchangeably because of their similarity in meaning in this thesis.

3.2.1 Truth discourses: the emergence of the new public health, medico-scientific truths, risk and healthism

In this section, I describe some of the 'key truths' (and their historical emergence) about health and the body that are recontextualised in the *dispositif* of new health imperatives. To begin, the term 'dispositif of new health imperatives' was decided on after the analysis of discourses and the analysis of texts provided in this chapter. The term health imperatives has been utilised in other recent work (Wright, Burrows, Rich, 2012; Rich, 2012; 2011) to describe 'renewed interest in the need for populations to monitor their own and others' bodies, weight and health against perceived risks associated with deteriorating lifestyles' (Rich, 2011: 66); in short, an individual's preoccupation with weight has been made possible through neoliberal notions of health and lifestyle.

The emergence of new health imperatives

Health imperatives have not always been punctuated by weight and individual responsibility. Hansen and Kayser-Nielsen (2000) argue that in the 18th century, ideals of health were, in the broadest sense of the expression linked to virtue and respectability which determined the 'right way to live'. Therefore, health was orientated toward community, rather than within the body. At this time, philosophers and clergy were considered to have authority to speak and influence decision-making in relation to the health of societies. Public health agendas were concerned with odor and contagion and the control of infection associated with water and sanitation in expanding industrial cities (Petersen and Lupton, 1996).

In the 20th century, the notion of 'The New Public Health' emerged and while it encompasses a variety of perspectives, collectively the term refers to the rise of preventative over curative medicine since the 1970s (Petersen & Lupton, 1996). Its associated practices and materializations intensified particularly during the 1980s as an increased public health conscious developed alongside the awareness of diseases associated with modern lifestyles. With this came a surge of interest in the attainment of health through self-care, with a range of movements coming into acceptance such as: vegetarianism, natural health, occupational health, 'work/life balance', community health, consumerism; and critiques of the medical profession (Ziguras, 2004). Hansen (2004) states that 'therapeutic and pastoral forms of care are inextricably elements of the array

of productive forms of discipline that define the daily experience of postindustrial Western workers' (p.152). From as far back as the early 1980s Bichovsky-Little (1982: 22) provided commentary on this changing meaning of health, writing: 'the status of illness and health is beginning to shift from an item of bad luck to a vice'.

In Australia, the new public health came into materialization with the formation of the *The Better Health Commission* (1986) in 1985, which was based on the premise that consumerism and individual responsibility for health was a feature of an individual's self-care strategies. At the time the commission was formed, it was perceived that three-quarters of Australians believed their health could be improved by their own changes to lifestyle practices (Ziguras, 2004). The advent of The Better Health Commission, along with an immense range of popular 'health-enhancement' or 'self-improvement' techniques, marks the normalisation of "health"' as a positive goal to be achieved rather then a state of being without illness. Ziguras (2004: 4) writes, 'the proliferation of reflexive techniques which promise to *improve* one's health has transformed the very meaning of the term "health"'. This popular public perspective of health, was instituted and thus reproduced through the oft cited World Health Organization (WHO) definition, made effective in 1948, in accordance with article 80: 'health is a complete state of *physical, mental, and social wellbeing* and not merely the *absence of disease* and infirmity' (Bellieni & Buonocore, 2009: 7).

Over the period of the late 20th century, and into the present, the modern lifestyle has been increasingly characterized as sedentary. Rising economic preoccupation with the threat of disease for its role in reducing productivity (Petersen, 1997) has contributed to the belief that individuals are not as healthy as they should be. Against this backdrop, in more recent times, public health agendas have shifted to a concern with 'lifestyle' as a manifestation of late capitalism (Fullagar, 2002) with a gradual shift from an emphasis on physical fitness and sports to physical activity and lifestyle behaviours. As part of these economic shifts, epidemiology emerged as a field to monitor and regulate population health (Lupton, 1995). In doing so, epidemiology provided a level of authority to the work of health promoters and educators who sought to reduce the risk of illness and disease of individuals and groups within populations.

Crawford (1986) was one of the first to point out how health has become a key category in contemporary capitalist society. He initially coined the term, 'healthism', which has since been heavily utilised in the literature, to describe the social representations of individuals as responsible for their 'state of health'. He describes 'the preoccupation with health as a primary – often the primary – focus for … achievement of personal wellbeing; a goal which is attained through the modification of lifestyles' (Crawford, 1980: 368). Healthism has long been discussed in the literature for the ways it works to attribute an individual's health to their own 'choices'. In doing so, it provides a mechanism by which blame is often shifted to individuals for their ill health, weight, or lack of 'healthy' practices. Locating health problems 'within the realm of individual choice' (Crawford, 1986: 368) works to conceal the structural and material inequalities of people's health and disguises social and environmental forces. The relevance of healthism to this project, as others have identified since the late 80s (see for example, Colquhoun, 1990; Kirk & Colquhoun, 1989), is how it works as a discursive technology often through blaming the individual. The term, while first configured in policies and government strategies of the 1980s has continued salience to describe the individualized responsibilisation for health. All of this has played out in 'neo-liberal' forms of individual responsibilisation and continues to endure as a key shaper in the literature on contemporary conceptions of health (Leahy, 2012). In particular, planning for the future, especially in relation to health, is a one of the hallmarks of the ideal citizen. This can be seen in the corporatization of 'health' and the formation of new markets, for instance clothing brands such as Lululemon that encourage consumers to constitute what Stokes (2008) refers to as 'healthiest ideologies'. Individual responsibilisation has also more recently played out in the proliferation of health literacy resources and pedagogies which place pressure on individuals, particularly families, to make 'healthy choices', especially in relation to food (Henderson, Ward, Coveney & Taylor, 2009).

Neoliberalism and the body

Since the late twentieth century, living has been characterized as one of amplified health consciousness (Petersen, 1997; Petersen & Lupton, 1996). In this health zeitgeist, the body and individual longevity is seen to be under increased threat from inappropriate lifestyles, environmental pollution, and the failure of conventional medicine to guarantee health. Howell and Ingham (2001: 342) contend that lifestyle has become inextricably linked with a consumerist culture. A 'do it yourself consumerist health economy' refers

to the naturalized association between exercise with leisure and is a uniquely 'western'/eurocentric approach to lifestyle driven by public health discourse and the neo-liberal notion of the entrepreneurial citizen (Maguire, 2008). As part of a consumerist agenda, there has been a gradual shift in focus from an emphasis on physical fitness and sports for community good, to physical activity and lifestyle behaviours as part of disease prevention.

Neo-liberal beliefs are entangled in the field of contemporary Australian culture and schooling, not unlike other industrialized 'western' democratic countries (Wright, 2009). Current economic markets infiltrate the ways in which health, bodies and curriculum and pedagogy are understood and operationalised. Sometimes referred to as the new right or free market economics, neoliberal philosophies have gained momentum in political thought since the 1970s (Gard & Leahy, 2009; Tinning, 2008). The visible effects of a neoliberal social and economic paradigm according to Bourdieu include,

> [the] poverty of an increasingly large segment of the most economically advanced societies, the extraordinary growth in income difference, the progressive disappearance of autonomous universes of cultural production… through the intrusive imposition of commercial values… the destruction of all the collective institutions (Bourdieu, 1998: 1).

In this sense, individuals and groups are compelled to adjust to the exigencies of the market, individual performance objectives, evaluations, salary increases or bonuses as a function of competence and individual merit (Halse, 2009). These values and ethics of living are said to infiltrate through multiple aspects of our lives. The consumerism of health services and products reflect the influences of politics and policies on individual's beliefs and practices of 'health' (Dean, 1999, Rose, 1999). In these circumstances schools have seen new changes in the curriculum, governance, management and structure, along with moves to decentralise the control of school management (Burrows, 2009; Lupton, 1999). In this setting, rather than coercing students and individuals into healthy practices through mandating practices, people feel the need and want to be 'healthy', 'productive' and 'successful' (Rose, 1999). In this economic environment, schools are considered key sites for bolstering economic wealth and health, through fostering the development of individual productivity and educating the 'informed' citizen so they are able to make 'healthy choices'.

Another feature of late capitalism as Greco (1993:367) points out are 'bodyisms'; a form of 'healthism' that is acted out via a hedonistic lifestyle and preoccupation with the aesthetic practices of body achievement and maintenance. Together with bodyisms, health promotion as a public pedagogy[12], 'feeds into and reinforces [a] preoccupation with aesthetics or the 'cult of the body' (Petersen and Bunton, 1997: 200). In this hyper-health and body conscious culture, Jutel (2006) suggests that there is an over emphasis on weight in public health. Through this line of analysis, we see how individuals are in a constant struggle to attain the 'healthy' 'other'. Such changes have significantly inflected upon the tapestry of our day-to-day lives by drawing attention to our perceived 'choice' and 'freedom' to make decisions and being capable of weighing up the costs and benefits of healthy day-to-day relations. Neoliberal philosophies support individual responsibility, statistical calculation of risk, competition and rationality (Apple, 2001; Brown & Macdonald, 2009). Whilst these forms of truth may not appear harmful on their own, collectively they are referred to as 'dangerous' for the ways they place responsibility and blame onto individuals for their non/successes, rather than examining the role of collective entities or governments (Lupton, 1999; Tinning, 2008). As a side effect of such truth mechanisms, individual 'choice' and agency in relation to health practices, and by association weight, are de-politicised. Risk discourse and self-regulatory techniques of governance in relation to health and the body are made possible through the neoliberal paradigm (Petersen, 1996). In this context, medical language has been a defining feature of the ways health, and more specifically food and movement have been understood and practiced.

Risk discourses

One of the effects of neoliberalism is the tendency to place the individual constantly 'at risk' and in need of saving themselves against potential health 'risks'. There is a growing list of risks that characterise modern life, as uncertainties propel government's efforts to avoid the 'risk' of illness and disease. This is well understood by the successful business sector of health insurance, as individuals are encouraged to take out various measures to ward against the possibility of financial costs associated with morbidity or mortality (Dean, 1999, p.158-60). In this market, a division runs between those who can afford health insurance, and those who can't. Beck (1992) argues that new divisions are also appearing between individuals in their ability to display the avoidance of 'risks'. In the

12 Following Sandlin, O'Malley and Burdick's (2011) call for scholars to be specific about theoretical underpinnings when deploying the term, 'public pedagogies', throughout this thesis the term is used like Rich (2001b) to point to how health discourses extend beyond formalized educational sites. Like Rich I also go back to Giroux (2004) - see page 92 of this thesis.

domain of health this could be understood as the division between those who display a 'healthy' weight and those who don't, or those who do/n't smoke. This is reflected in Petersen's (2007) book *The Body In Question*, where he describes the ways health and fitness have become predominantly social imperatives rather than biological ones.

Popular media provides an important avenue for the social amplification of risk. Often discursive narratives are imbued with 'scientific' reports of 'truth' and certainty. In so doing this knowledge assumes a position of 'stability' against the backdrop of an amplified 'uncertain' world. Gard and Wright (2001) for example, have deconstructed the ways mass media has amplified the obesity epidemic discourse and the associated threats to the population and individual life. According to Bauman (1993: 2004), 'to keep the wheels of the consumer market well lubricated, a constant supply of new, well-publicised dangers is needed'. He asserts that questions need to be asked as to which stories get told and why; who has access to and control over the media; the form in which stories are told as well as the messages they disseminate; and how they work and what they accomplish in terms of people's everyday lives.

Given the pressures to perform healthy lifestyles, it is hardly surprising that many people are said to experience increased anxiety or a 'less comfortable psychology' as individuals navigate an increased range of 'choices' and uncertainties in the need to control their health and weight. While public health initiatives underpinned by scientific rationalities have often been well intentioned, with a commitment to mitigate health inequalities and liberate the health of individuals through focusing on preventative practices, such intentions have become, as some argue (see for example Curtis, 2008; Halse, et al., 2007; Rice, 2007; Rich, 2011a), counterproductive by promulgating risk discourses and conflating health with weight and beauty (Beausoliel, 2009). In particular, longevity management has been inserted into everyday life (Rabinow & Rose, 2006) through moral imperatives, fear and abjection. At present the health 'risks' associated with obesity and food consumption are frequently reported on. These risks make up a substantial contribution to the truth discourses at play in what I have called the *dispositif* of health imperatives. Lupton (2004) describes the ways food is translated through discourses of risk and health, stating 'heightened awareness of risk is nowhere more apparent than in contemporary representations of food and eating' (p449).

A driving force for the promulgation of medico-scientific 'truths' is the field of epidemiology, which Lupton (1995) states 'provides only a veneer of scientific legitimacy, objectivity and expertise'. Whilst proponents of health promotion and prevention promise better individual management of risk and uncertainty, illness prevention or screening for risk, Nettleton (1997) argues that, in this context, individuals are rendered 'docile' as they become passive receivers of health advice from those who are perceived to have the capacity for self-control, responsibility, rationality and enterprise (p.213). The relevance here is for the ways self-governing agendas of health provide individualistic, rather than collective constructs of 'health', illness and disease, which provide powerful ways for individuals and young people (including the PPGTs in this study) to understand their own and others' embodied experiences of health and the body.

Medico-scientific and beauty discourses

Because enactments of health are reponsibilised at the individual level, the body has become a site of social struggle between biomedical sciences, practices of governance, adornment, nourishment and treatment. Modernist beliefs in the power of science to solve social problems have underpinned strategies and rhetoric of the 'new public health' (Petersen & Lupton, 1996). In this ongoing era of new health consciousness, medico-scientific discourses are heralded as authoritative in relation to how we should live. The body itself in late capitalism is positioned as an object of control and 'medicalised' knowledge is afforded social legitimacy for its 'truth-telling' and capacity to control health, quality of life and wellbeing. Lupton (1995: 142) argues that through health promotion, 'lifestyle is pathologised as a source of ill-health, the constellation of a diverse range of specific and discrete behaviours identified as risky'.

Medicalisation (Illich, 1975) is defined as a process whereby 'non medical problems become defined and treated as medical problems usually in terms of illness or disorders' (Conrad, 1992, p. 209) by laity, the media, educational and medical institutions (Jutel, 2006; Zwier, 2009). Medicalised accounts of health and the body are underpinned by scientific rationality. However, they are also underpinned by ideals of the body. Feminist scholars have long characterized weight loss as associated with the 'tyranny of slenderness' and the circumscription of appropriate feminine behaviour and appearance (Bordo, 2003). Made possible through medico-scientific discourses, the 'slender body shape' is a metaphor and symbol of health. Heyes (2006), for instance argues we have been 'duped by an oppressive set of beauty ideals' (p.127) and this has been conflated

with 'health'. Medico scientific discourses fuel pre-occupations with the body and the belief that one can attain any body shape, given they have sufficient will power and economic capabilities to purchase necessary goods and services. Williams (2006), drawing on Fox (1999) highlights how discourses of medicine work to discipline bodies in ways that encourage individuals to strive for 'beauty', and a 'full and active life' in the name of health and illness.

Medico-scientific knowledge affords cultural authority due to its perceived claims of objectivity and rationality (Saguy & Almeling, 2008). 'Scientificity' itself, is an underpinning tenet legitimating social meanings of health. The knowledges of fitness and healthy lifestyles of self-regulating citizens are underpinned by the 'new health conscious' of disease and illness prevention.

Obesity discourse and health aesthetics

> Whether the future will deliver waxing or waning rhetoric about the obesity time-bomb is unclear. What I think we can say with more certainty is that the obesity research community has managed to convince a significant percentage of the population that they should think and worry a great deal about their own and other people's body weight. The monumental task of educating the planet is largely complete. The question now is 'what next?' (Gard, 2011: 4)

When I began this research project in early 2008, there were two principal driving concerns; firstly, the amplification of obesity truths in social discourse and secondly the normalisation and simplification of an individual's weight as an equation of 'energy in and energy out'. There is no question that challenging these truths, for important reasons, was an ideological undertaking. The later truth of energy input and expenditure was (and still is) frequently deployed as a technology in various research and government interventions, public health campaigns, enactments of teacher education (namely those I experienced as an undergraduate H-PE specialist), schooling and in familiar and popular cultural/media spaces. Public health and health promotion agendas or 'health imperatives' are entrenched in broader social, political and economic relations of capital, education and the state. Through these sites, normalising and regulating practices of health work as a form of surveillance and increase individuals' knowledge of risks associated with 'obesity' (Rich, 2011; Wright, 2009). Gard's (2011) quote from his book *The End of the Obesity Epidemic,* which begins this section, points directly to my concern with the present normalisation of an obesity crisis, and from my educational perspective

the associated moralisation of individual responsibility for a person's weight. Gard suggests with the omnipresence of an 'obesity crisis' very few individuals in western societies are left unaffected at the personal level by the circulation of obesity truths in public discourse.

The power relations of medico-scientific truths have infiltrated into both social structures, for instance, schooling through the likes of healthy canteen policies, and the micro practices and technologies of the self at the everyday level of life. This has taken place in diverse ways through multiple practices and formations - keeping in mind the obesity epidemic itself is a 'unique social phenomenon' (Gard, 2011: 167). Because of its uniqueness, Gard (2011) argues working with the topic requires careful engagement, without falling into 'scientism'; as so much research dedicated to the topic has done. Gard and Wright (2005) have argued that the 'findings' of obesity scientists were often stretched beyond their range of data. In essence, their argument was that aesthetic moral ideals about 'healthy' bodies had become interwoven with scientific claims of an obesity crisis. They also made note of the lack of useful knowledge generated from obesity research. Despite their critique, and a small collection of others challenging the morality and overrepresentation of an 'epidemic' (see for example, Campos, 2004; Gaesser, 2002; Gilman, 2008; Oliver, 2005), what we have seen ensue in the past decade is a 'moral panic' (see, Cohen, 2002; Thompson, 1998) and normalisation of 'healthy bodies' through the recontextualisation of obesity science in the public sphere (Boero, 2007; Collins, 2007; Saguy & Almeling, 2008). Rich and Evans (2005: 344), for instance, describe some of the social consequences that have come about from cultural understandings of obesity,

> … the stereotyping of fat, the feelings of guilt and shame that are produced through this (obesity) discourse, and the tendencies towards a culture of healthism and individualism, are regarded as secondary to the primary concern to develop concrete scientific evidence to understand the causes of and treatment for the obesity epidemic… public representations of obesity do not simply inform us of medical or biomedical 'facts', but create meanings that influence cultural understandings of health, the body and eating.

These social truths have worked to normalise the individual and collective need to combat weight, 'overweight' and 'obesity' and the individual responsibility for eating healthy food and engaging in sufficient and appropriate exercise. Televisions shows like *The Biggest Loser*, and with less popularity *Teen Fit Camp*, are testament to, and work to

reinforce and generate, these popular and normalised interests in weight reduction (Silk, et al., 2011).

The evolving obesity discourse

While the social normalisation of a present day 'obesity crisis' for 'average citizens' does not seem to be diminishing, there is increasingly more examples of resistance to both simplistic approaches towards the extent of overweight and obesity as well as one-dimensional explanations of what individuals eat and how they move. In academic literature, at least, a range of scholars have critiqued obesity truths at play in: media (Boero, 2007); schooling (Cliff & Wright, 2010; Evans, Rich, et al., 2008; Gard & Wright, 2001; Kirk, 2006); community healthcare (Cohen, Perales, & Steadman, 2005; Wray & Deery, 2008); experiences of pregnancy and parenting (Dworkin & Wachs, 2004; Harper & Rail, 2012; Luttrell, 2011; Warin, et al., 2008); practices of body modification (Rail & Lafrance, 2009); the medical profession (de Vries, 2007), social justice and human rights agendas (Aphramor, 2005; Lobstein, 2006; Russell-Mayhew, 2007); the workplace (Vander Schee, 2008); and problematic relationships with the body (Halse, et al., 2007). Each of these have politicised obesity discourse and highlighted the consequences of a moralising focus on weight in a call for more complex and alternative approaches. Gard (2011: 109) refers collectively to these different counterpoints in the literature and public commentary as 'empirical and ideological skeptics', who 'cover a wide moral and ideological spectrum… suggesting and offering different kinds of responses' to the obesity epidemic. Thus as Gard argues, 'the period (spanning the mid 2000s) of uncontested dominance (of overheated rhetoric) is now over' (p.109). This shift of increased resistance[13] can be thought of as the evolving synthesis of the obesity discourse, or materializations of heath imperatives in action. There has been some acknowledgement of the complexity of the obesity problem. Thus while a proliferation of research around overweight and obesity prevention has sprouted in the wake of experts disseminating assumptions about the future, the strength of obesity discourse has, at least in academic and those interested spheres such as opinion blogging, been challenged. As Gard writes,

13 The ongoing 'skeptics' of obesity truths, as Gard calls them, attend to their arguments from the foundations of empiricism (Campos, 2004; Campos, Saguy, Ernsberger, Oliver, & Gasser, 2006; Oliver, 2005), lobbyists of food corporations (against regulations and pro-freemarket), scientific empiricism (challenging the statistics and research of weight gain and population anthropometrics), feminist critiques, fat acceptance movements and neo-liberal arguments (of the consequences of economic forces shaping the micro, everyday level of life).

> skeptical online blogs and discussion groups are multiplying - evidence, I think, that the obesity epidemic has generated its own popular backlash and that one need not be an epidemiologist or social theorist to perceive the mistakes and exaggerations of obesity scientists (2011: 170).

This leaves my starting point for the research as both significant and somewhat shifted in nature; threads of resistance to the obesity debate have emerged in multiple forms of backlash, whereas in its first instantiations, when I became interested in this topic, it seemed there was little resistance. This may mean there are a greater number of public narratives that resist essentialist conflations of weight and health and there is certainly an emerging focus on other health imperatives, such as mental health, however, there are also constant social reminders that suggest this is not the case. What is clear in the debates and public discourse of obesity is that there is an ongoing concern with population health and in particular individuals' weight. The normalisation of obesity has become sedimented in our ways of knowing about health, and this coupled with aesthetic ideals of a slender body adds to the taken-for-granted notions of obesity. Weight is often associated with emotions of fear, guilt and shame (Fraser, Maher, & Wright, 2010), and, while there are some counterpoints to the obesity epidemic and health imperatives, this does not immediately translate to the everyday lifeworlds of individual experience and knowledge.

Gard (2011: 186) writes that the obesity epidemic 'is a complex social movement' that has 'taken place in public health authority offices, school classrooms, supermarkets, on television and in the minds of average citizens'. This 'present' phenomenon leaves many uncertainties for the future in so far as what the aftermath of the 'war on obesity' might bring. If a *dispositif* represents a thoroughly relational concept of meaning and one recognises a *dispositif* when one finds 'strategies of relations of forces supporting types of knowledge and vice versa' (Hacking, 1986: 35, cited in; Wagenaar, 2011: 118), the normalisation of scientific truths of obesity discourse in multiple discursive and non-discursive structures contribute significantly to the what is happening in the present – a *dispositif* of health imperatives bolstered by 'obesity'. One way of thinking about this is that much 'damage' has been done from over a decade of heavily circulated truths about weight and health. These truths are not going to go away quickly as the currency of obesity discourse continues to be central to public health agendas and school interventions (Evenson, Ballard, Lee, & Ammerman, 2009; Gard, 2011; Jansen, et al., 2008; Pagnini, King, Booth, Wilkenfeld, & Booth, 2009). For example, NSW health and

the Australian Heart Foundation have an ongoing well funded 'Healthy Kids: eat well, get active' initiative in schools promoted on the Internet. Their rationale begins with:

> The Healthy Kids website is a joint initiative of NSW Department of Health, NSW Department of Education and Communities and the Heart Foundation. The development and promotion of the website is a key initiative of the current NSW Government Plan for Preventing Overweight and Obesity in Children, Young People and their Families 2008-2011 (Healthy Kids, 2012).

In the sites of schooling, teacher education, government and popular social contexts, research and theory, obesity science is recontextualised via pedagogical encounters (Evans, Evans and Rich, 2003). Recently, given the centrality of obesity debates to the work of H-PE teachers, in specialist H-PE teacher education, examining the epistemological debates of obesity has been promoted as an important agenda, for practice and research (Pringle & Pringle, 2012). However, it seems at least in the teacher education sites of this study, there has been little direct application of such ideas.

To conclude this section, obesity discourse has, at least over the past decade, been an omnipresent truth in the cultural landscape of meanings of health and the body. These truths have been recontextualised in the everyday lives of individuals via biopedagogies in and through schools, popular culture, health professionals' consultation rooms, consumerism and family spaces (Wright & Harwood, 2009).

3.2.2 Practices and materialisations of the *dispositif* of new health imperatives

After describing some of the major discourses at play in contemporary healthscapes, particularly the emergence of obesity discourse, this section shows how non-discursive practices and materialisations of health are interwoven in the *dispositif* of health imperatives. The cultural texts and literature drawn on in this section help to provide the backdrop of the 'conditions of possibility' (Foucault, 1970: 168) for thinking about health and the body and how these are embedded and materialized in broader historical, social, cultural and political settings. To understand these processes I firstly outline the concepts of biopower (Foucault, 1984) because it helps illuminate the processes through which truths are mobilised and circulated.

Biopower

Often, the ways social processes inflect an individual's sense of self is theorised in relation to knowledge and power. To revisit the Foucauldian notion, Lupton explains power as:

> not a unitary entity, but a strategic relation to which is diffuse and invisible. Power is not necessarily a subjugating force aimed at domination which itself is vulnerable to resistance, but rather is closer to the idea of form of social organization by which social order and conformity are maintained by voluntary means (Lupton, 1994: 111)

As a more specific form of power, the notion of biopower is often used to conceptualise forms of social organisation in relation to an individual's biological processes. 'Biopower' is not only limited to, but often understood in light of Foucault's use of the term (see Esposito & Rose, 2010) to refer to the governmental strategies or technologies that aim to improve the health and biological practices of individuals and in turn the working productivity of populations. 'Biopower', or 'biopolitics', represents a specific technique and function of power that emerged in Foucault's (1984) writings. To state it concisely, biopower is about governing people, and in particular, as it is applied here, governing people to achieve particular states of 'health' and 'wellbeing'. As a concept, it describes the governance and regulation of bodies and can include different forms and practices of power (Esposito & Rose, 2010: 110).

Practices of biopower, then, attempt to raise the life expectancy, levels of health and the economic efficiency of a society. Outlined as a methodological tool in Rabinow and Rose's (2006) widely utilised paper '*Biopower today*', biopower consists of three minimum elements as part of its historical 'plane of actuality' that imparts knowledge and makes meaning:

> (i) One or more truth discourses about the 'vital' character of living human beings and an array of authorities considered competent to tell the truth;
>
> (ii) Strategies for intervention upon collective existence in the name of life and health that may be addressed to the population or collectivities [in this, case PPGTs, teachers, children, and to a lesser extent, parents]; and
>
> (iii) Modes of subjectification, through which individuals are brought to work on themselves … by means of practices of the self in the name of their own life and health (Rabinow and Rose, 2006: 197).

Rabinow and Rose's three elements facilitate an understanding of the strategies for intervention and modes of subjectification pertaining to health in everyday life. The first

element relates specifically to the discourses mapped in the previous section of this chapter. The second and third elements are apparent in the 'practices' and materialisations of the new health imperatives outlined in the following section. The notion of biopower theoretically, then, can be used to make visible the ways discourses associated with heath imperatives have emerged in the bio-physical sciences and work to govern bodies in cultural settings. By drawing on the notion of biopower, and its subsequent post-Foucaldian applications in education, my intention is not to engage in 'obesity' debates but rather to describe the ways power plays a role in representing the body.

Biopedagogies

As an extension of the concept of biopower Wright and Harwood (2009) develop the term: 'biopedagogies' to denote 'the art and practice of teaching of "life"' (Harwood, 2009: 21). It explains how obesity truths are recontextualised in 'different social and cultural sites to inform and persuade people on how they should understand their bodies and how they should live their lives' (Wright, 2009: 5). Others (for example Rich, 2012; Leahy, 2010 and Fernandez-Balboa, 2009) have also mapped the effects of biopedagogies for the ways social sites, such as schooling, medical practice, virtual media, and welfare policy, govern bodies in the contemporary healthscape of obesity discourse. Biopedagogies, then, are circulated and normalised through multiple sites, not only schools, but also 'everywhere around us, on the web, on television, radio and film, billboards and posters, and pamphlets in doctors waiting rooms' and embodied at the micro level of the self (Wright, 2009: 7).

The dissemination of biopedagogies particularly operates in the current context through the public pedagogies of new media technologies. As Giroux suggests:

> … a variety of educational sites and forms of pedagogical address … have largely become the handmaiden of corporate power, religious fundamentalism, and neo-conservative ideology. These new sites of public pedagogy, which have become the organizing force of neo-liberal ideology, are not restricted to schools, blackboards, and test-taking. Nor do they incorporate the limited forms of address often found in school settings. Such sites operate within a wide variety of social institutions and formats including sports and entertainment media, cable television networks, churches and channels of elite and popular culture, such as advertising (Giroux, 2004: 497-498).

As described in the quote, biopedagogies move through the self and the social, in capillary-like ways. In the process of knowledge recontextualisation or the dissemination

of biopedagogies in social and educational spaces, knowledge always becomes more 'user-friendly', or watered down from its original source. Thus 'expert' knowledge is simplified for popular consumption. This process of the reproduction of knowledge cannot take place without it being recontextualised in a different form. Thus in the process, shades of complexity in research findings and how these findings have come about are usually lost (Gard and Wright, 2005). Giroux (2005: 5), for example, writes of changes in knowledge production, where non-traditional mediums provide sites of pedagogy through 'seduction' or incitement to knowledge:

> Profound transformations have taken place in the public space, producing new sites of pedagogy marked by a distinctive confluence of new digital and media technologies, growing concentrations of corporate power, and unparalleled meaning-producing capacities (Giroux, 2005: 5).

For this reason, Miah (2005) argues, media translated messages which are recontextualised from 'expert' opinion need to be subject to a more ethical process of knowledge dissemination as non-experts derive moral significance from 'scientific' news. This aside, there is an ongoing question that underpins this thesis: how might we reveal and dispel a picture of obesity that has dominated political thinking and ubiquitous notions of 'health'. One response, suggested by Miah (cited in Rich & Evans, 2005) is that if we take a bioethical perspective, we need to differentiate between technical, scientific and ethical expertise in order to encourage ethical public understanding. This is taken up further in the final chapter.

'Walking' through (virtual and physical) healthscapes: materialisations and the barrage of biopedagogies

The new public health, and the commodification of 'health' has rapidly become an invasive part of our everyday lives. For instance, 'active living' is on the agenda for city and town planning (Laurian, 2006) and active living spaces are on the agenda of urban planers' decision-making and policy (Fusco, 2007). Web based and digital health resources have more recently offered new forms of health and body regulation. Social media, reality television and entertainment such as *Jamie Oliver* give rise to technologies of self-governance (Warin, 2011), which have provided the possibility for health and the body to be articulated within surveillance discourses. Rich and Miah (2009) argue that digital platforms and modes of entertainment in the online environment have expanded the medical gaze to include a greater focus on prevention of disease and 'healthy' lifestyles. To draw on a personal anecdote, as I was writing this chapter, I ate some 'milk

bottles', 'cola bottles' and 'ripe raspberries' from a bag of Allen's 'Retro Party Mix'. Glancing down to a blue accentuated graphics box on the shinny plastic packaging, it read: 'Nestle believes that proper nutrition and physical activity are important in maintaining good health'. My thoughts then turned to the glucose syrup I had just consumed. I then thought of the 'party mix' label and enjoyment of chewing on the 'retro' confectionary. As I ate another and logged onto Facebook, at first glance of the newsfeed a friend with a doctoral degree in 'arts', had posted a link to a Sydney Morning Herald (SMH) article: 'Sugar as harmful as tobacco and alcohol experts confirm'[14]. Mixed thoughts of enjoyment and concern of the Allen's Retro Party Mix I'd just eaten coalesced into feelings of guilt, only to conclude: I best put the packet back in the drawer. Some of the key actors in this story are the packaging of food and the news article validated by 'experts' and its circulation (from a 'trusted' friend) on social media. I did not need to look far for an example of public health enactments in everyday life (and the associated thought processes and micro level of subjectivisation of myself as a 'bad' subject). Beyond this personal account, there are multiple instantiations of public health messages, technologies of health surveillance in the socialscape. It is not uncommon to see products, in this case a wine bottle, previously unassociated with nutrition labels to now have markers of consumption such as 'weight watcher' calorie labels (see figure 1).

14 (Sydney Morning Herald, 2012b)

Figure 1. Weight watchers wine label[15].

Current debates in the Federal Court over cigarette packaging laws (Sydney Morning Herald, 2012a), the recent introduction, of what was popularly referred to as, a 'fat tax' in Denmark (Wilson, 2011), and the requirement by law to wear a helmet when cycling are all more well known examples. What is central to each of these is how the political debates between mostly government, drawing on scientific rationales, and private corporations, are experienced at the everyday level of life through the matrix of individuals' desires and emotions.

Ellsworth (1997) offers a description of the intimate experience of pedagogy as a relationship to knowledge that takes place in multiple social spaces. She describes pedagogy as a,

> … social relationship that gets in very close. It gets right in there - in your brain, your body, your heart, in our sense of self, of the world, of others, and of possibilities and impossibilities in all of these realms... it is a relationship whose subtleties can shape and misshape lives, passions for learning, and broader social dynamics (Ellsworth, 1997: 6).

15 Image sourced from McWilliams Wine Group (2012) Available URL: http://www.mcwilliams.com.au/news/articles/weight-watchers-launches-its-first-uk-endorsed-wine-range/

Thus interventions and priorities of the State and financial markets or consumerism, such as the food products described earlier, become intimately experienced at the level of the embodied self.

Another way the relationship between the self and the social can be theorised is by individuals being 'interpellated' into becoming 'bio-citizens' (taking personal responsibility for the physical care of oneself), to borrow Halse's (2009: 53) term. Interpellation, here, refers to Althusser's (1971) understanding of subject formation as a response to the discursive regimes of ideology, by the 'hailing' by a usually more powerful other. Interpellation as a term has been extended by Butler (1997) in her later work to encompass the compelling and compulsive power of social norms, with particular attention to intersubjectivity of performativity. Further to this, contemporary forms of interpellation can be thought of as occurring in contexts of media consumption. For example, Gauntlett describes:

> … when a person connects with a media text: when we enjoy a magazine or TV show, for example, this uncritical consumption means that the text has interpellated us into a certain set of assumptions, and caused us to tacitly accept a particular approach to the world (Gauntlett, 2002: 27).

One of the reasons an individual is interpellated by health imperatives, with the effect of these becoming embodied in their lives, is that there are cultural returns and rewards for investing in socially deemed 'healthy' practices. It is desirable to be 'fit', 'slim' and in 'control' of one's health. Thus, individuals who identify with health discourses are likely to feel good, or experience 'happiness' when they comply with 'healthy' pedagogies in practice. The processes of subjectivisation or interpellation are evident in the ways people talk about themselves and their experiences, feelings and behaviours. Often these truths are derived from biopedagogies disseminated ubiquitously throughout contemporary healthscapes.

Media flows

What counts as a desirable body as Cregan (2006: 6) points out, is increasingly globalized through the flows of images via everything from media to educational programs and monetary reform. Cregan argues that 'with the intensification of globalization' modern forms of embodiment, 'are infiltrating and reshaping other traditions of embodied being'. Cregan is referring to the expansion of European 'progress' and 'civilisation' in how she mobilises the term globalization here. She outlines the myriad of channels through which

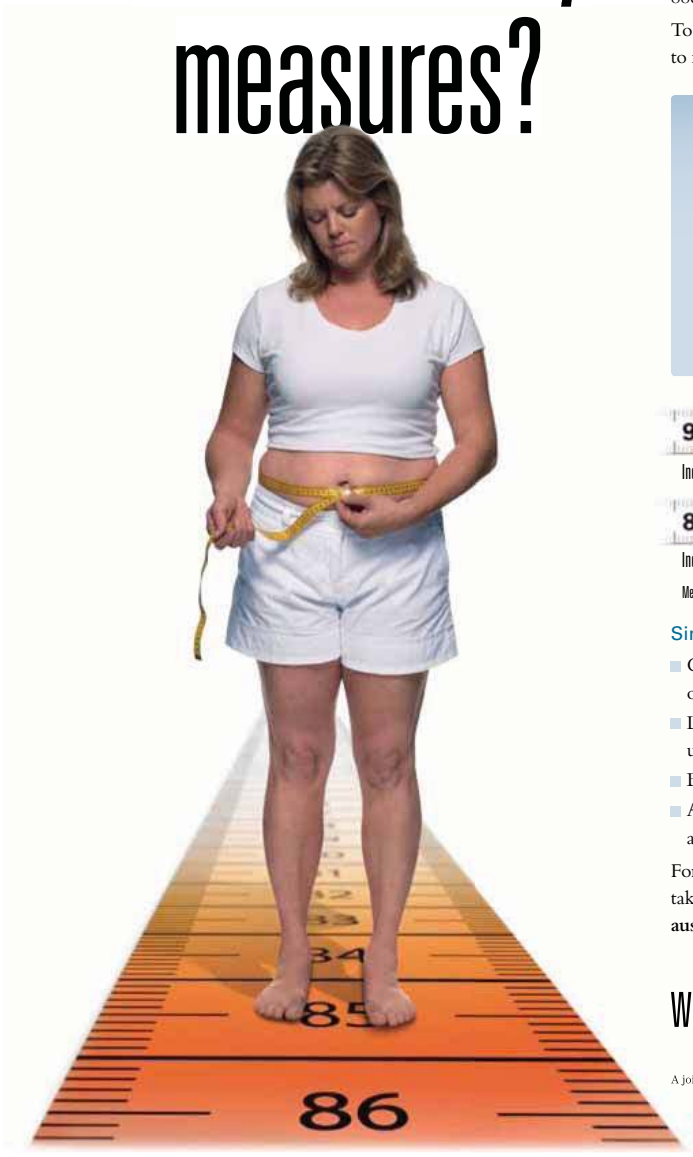
particular bodies are symbolized and deemed virtuous including political incursions, educational programs, and commercial products. Via these materialisations, individuals and organizations are held responsible for their ability to embody a desirable 'healthy' body or aesthetic.

Through popular cultural influences, such as film and television, it is clear that being labeled 'obese' or 'overweight' exceeds the bounds of cultural acceptability. From what I can tell, while what it means to be 'obese' or 'overweight' can be described differently depending on who speaks, and from what position, in both schooling and popular media spheres it seems weight is almost always talked of in a negative light, with an omnipresent mantra for individuals to manage 'the bulge'. For instance, public health discourses represent overweight and obesity in terms of health care costs and tax-payers money. Government health campaigns such as *Measure Up (Commonwealth of Australia, 2008)* (see Figure 2) speak of weight circumferences; and doctors, exercise physiologists and personal trainers may refer to Body Mass Index (BMI) to categorise bodies as 'normal', 'overweight' or 'obese'. Newspapers and government press releases, reproduce stories of an 'epidemic of threat to health care' and liken fat to tobacco consumption (ABC News, 2012); the *Obesity Prevention Australia* website explicitly frames childhood obesity as 'parental abuse' (Obesity Prevention Australia Inc, 2010); epidemiologists speak of obesogenic environments and comorbidity of obesity with as many illnesses/diseases (see for example, Swinburn, et al., 1999). What is concerning here is the considerable overlap and recycling of normalised accounts of weight and health that contribute to what Evan's and Rich (2011), drawing on Bernstein (2001) refer to as 'totally pedagogised societies'. Many different sites of health promotion constitute truths of slenderness as healthy, and in doing so provide a rationality that supports the practices arising from problematic relationships with food (Austin, 1999; Burns & Gavey, 2004; Cogan & Ernsberger, 1999).

Figure 2. Time to take some healthy measures? (female) poster. Australian Government, Department of Health and Ageing (2011b).

ADVERTISEMENT

Time to take some healthy measures?



1 in 2 Australian adults is overweight. And, irrespective of your height or build, if your waistline is getting bigger it could mean you are at increased risk of chronic diseases like some cancers, heart disease and type 2 diabetes.

Understanding the risk

For most women, a waistline measurement of over 80cm carries increased risk and over 88cm indicates greatly increased risk.

To find out your level of risk, it is important to measure your waistline accurately.

Measuring your waistline is a simple check:

1. Measure directly against your skin
2. Breathe out normally
3. Make sure the tape is snug, without compressing the skin
4. The correct place to measure your waist is horizontally halfway between your lowest rib and the top of your hipbone This is roughly in line with your belly button

94cm	102cm	MEN
Increased risk	Greatly increased risk	
80cm	88cm	WOMEN
Increased risk	Greatly increased risk	

Measurements may vary depending on your ethnic background.

Simple measures for better health

- Go for at least 2 serves of fruit and 5 serves of vegetables every day
- Limit your intake of "sometimes" foods like unhealthy snacks and take-away foods
- Be active every day in as many ways as you can
- Aim for 30 minutes or more of physical activity every day

For more information and measures you can take to reduce your health risks, go to **australia.gov.au/MeasureUp** today.

What measures will you take

Australian Better Health Initiative
A joint Australian, State and Territory government initiative.

Authorised by the Australian Government, Capital Hill, Canberra.

Nikolas Rose argues that in modern life, identity is now a project (Rose, 1996b: 160) where individuals assemble their identities via lifestyles of purchasing material

possessions and actions in contrast to an external realm of moral obligations. Here contemporary moral life engages with what Rose refers to as the 'little pedagogies' (not dissimilar to biopedagogies) of talk shows and operas (p.164). Extending upon this I suggest that the 'little pedagogies' of 'health' and the 'body' that infiltrate popular programs such as The *Biggest Loser* or Jamie Oliver's *Eat to Save Your Life* work in the same ways. In these programs, a abject 'before' and successful 'after' identity is equated to those individuals who work hard enough. This presents a narrative of a simplistic formula to weight loss and protection from disease. Wright points out how the Biggest Loser 'promotes the idea that change is absolutely necessary and that to not change is unthinkable… and inexcusable' (Wright, 2009: 8). It is almost as if health is offered as a 'makeover' where one just needs to 'detox', 'change their ways' and take control of a 'healthy' lifestyle. Such little pedagogies (narratives or biopedagogies) combine postmodern notions of the fluid, malleable self with modernist notions of self-enhancement and improvement. Combined, little pedagogies form part of a powerful set of ways of thinking about health and the body. The omnipresence of such biopedagogies through multiple sites, contributes to the total (bio)pedagogisation of the *dispositif* (or assemblages) of health imperatives.

Nowhere are truths of weight loss and self discipline more apparent than in lucrative health and fitness industries, which encourage the display of individuals' 'progress' through publicising 'weight lost to date' or individually imposed rewards or reprimands for conducive or counterproductive practices to weight management. These techniques aim to increase the capacities and knowledge for individuals to change themselves and permit the embrace of self-disciplining practices. This presents a paradox, one that as Heyes (2006: 128) suggests Foucault draws attention to, where the, 'normalising of disciplinary practices is also enabling of new skills and capacities'. For instance, Heyes, writing up her experiences of her own immersion in a Weight Watchers program states:

> On the one hand, deliberately losing weight by controlling diet involves the self-construction of a docile body through attention to the minutest detail. On the other hand, becoming aware of exactly how and what one eats and drinks, realising that changing old patterns can have embodied effects, or setting a goal and moving toward it, are all enabling acts of self-transformation (Heyes, 2006: 128).

At the micro level, the paradox of self-discipline and associated guilt when one does not comply with ideologies of diet control, and in Heyes case, the enabling 'self-

transformation' of weight loss when one does. This is neither a good, nor a bad thing. The problem is however, not the conformity to cultural patterns and models of health, but rather how particular truths are used and with what effects. In the context of this thesis, I argue that the effects of the dominant obesity discourse is likely to overshadow the enabling effects of self-transformation if an individual is unable to comply with the prescribed practices of health. The underpinning morality of a 'healthy' and 'successful' body is that losing weight is good for you. However, a deluge of bio-medical truths and oppressive structures of fat phobia and ideologies of aesthetics, which bolster up the mantra that weight loss is a moral virtue in and of itself, overshadow these. Corporations with vested interests in 'health' such as the diet industry, medical providers and advertisers along with government health promotion agencies recycle this taken for granted truth. In this context, alternative accounts of the body and health are marginalized, and weight loss in the form of exercise and diet control are powerfully endorsed as a means to 'health' and 'success'.

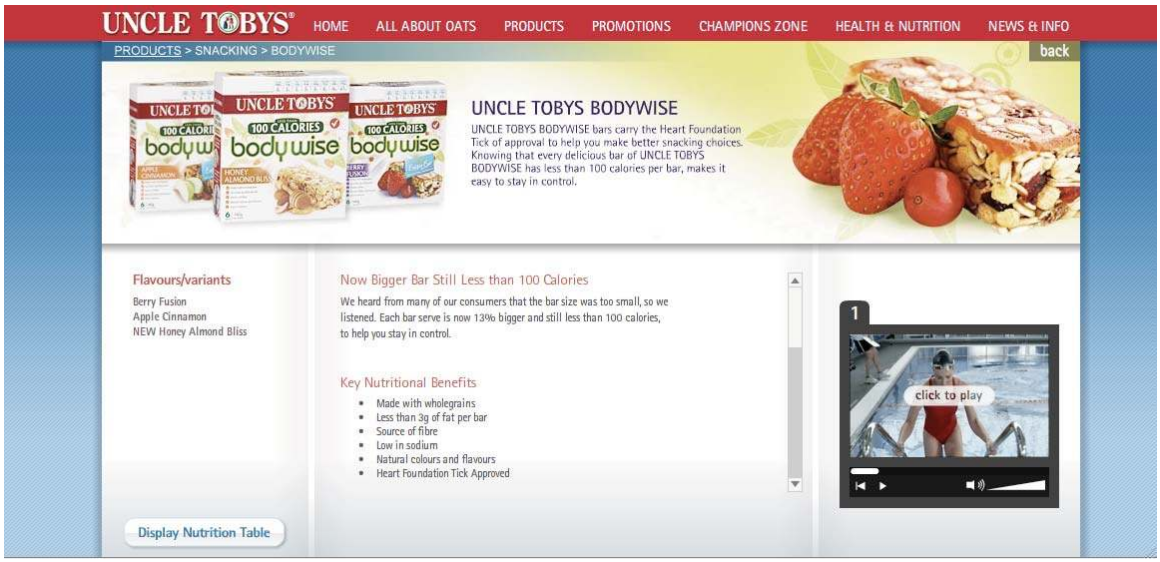
A focus on food, exercise and weight: medicalised materialisations

The commodification of health as a multi-billion dollar enterprise has contributed to the diversity of materialisations of biopedagogies that encourage individuals to adopt 'healthier' options over 'risky' behaviours. The multiple manifestations include 24-hour gyms, outdoor personal training groups and a myriad of food products including, for example, the UncleToby's *Bodywise* museli bar. In each of these materialisations, it is apparent that biomedicine has had profound consequence for how we understand ourselves and health (Rose, 2007). I will take a moment to use the *Bodywise* bar to demonstrate how medico-scientific notions of health are promulgated in the everyday and the types of truths mobilized for PPGTs to draw knowledge and experience from.

The construction of the *Bodywise bar* advertisement utilises a 'factual' account of nutrition, comprising science, nutrition, success, competitive athleticism, and forms of everyday talk. Through the label, packaging and marketing of this product (see Figure 3), it reifies objective 'scientific' truths around nutrition and the body. The most overt discourse presented is in the name of the product. Promulgating the notion of 'wise' practices for the body it epitomizes how meanings around food have become inextricably bound to a persons' body, and individuals' food choices. Further to the name, reading the running head of the product, we are told,

> Uncle Tobys Bodywise bars carry the Heart Foundation Tick of approval to help you make better snacking choices. Knowing that every delicious bar of UNCLE TOBYS BODYWISE has less than 100 calories per bar, makes it easy to stay in control' (Nestle, 2009).

Figure 3. Bodywise bar website and branding (Nestle, 2009)



The selling of the *Bodywise* product has not been a marketing 'fad' only to flare up and dissolve. The product remains in production and on supermarket shelves four years after its conception. In many ways, this product represents one of many other successful food products that take advantage of popular, rational medicalised truths that suggest we should control our 'calories'; that is, it assists us in making 'informed' decisions as to what we put in our mouth (Germov & Williams, 2008a). The product is also legitimated with the Australian Heart Foundation Tick of approval. These combined materializations of health truths reproduce the understanding that uncontrolled, and unmonitored eating represents a lack of individual responsibility for their health. It enters into what Bryman and Burgess (1994: 50) call quantification, which, 'in one form or another is one of the most important devices used to manufacture authoritative factual versions, where numerical accounts are often contrasted explicitly with "vaguer", "less precise", "more subjective", qualitative versions of the events'.

By scientifically attributing certain health and risk values to food, the dominant discourses associated with food have become increasingly medicalised. That is, food has become valued for its contribution to preventing disease, or vilified for its contribution to ill health. The development of nutrition as a science over the last century as a means to prevent illness has been rapidly taken up in everyday life (Apple, 1996; Chamberlain,

2004). Scrinis (2008) associates the medicalisation of food with a wider trend within nutrition science; one that reduces the value of food to its nutrients and their health-giving properties. He describes this trend as 'the ideology of nutritionism' (Scrinis, 2008: 47) and links its dominance to the food industry's marketing strategies. Biotechnologies and nutritional science have made the way for what are referred to as 'functional foods', alleged to have therapeutic properties (Germov & Williams, 2008a). There are two noteworthy problems with the medicalization of food. The first is that it assumes health and illness is to be addressed at the individual level. The second is that often the claims made by food packaging and marketing can be exaggerated or misleading (Germov & Williams, 2008b).

The conflation of food with medicine and science is a powerful alliance and one that constitutes 'truths' in public discourse that are difficult to contest. Representations of food in the different sites of advertising (Zwier, 2009), the home and popular culture (Chamberlain, 2004) increasingly feature food for its 'health giving' nutritional contents (e.g. protein and antioxidants) (Scrinis, 2008). Fruit and vegetables are valued for vitamins and minerals or fibre and their generally low energy value; on the other side are foods judged to be low in vitamins and minerals and high energy value (high 'empty calories'). All this becomes translated into the shorthand of 'junk' and 'fast' food. As Lupton (1996, p. 27) states 'one powerful binary opposition which is often invoked in popular and medical discourses relating to food is that between 'good' and 'bad' food'. Chamberlain (2004, p. 469) describes how 'fruits and vegetables changed their status from inessential delicacies to essential foods for good health' and how nutritional science 'opened the way for the state to intervene in the regulation and surveillance of food'. This is apparent in the ways the Australian government, for instance, disseminates nutritional guidelines and food promotion campaigns to citizens. All stages of the lifespan are seen as key points of development and prevention of ill-health and disease, and food is valued for its medicinal role in safeguarding weight gain, wellbeing and longevity. Medico-scientific food truths, then, are intimately connected with individuals' everyday life practices and work to constitute and regulate understandings of 'morality' and 'risk'. For instance, fast foods are characterised as bad because of assumed low nutritional and high energy value, but also because they carry associations of food prepared outside the home, demonstrating a lack of a caring relationship between parents (particularly mothers) and children (Lupton, 1996) and individuals' self care. On the

other hand, products like Uncle Tobys *Bodywise* bar capitalize on the 'health' conscious market and contribute to the dominant discourse of what constitutes 'healthy' food.

While healthy eating is seen as a public health concern, those who are privileged, and those who are marginalized by constructions of food are rarely considered in such accounts and the research that fuels them (Chamberlain, 2004). Rather a common undertaking in health promotion and education is to 'educate' for behaviour change. This is a key tenet of 'healthism' (Crawford, 1980). Yet, concluding that particular social groups and individuals need 'education' in order to change their behaviour fosters a practice of blaming individuals, and fails to consider class and the socio-cultural worlds that contribute to individuals' practices of the self (Lupton, 1996). These renderings of food and the body also fail to take into account the complex relationships that make up health and the structural causes underpinning food disadvantage (Coveney, 2002). A feature article in the *Indigenous Times* in 2009 (see figure 4) captures the problematic promulgation of medicalised food truths and public health agenda. It represents a critique of the heavily funded *Go for 2 & 5* Australian Government campaign. The article caption reads: 'VEGIE MAN reckons fresh fruit and vegetables will save your life. But VEGIE MAN obviously doesn't live in a remote Aboriginal community, where you'd have to sell an internal organ to pay for them'. At the intersection of Indigenous journalism, and remote communities and health, there is an acknowledgement that geographical location and the expense of fulfilling the requirement of eating '2&5 fruit and veg' a day is not as attainable as the National public health initiative prescribes.

The article 'Spoilt Rotten' in the *Indigenous Times*, is counter to most reporting from popular media on food. Rather, truths of food in the contemporary healthscape produce a dominant permutation of what it means to be 'healthy' by drawing on medicalised classifications and food binaries, separating those who 'can/do' from those who 'can't/don't' eat well. All of these truths reify food as a means of corporeality and health utility before pleasure or cultural enjoyment.

Figure 4. 'Spoilt Rotten' (Indigenous Times, April 30 2009)

Physical activity has come to represent the other side of the energy in (food) and energy out (activity) equation. Lupton (1997) writes that physical activity, once undertaken for the purposes of 'character formation', fresh air and experiencing nature, just for pleasure, is now understood largely as a medical activity. 'Incidental exercise' has become a common way of describing any unorganised movement where an individual has the opportunity to 'burn calories' such as walking to the coffee shop (Australian Medical Association, 2006). In the current heathscape, lifestyle 'success' is part and parcel of physical culture and politics and the market place. It manifests in forms of policing the body and 'strengthening of a super ego' (Ingham, 2001), where the individual is held personally responsible for his or her own quality of life. As Howell and Ingham, 2001) write,

> The language of lifestyle is one of independence, and self-sufficiency; it signifies pleasure, freedom, success and mobility. In this sense, practises in physical culture provide personal freedom and the opportunity to share in the good life: To

> control one's own future, to have individual control over one's own destiny' To adopt the Nike's slogan of the times, 'Just Do It' (Howell & Ingham, 2001: 337).

In the climate of contemporary healthscapes it is normal to judge others and oneself for their fitness, weight and health. Maguire (2008) argues that there is an obligation to fitness self-work in individual's leisure time. The work of fitness, she suggests is a type of self-investment, increasingly necessary for self-value in an economic environment. These values are also a discursive force of public commentary on political leadership. In the case of the 2009 presidential elections in America, a *Men's Fitness* magazine article titled 'Obama Is Fit to Lead' wrote: "The slim senator runs and works out regularly. More impressive, *he's helped liberals shed that hand-wringing, wussy image* they've lately been fighting to change. And *that takes muscle*!" (Men's Fitness, 2008). It is assumed that on Obama's lifestyle, as evidenced by his slim body and exercise routine alone, he is fit and capable of leading the country. Recently, some scholars, (Heyes, 2006) have come to argue that weigh-loss dieting is not just about a 'slender' or 'fit' ideal, but also a process of working on the self, couched in a discourse of self-care. It is here that Obama's body is an important source of 'social capital' (Shilling, 1993), specifically 'physical capital' in the Men's Fitness magazine's characterization of Obama. As Shilling points out (1993) the body as object and as a source of physical capital, is read as an indicator of one's physical and mental competence.

3.3 Schooling the 'healthy' child citizen

The ways in which health and body discourses have been recontextualised in school and H-PE practices has varied significantly over the past century; some threads of knowledge continue to hold power, whereas others have dropped off, and new forms have emerged. In what follows, I discuss how schools operate as sites where formations of the same public health promotion and discourses of obesity of the contemporary healthscape have ascended into prominence. In particular, I highlight how such discourses have become normalised in the context of schools through biopedagogies about how to be 'healthy'. This is far from a new territory with literature steadily growing in recent years mapping this phenomenon (Burrows & Wright, 2007; Cliff & Wright, 2010; Evans, 2006; Evans & Rich, 2011; Gard & Wright, 2001; Harwood, 2009; Kirk, 2006; Rich, 2010). By bringing together such literature with examples of Australian materialisations, the intention is to describe how contemporary healthscapes seep into school curriculum, pedagogies and practices.

3.3.1 A Brief History of H-PE in NSW

In Australia, and other countries as a compulsory school subject, both Health and Physical Education have traditionally been afforded an instrumental role in the development of young peoples 'correct attitudes' and morals towards physical, social, and psychological dimensions of health and the body (McCuaig & Tinning, 2010). However, over time, what counts as important has changed along with the terminology used to describe the learning area. The unification of H-PE has been an uneasy relationship. Given its historical context, health education in its present state is particularly obscured by its ties with the subject area of physical education. This has lead to limited literature that deals specifically with health education curricular and pedagogy; the majority of the socially orientated literature has focused on PE. With a few exceptions (Sinkinson & Burrows, 2011; Leahy, 2012), when 'health' has been considered, it has often been for its relationship to medicalised versions of health prevention or promotion aspects of PE such as Health Based Physical Education (HBPE) or Health Related Fitness (HRF) (Colquhoun, 1990; Gard, 2006; Johns & Tinning, 2006; McCuaig & Tinning, 2010; Tinning & Glasby, 2002). This ill-defined relationship between the subject areas of 'Health' and 'Physical Education', as others have identified, has not only led to some tensions among people with vested interests in the learning area, but has presented enduring challenges for the field (Lupton, 1999; Tinning & Glasby, 2002). In differing configurations in states and territories, the learning area (of H-PE) usually subsumes the subjects of home economics and outdoor education (Macdonald, Hunter, Carlson, & Penney, 2002). As a subject, health education draws on disciplines as diverse as psychology, biology, sociology, ethics and medicine (Burrows, 1995). This, along with the subject's core content dealing with personal and private values makes it no small task to prepare graduate teachers with content knowledge and skills to teach it.

Bodies for industrial labour

Historically, in NSW schools, the field of H-PE's core interest has been developing healthy citizens, or more recently, healthy bodies. In the late 19th and early 20th Centuries, early human movement professionals responded to concerns over illness related to industrialization by emphasising the need for exercise programs in schools (Tinning, 2010, Lawson, 1983). The teaching of health up until the late 20th century was invested in inculcating corporeal habits. Values of citizenship were highly valued and as part of this, there was an emphasis on the body in relation to: posture and hygiene, the need for fresh

air, the prevention of infection and disease, and suitable foods. The molding of 'good' citizens was a preoccupation that was regulated through military drill with the intention of disciplining a uniformity of bodies. The 1965 syllabus states: 'health must first be nurtured in the school as a preliminary to its sustaining and strengthening an evolving adult society' (p.x). Kirk (1998) demonstrates how these 19th century ideals of PE had a residual legacy up until the 1960s, however as capitalism rose into prominence, a much more individualistic rather than obvious regime of physical control began to develop (Wright, 1991).

In NSW, up until the early 1990s Physical Education in primary schools was taught from the 1965 *Natural Science, Health and Physical Education* syllabus. In 1992 after a restructuring of the primary curriculum by the Australian Education Office, 1965 syllabus was replaced by the *Personal Development, Health and Physical Education (PDHPE) draft* syllabus. The primary school curriculum changes at the time of the 1992 draft meant that PDHPE become one of six compulsory primary school learning areas mandated by a Board of Studies syllabus. Even though this emergence of new curriculum formalized the learning area of PDHPE in NSW primary schools, reforms in health and physical education were already well underway. The reemergence of health education was taking place predominantly in high schools in response to the permissive society of the 1960s and 70s (Bray, 1991). In primary schools, by virtue of a rising health consciousness that attributed a lack of physical activity to lifestyle diseases, fitness and personal responsibility, there was a rising focus on public health through educational practices. In particular, there was a myriad of resources that filled a gap for schools and teachers to respond to children's levels of health and fitness. All of this came into prominence from wider forces in the competitive climate of the Cold War.

Public health inroads in Physical Education

The emergence of a concern with sedentary lifestyles and the emerging medico-scientific knowledge around the risks of cardiovascular disease led to developments in schools around physical education geared toward developing fit, active children. This gained momentum in the 1990s with HRF and HBPE, or various versions of these, coming to prominence in primary schools. Kirk (1989) argues how there was a significant shift in ways of thinking about health at this time that infiltrated educational agendas. As he suggests,

> …[a] simultaneous emergence of a particular view of the relationship between exercise, physical fitness and health a number of different sites in the cultural production is a matter of considerable significance, because it indicates a shift in the locus of social control within capitalist societies from mass, external control of the body to an individual, internal mode of corporeal control (Kirk, 1989: 418).

In response to the focus on individual control over health, nationwide measurements of fitness were conducted. Two surveys of childhood health and fitness, in the Australian context, followed suit from America and their preoccupation with European versions of fitness testing at this time: *The Australian Health and Fitness Survey* (Pyke, 1986) and the *Australian Youth Fitness Survey* (Emmel, 1980). These resulted in the insurgence of childhood and youth fitness programs with the assumption that they would bolster Australian Children's health and fitness (Kirk, 1989). More recently the *'Schools Physical Activity and Nutrition Survey' (SPANS),* which began in 1994, with three subsequent reports in 1999, 2004 and 2010, continued to measure levels of fitness and 'health', with similar efforts being adopted elsewhere. In Canada, for instance, the third wave of the Canada Fitness Survey was renamed the '*2002 Survey of Well Being in Canada*'. In the US, the '*National Youth Risk Behaviour Survey*' (YRBS) took place of the '*National Children's Fitness Survey*'.

The emergence of H-PE reform in primary schools leading up to the 1992 draft syllabus is also exemplified by school support documents such as 1982 *Get moving: fitness is fun: a handbook of the daily fitness programs K-6* (NSW Department of Education, 1982). This was published for teachers to support the implementation of fitness lessons/programs in schools in the early 80s. However, most popular during this time were self-contained curriculum packages, namely Jump Rope for Heart (the National Heart Foundation), Daily Physical Education Program (endorsed by ACHPER and sponsored by the NABISCO Food Company), Aussie Sports and Sport It! (endorsed by the Australian Sports Commission (ASC) and sponsored by Pizza Hut). These packages, capitalized on the burgeoning knowledge and concern over children's poor health and fitness. Discourse surrounding this movement has been identified in the literature as HBPE emergent from the mid 1970s (Colquhoun, 1990; Kirk & Tinning, 1990) and HRF (Kirk & Tinning, 1990). The Daily Physical Education Program and Jump Rope for Heart, represent early materializations of the rise in HBPE discourse.

Another example of the infiltration of health ideals is apparent in a 1997 document titled 'Physical activity for health and fitness support document: A support document for the

K-*6 Personal Development, Health and Physical Education Draft Syllabus'* (Board of Studies New South Wales, 1997). This was introduced to schools with the aim to 'support teachers in implementing the 1992 PDH-PE draft syllabus. Its motive was to 'encourage students to become more active through: developmentally appropriate physical education programs… and support school policies and procedures and the involvement of the broader school community' (p.3). This support document, whilst not mandated for implementation, is emblematic of the subtle shifts in the field of H-PE and more broadly healthy citizenship through the 1990s. This document, or what it aimed to achieve, was largely incorporated into the NSW K-6 PDHPE Syllabus document in 1999. During this time, over the 1980s-90s there was considerable intensification of healthism discourses, inclusive of physical activity, fundamental movement skills and body regulation, placing pressure on curriculum development. For instance the same year as the release of the *Physical Activity for Health and Fitness Support Document,* the Schools Fitness and Physical Activity Survey (SPANS) (Booth et al., 1997) report was published and provided direction for the 1999 syllabus inclusions. This document provided recommendations to improve the fundamental movement skills of primary school students with the aim of 'increasing their enjoyment of sports and other activities and to promote a more active lifestyle' (Booth et al., 1997). Interestingly, the former 'fitness and lifestyle' strand of the 1992 consultation draft document was replaced by the term 'active lifestyles' in the 1999 syllabus document in a bid perhaps to differentiate the newer focus on 'physical activity' from 'exercise'.

The current 1999 primary syllabus, reprinted in 2007 with minimal changes, continues to focus on physical activity for health benefits, in the aim to address perceived inactivity amongst children. It states in its rationale that physical activity 'can improve cardiovascular efficiency and aid efforts to reduce risk factors of coronary heart disease. It is critical for bone development, controlling obesity and improving psychological health and immune status' (Board of Studies New South Wales, 1999: 7). The syllabus reinforces the relationship between physical activity and the management of lifestyle to reduce health risks. This materialisation of primary school curricula has been made possible via medico-scientific knowledge and the preoccupation with health related fitness. More recently, the justification for physical activity in schooling has been conflated with physical education as a response to the risk of 'obesity'. The 1999 syllabus,

which also takes as its core the promotion of active lifestyles through knowledge, understanding, skills, values and attitudes:

> The aim of this syllabus is to develop in each student the knowledge and understanding, skills and values and attitudes needed to lead healthy, active and fulfilling lives. In doing so, the syllabus will form the basis for students to adopt a responsible and productive role in society (Board of Studies New South Wales, 2007: 8).

The NSW H-PE syllabus is constituted of eight subject areas, five skills and six values and attitudes (see Table 2).

Table 2. NSW BOS K-6 PDHPE syllabus subject matter, skills and values and attitudes

Strands	**Subject Matter**	**Skills**	**Values and Attitudes**
Active Lifestyle	• components of an active lifestyle • ways to be active • effects of physical activities	Communicating Decision Making	V1 refers to a sense of their own worth and dignity;
Dance	• non locomotor skills • locomotor skills • elements of dance • composition • dance styles	Interacting	V2 respects the right of others to hold different values and attitudes from their own;
Games and Sports	• non locomotor skills • locomotor skills • manipulative skills • games • athletics • aquatics • playing the games	Moving Problem Solving	V3 enjoys a sense of belonging; V4 increasingly accepts responsibility for personal and community health;
Growth and Development	• personal identity • the body • human sexuality • changes		
Gymnastics	• non locomotor skills • locomotor skills • elements of movement • composition		V5 willingly participates in regular physical activity; and
Interpersonal Relationships	• relationships • communication • families • peers • groups		V6 commits to realising their full potential.
Personal health Choices	• making decisions • nutrition • health services and products • drug use • environmental health • preventive measures		
Safe Living	• personal safety • home and rural safety • school and play safety • road safety • water safety • emergency procedures		

Glancing towards the future

Enduring into the present has been the ongoing focus on physical activity HRF and HBPE. This has continued as a stalwart agenda in school H-PE (in particular, see Sallis, et al., 2012). Common themes enduring both primary and secondary PDHPE curriculum include: 'personal responsibility, personal choice, decision-making, personal development and fulfillment responsibility for others, rationality and autonomy' (Leahy, 2012: 129). More specifically, there has been a concern with risk and lifestyle diseases tied up in individuals' personal choice and decision-making. It seems this historical position has lead to an absence of literature that engages with health education in its own right, aside from physical education and its relationship to 'health', HBPE, risk or health promotion particularly in primary schools.

The new National Curriculum currently being dawn up and consulted under the title of 'Health and Physical Education', also suggests the joining of the subject areas of health and physical education is not going to change any time soon. The elements of this forthcoming syllabus will be taken up later in this thesis. What is striking, however throughout the last thirty years of H-PE curriculum is its enduring focus on physical aspects of health. The subject's ties with physical education have only worked to strengthen this relationship. It is not surprising, then, that Lupton (1999: 295) found that some of the specialist teachers in her study 'found it difficult to coordinate what happens in physical education with the health education side'. She found with the introduction of a combined supposedly 'integrated', syllabus, oftentimes teachers would teach either of these subject areas, but not together. This was despite the teachers' support for the implementation of a combined subject area.

As part of H-PE's ties with human movement sciences, empirical-analytical forms of research have been privileged in physical education research, and in short, this has filtered into often times residual technocratic values and attitudes in the field of H-PE curricular (McKay, Gore, & Kirk, 1990). While 'alternative' methods of research and perspectives in H-PE have come to include socially critical, feminist, phenomenological and other approaches since the early 1990s, there are still strong links between scientism, validity and objectivity of the body in H-PE practice, teacher education and research. The sociocultural agenda emerged in the 1999 secondary school PDHPE syllabus and gestured toward a departure from biomedical notions of health. As Cliff (2012: 296)

writes 'definitions which focused solely on biomedical notions of health were exchanged for the 'social view of health', which placed an emphasis on locating health within its social and cultural contexts'. Garrett and Wrench (2006) outline how HPE in South Australia had been envisioned as 'underpinned by the key principles of diversity, social justice and supportive environments' (Garrett & Wrench, 2006: 200). However research continues to demonstrate some of the mainstay discourses at play in physical education including: performance and discipline, gendered performance, slender and 'fit' bodies, fitness, 'academic' versus 'practical' subjects and 'useful' and obedient bodies (Webb, et al., 2008: 354).

While little work has been done in differentiating health from physical education, there has been a strong argument for differentiating between physical activity and physical education (Corbin, 2002). Claims as to what physical education can achieve for children's physical activity levels are at best dubious (lisahunter, 2006). Trost (2006: 164), in his review of the literature writes, 'while there remain compelling reasons to promote physical activity in young people, there is currently little evidence to suggest that childhood physical activity has a significant influence on health outcomes during adulthood'. At the Australian Educational Research Association (AARE) HPE Special Interest Group (SIG) conference, held at the University of Queensland (2010), a focus and expectation of 'physical activity' was discussed as an ongoing concern for the field of H-PE. What was tabled was the need for a professional body of academics and teacher educators to be clear about the epistemological and ontological bases of H-PE, health based PE and physical activity. This is difficult work, as physical activity for the promotion of health through PE bolsters the very standing and inclusion of H-PE as a learning area in schools and a university discipline (Tinning, 2012). Thus there is an ongoing discussion in relation to the ideals of educating the 'future citizen' with the aim of instilling young people with the ability and desire to manage and self-regulate their own health.

3.3.2 Curating a 'healthy' aesthetic: The material body in H-PE

Aesthetics can mean many things: style, taste, philosophy, artistic language or a cognitive mode, however here I use the word in relation to the appearance of something; how it materializes on the surface similar to the notion of veneer (Koren, 2010; Sartwell, 2010). An enduring theme in the culture of school H-PE is the importance of the teacher modeling and displaying 'healthy' behaviours, attitudes and beliefs. The relationship to

aesthetics here is that a particular symbolic version of health seems to characterize the 'exemplar' teacher. The role of health aesthetics extends to both the 'health promoting' actions of teachers, such as being seen eating fruit and vegetables rather than chips and chocolate or wearing a hat, and also to their ability to competently demonstrate movement skills and not be 'overweight'. Lupton describes 'the values of "activity" rather than passivity, "physical fitness", "healthiness", "an ordered life", emotional equilibrium as being presented as integral to the objectives of the health and physical education curriculum' and teachers' work (Lupton, 1995: 294).

Modeling forms of positive health behaviour has become a normalised moralistic enterprise, a signifier of the competent, conscientious teacher or individual. Thus, in itself the materiality of the body is a form of pedagogical work. Tinning has argued that the teacher's body 'by virtue of its materiality does pedagogical work without a word being spoken' (Tinning, 2010: 126). McWilliam (1996: 367) also emphasizes the importance of the embodied materiality in teachers' work and students' learning. She writes, 'the body of the teacher needs to be remembered in writing about teaching and learning, because it produces desire in pedagogical events, for good as well as ill'. In the contemporary *dispositif* of obesity and health imperatives, it is not uncommon for school leaders, including teachers and administrators to see themselves as evangelists for modeling 'health' (Vander Schee, 2009a). Vander Schee (2009a) in her study of interviews with administrators, faculty and staff at a school in the northeastern United States found that the teachers' commitment to health was espoused through a belief in the need to overtly display their healthy bodywork. She describes some teachers as having:

> [a] kind of zealot-like enthusiasm for the project of health… that encouraged a hyper-vigilant form of self-surveillance among school leaders reading their own bodily conditions and/ or actions. There was a belief (among teachers)… that students would internalize certain behaviours (negative or positive) if they saw these particular health modalities displayed (Vander Schee, 2009a: 412).

While it is difficult to trace how students understand and take meaning from these teachers in this particular school, there is a particular pedagogical intention here. Tinning (2010: 19) argues that outcomes or consequences of learning will always be present, but they are 'often unpredictable and always dependent on meaning making processes which are beyond the control of the teacher'. Thus, what is important to highlight and consider, is the intentionality of pedagogies or biopedagogies. 'Pedagogical work' takes place in the form of 'what knowledge(s), ways of thinking, dispositions and subjectivities are actually

(re)produced in/through particular pedagogical encounters' (p.19). However identifying normalised forms of intentionality in acting and conveying knowledge and beliefs is what lies at the heart of this thesis. In the field, meaning making intentions have been heavily underpinned by performance, medico-scientific, gendered and health promotion discourses and practices. If we consider Ellsworth's (1997: 2) contention that 'all curricula and pedagogies invite their users to take up particular positions within relation of knowledge, power and desire', then the power relations of H-PE are evident in the pedagogical intentionality of health promotion is experienced through imperatives, which govern how one should lead, look and act.

The materialisation of symbolic aesthetics of the body is also apparent in the ways primary teachers are positioned by H-PE specialists. For example, Tinning (2010) recounts an experience he had as a teacher educator showing specialist H-PE students a video of a primary school generalist teacher leading a movement class. The beliefs of these H-PE students, represents prevailing ideas in the field of what makes a good H-PE teacher: physically competent and a 'role model' in movement and 'health'. It also reinforces that primary teachers do not always live up to the ideal, thus making them 'poor' subjects in the eyes of specialists. Some of the pre-service teachers argued that the primary teachers in the video were 'not real PE teachers' because they did not move around much, and that they did not demonstrate particular skills. This was despite the pupils in the video being instructed, through what Tinning describes as successful teaching. Tinning concludes that being able to demonstrate is not the most vital element of quality teaching - 'being able to perform the skill might be a bonus rather than a necessity' (p.129). There have been longstanding discussions of teacher as exemplar healthy citizen in PE. Johnson (1985: 43, cited in Tinning, 2010: 127) for example, wrote in the 1980s: '[h]ow can we expect anyone to listen to what we have to say about the benefits of fitness if we are overweight and in poor physical condition ourselves?'. These beliefs constitute what some regard as a good teacher, and I refer to as the imperative for the curation of a healthy aesthetic in order to teach about health.

Unique focus on the body in H-PE

The body and health are explicitly central to the contemporary subject area of H-PE and the agenda of healthy schooling. Primary syllabus documents (Board of Studies New South Wales, 2007) call upon students to: 'describe different body parts and how the body grows and changes' (p.14), 'practice body movement and control' (p.14),

'describe(s) the things they need to refuel their body' (p.27), 'display(s) basic positive health practices' (p.19), or 'recognise(s) that positive health choices can promote wellbeing' (p.19). These health and bodily 'outcomes', along with others, position teachers in a powerful role of responsibility to fabricate 'health' and 'body' pedagogical practices. Thus, decisions about what constitutes lessons and learning activities along with school wide programs and initiatives require professional judgement over content inclusions/exclusions. This is by no means a simple task. Given the syllabus is underpinned by an outcomes approach to bodily knowledge, this lends itself to a technocratic form of translation in schools. Tinning (2010) has described how the interpretation of syllabus documents is likely to assume bio-medical knowledge as 'expert' knowledge (Tinning, 2010). While research from a social, constructivist view of health has, and continues to, inform curriculum and policy documents (for example, see ACARA, 2012; Australian Education Council, 1994), how this looks in practice is complex, and underrepresented in research (Cliff, 2012; Macdonald & lisahunter, 2005).

In contrast to more 'academic' subjects such as Maths and English, H-PE presents a unique subject area where students' bodies 'take on different attire (gym clothes, bathers) and there are permissions to break the normative discourses of other subjects where students sit at desks and are expected to work quietly' (Webb, et al., 2008: 354). Arguably, there are more opportunities in physical education for 'noise versus silence, there is movement versus stillness, and bodies are touching or touched' (Webb, et al., 2008: 354). While movement and noise can clearly take place in other subject areas, and these elements are not exclusive to H-PE, Webb et al. (2008) point to the normalisation of these elements in the H-PE learning area and the likelihood of their occurrence on a frequent basis. This is partially why PE may be a confronting subject to teach for some generalists who are more comfortable in the confines of a classroom, especially when we consider this in comparison to its counterpart, 'health' education. Either way, there is a unique set of resources for the formation of body knowledge and experience in H-PE. Accordingly, this places teachers' pedagogical intentionality of health imperatives even more important to critically reflect upon in primary teacher education.

3.3.3 School wide health imperatives and addressing 'obesity'

The preoccupation with preventing childhood 'overweight and obesity' has infiltrated not only curricular, but Australian school policies and programs that promote physical activity and nutritional practices. Schools are targeted for government funded programs

such as *Go for 2 and 5*, *Go for Your Life* and Healthy Canteen policies. One of the major forces driving such programs and initiatives has been government funding and attention, backed by a host of preventative health taskforces, including organisations such as the Heart Foundation (2007) and Obesity Prevention Australia Inc (2010). An Australian government initiative, 'Building a healthy, active Australia: Active school curriculum' states as its rationale:

> Some children are not spending as much time engaged in physical activity as children in previous generations… This is contributing to the fact that there are currently 1.5 million young people under the age of 18 in Australia who are either overweight or obese. Once children or adolescents are overweight it is difficult for them to get back to a healthy weight… The majority of children spend six hours per day in school for 40 weeks of the year between the age of 5 and 17 years. Schools are, therefore, well placed to provide children with the opportunity to be physically active… Given the amount of time children spend at school it is important that they spend some of this time doing physical activity and learning about the importance of daily exercise (Australian Government Department of Health and Ageing, 2011a).

In this climate, the 'classroom' has emerged as a space targeted by various groups and stakeholders to educate for the healthy child citizen, who will grow up to be self-regulating individual capable of making the 'right' moral decisions from a plethora of 'choices' available to him or her. Another example of the translation of health imperatives in school wide initiatives is a six-page newsletter that was distributed to parents of children enrolled at an Australian inner-city primary school, in the second school term of 2009. The newsletter itself did not appear too different from that of a regular school newsletter designed to communicate information to parents. In this particular edition, however, it included an item where members of the school teaching and administration staff outlined the school's expectations around children's healthy eating. There was also mention of students participating in and donating money to the 'Jump rope for heart' fundraiser - a 'health program for the students'. Another item informed parents that students would be completing a health questionnaire and having their Body Mass Index (BMI) measured as part of a school 'health evaluation program', explained in terms of making 'our children healthier and more active':

Figure 5. School newsletter excerpt: from the head of student & family support services sourced online.

Dear Parents,

Welcome back to the new term. I hope you all had a lovely break. I have to bring your attention to the health of our children. We are starting a health evaluation program in our school from term two where all the students will be required to fill out health questionnaires and have their Body Mass Index (BMI) measured. We will be concentrating on healthy eating habits and a more active life style.

Your cooperation will be much needed and appreciated in making our children healthier and more active.

Please pack a healthy lunch for your child/ren as junk food is not tolerated in school and from this term any chips and lollies will not be allowed in school. Hygiene is another area we will be working on. We will do regular uniform checks and head lice screening will be done once a term. If you have any queries please do not hesitate to contact me.

The College is participating in 'JUMP ROPE FOR HEART' fundraiser for the heart foundation. Please send a gold coin donation. We will be skipping ropes on Friday 8th May all day. Any parents interested are welcome to join us with a gold coin donation.

We will be running regular activities and your participation is much appreciated. I will keep you posted on what we are planning on doing in the coming weeks.

This newsletter in many ways represents an instantiation of the current epoch of healthy schooling. This particular school is not operating in isolation from the wider social and cultural knowledge and practices, but rather these same ideas and events manifest in similar and different ways in other schools and social forms of biopedagogies. The assumption that underlies the current approach to health in schools and this newsletter is the moral imperative (for both students, parents and members of the school community) to eat 'healthy food' (read as fruit and vegetables) and not eat 'unhealthy food' (junkfood, such as lollies and chips). In this example 'healthy' eating is emphasized with the language of certainty: 'junk food is not tolerated in school and from this term any chips and lollies will not be allowed in school'. It is also assumed measuring children's BMI (which involves weighing children) is a socially sanctioned practice (and even required), perhaps because it is part of a health evaluation program that is underpinned by the authority of normalised biomedical truths. At a glance one might think the school appears to have the best interests of the students' health and welfare at play. But if we consider the wider *dispositif* of power-knowledge relations of practices underpinning this and other schools, health can be understood as a politicized practice with contested ideas about what is ethical and educationally 'productive'.

Vander Schee (2009a) argues in light of her empirical material that it would be an exception rather than the norm for a school leader, for instance a principal, to be committed to alternative forms of health and wellbeing. Rather, as a discursive formation, the 'obesity crisis' represents a powerful set of ideas and ways of seeing 'health' and the 'body', at the forefront of health educational agendas. Laker (2000: 4) describes how many biopedagogies operate through the 'hidden curriculum': 'what is taught to pupils by the way the school operates, by the way teachers behave and by the interactions that take place on a daily basis in school'. He goes on to explain that physical

education practices are central to the promulgation of particular 'norms and values', with young people themselves implicated in these processes: 'Pupils also have a part to play in establishing the status quo and their reactions to it and treatment of other pupils' (p.48). In this context is it difficult to see the fat child as anything other than 'unhealthy' or having 'immoral' parents (Burrows, 2010a). Thus, current discourses of overweight and obesity provide powerful ways of knowing and understanding health and the body that legitimate particular ways for young people to construct themselves. This is situated within a 'performative culture' where individuals or teachers are brought into the competition and constant comparison of health and fitness (Ball, 2003). These tendencies provide dichotomous classifications of people as being either 'overweight' or a 'healthy weight' and individuals are distinguished as either 'normal' or 'pathological'. PPGTs, teachers and children have to make sense of all of the 'obesity' noise, in coming to understand themselves, their health and bodies.

A point of departure

Tracing health and body discourses in this chapter has involved identifying the interaction of power-knowledge within and through the practices and structures of popular meanings of health and H-PE in schools. The key ideas developed in this *dispositif* include biopedagogies and the recontextualisation of public health agendas underpinned by epidemiological and medico-scientific rationales. The rise of such rationalities has brought about a deep-seated social link between health and weight as a personal and economic problem. Despite 'ideological and empirical' counterpoints to weight as symbolic of health, the ideal of a 'slender weight controlled body' remains dominant in government, health promotion, educational, and popular cultural accounts of 'health'. Through constructing a *dispositif* of the present, that is, knowledge structures shaping the conditions of possibility and dominant ways of thinking about health and the body, I have outlined the ways these truths circulate in popular culture, schooling and other social sites of knowledge production and experience. Using Foucault's analytics to describe what I have called 'contemporary healthscapes' has helped to uncover the taken for granted knowedge and practices of health and the body in cultural, social and educational sites. In the next chapter I introduce the two empirical sites of participant recruitment and the ways teacher educators from these institutions may contribute to the nexus of discursive knowledge and non-discursive practices that are available to PPGTs.

Chapter 4

Teacher Education as a site of knowledge production

Introduction: Teacher education

Primary generalist H-PE teacher education

Two sites of teacher education

Site A: Moore University

Site B: Cavendish University

Discussion: Orientations in primary H-PETE

4.1 Introduction: Teacher education

As already mentioned, the institutional practice of primary generalist *health education* teacher education is a unique area with little research. This chapter brings together the ways two sites of primary teacher education, Moore and Cavendish Universities, and their teacher educators engage with and construct Health and Physical Education Teacher Education (H-PETE). In addressing the first major research question, what are the discourses of health and the body available to PPGTs this chapter examines teacher education as a site of knowledge production in relation to health. I interpret the unique assemblages of courses and teacher educators' positions in relation to H-PE knowledge at each of the universities. Notwithstanding the experiences and knowledge PPGTs bring with them (Fletcher, 2011; Garrett & Wrench, 2007), the focus of this chapter is to specifically explore teacher education because of the important role it plays in shaping graduate teachers' pedagogical and content knowledge in relation to health education.

Complementing the *dispositif* of health imperatives mapped in chapter three, chapter four draws on the literature in relation to H-PE teacher education as well as an analysis of interviews with five teacher educators. In addition to examining the ways these teacher educators instantiated discourses of H-PE, the analysis also involved consideration of the coursework outcomes and assessments students (including the participants in this study) were invited to engage with. The purpose of this exploration is not to compare the institutional sites or individual teacher educators with the PPGTs' knowledge and learning, per se. Rather, my intention is to map the common approaches to generalist H-PETE and how these are shaped by institutional requirements and the *dispositif* of new health imperatives, or in other words contemporary healthscapes. While the sample of teacher educators is relatively small, there is sufficient material to consider how different perspectives benefit particular ways of acting, knowing and being, and thus what students were invited to do. Overall this chapter provides a platform to later consider the effects of particular pedagogical approaches and intentions in generalist H-PETE.

4.1.1 Theorising the role of teacher education

H-PETE is a particular site of cultural and institutional practice where discourses of health, the body, childhood, teaching and learning cohere with the aim to provide prospective teachers with the knowledge, attitudes, behaviors and skills to 'successfully' begin teaching in schools. Throughout teacher training encounters, teacher educators and

students bring with them lived histories of cultural and social activities that affirm or challenge specific discourses, social relations and cultural practices (Ryan, 2011). One way of theorising the various encounters that take place in teacher education is the notion of a 'triadic' relationship (Herold & Waring, 2009) between: (i) students biographies; (ii) the teacher; and (iii) the content knowledge/outcomes of the subject. Each of these three elements are considered important in the process of teacher education and generating prospective teachers skills and knowledge. Common to the literature on teacher education and pre-service teachers is a body of work that points specifically to the role student teachers' own schooling experiences (their biographies), and their situated learning plays in the formation of their evolving perspectives and identities (Kirk & Kinchin, 2003; Lortie, 1975; Mewborn & Tyminski, 2006).

In contrast to drawing on the 'triadic relationship' of pre-service teachers learning, often the process of becoming a teacher is viewed as a linear development, where teachers learn the craft in ways that are identifiable, measurable and replicable. This is currently mirrored in the teaching standards and accreditation of registration bodies that have different levels of progression to describe what is considered to be an accomplished teacher (Connell, 2009). Connell (2009) argues that a developmental approach to teaching standards and accreditation is brought about by a form of corporate managerialism and suggests there is a 'construct of the good teacher as an entrepreneurial self, forging a path of personal advancement' (p.220). The 'quality' of a teacher in this sense is seen to be dependent upon the individual's capacity to seek out knowledge and continually advance themselves. The assumptions with this approach, is that with enough time and practice prospective teachers will become 'expert' teachers (Marble, 2012).

Marble (2012), drawing on a Deleuzian framework, offers another perspective to that of developmental or 'entrepreneurial' approaches to being a teacher. Rather than the replication of a teaching identity or 'accepted sets of behaviours', Marble argues that the becoming-teacher might involve 'the creative responding to always-new situations and relationships that classrooms and schools make possible' (p.22). This requires equipping students with knowledge and critical thinking skills. Connell's (2009: 224) description of teachers as intellectual workers is similar to this. She suggests that to teach well,

> requires endless initiative and invention – the constant improvisation revealed in studies of the teaching labour process. It also requires a depth of knowledge about

> the culture, and a practice of critical analysis, which only an intellectually substantial program of teacher education will support.

If we take Connell (2009) and Marble's (2012) stance on teacher education, developing PPGTs' capacities for critical analysis as well as intellectual engagement with content knowledge are crucial elements of TE programs.

Others, in contrast to Connell, have placed more emphasis on the importance of practical experience in teacher education. Darling-Hammond (2006a) has been influential in suggesting that there is enough evidence for teacher education programs to achieve high outcomes for graduates. She outlines three critical components of effective teacher education programs:

> [1] tight coherence and integration among courses and between course work and clinical work in schools, [2] extensive and intensely supervised clinical (professional experience) work integrated with course work using pedagogies that link theory and practice, [3] and closer, proactive relationships with schools that serve diverse learners effectively and develop and model good teaching (Darling-Hammond, 2006a: 300)

In formulating these three critical components, Darling-Hammond draws heavily on the National Academy of Education Committee of Teacher Education outcomes. While these are taken from a US context, they have productive outcomes for other contexts of teacher education. Darling-Hammond suggests there are three elements to foundational teacher education, which if done well, will develop 'good' teachers: (i) knowledge of learners; (ii) understanding the curriculum content and the social purposes of education; and (iii) understanding the skills for teaching. In the literature on making a difference in teacher education the fragmentation or smatterings of unrelated courses are argued to be feeble change agents in helping new teachers move along in their thinking and educational practice (Zeichner & Gore, 1990). In summary, teacher education literature tends to place an emphasis on intellectual engagement (for instance with content knowledge) and/or integrated practical teaching experience.

4.2 Primary generalist H-PE teacher education

The interests and tensions that permeate the learning area of H-PE as described in chapter three, are also to be found in the project of generalist H-PETE. There are, however, added considerations and characteristics unique to generalist H-PETE as distinct from specialist H-PETE. In particular, a significant difference is the limited time H-PE receives in teacher education program timetabling. What more recently has

emerged as a feature of training teachers is the responsibility to carry out their courses within the requirements of governing graduate teaching standards. Across the UK, North America and other developed countries, there is usually a governing body that sets down policies and regulates the compliance of teacher education institutions to the standards. It is no surprise then, that Herold and Waring recommend that 'the development of knowledge for teaching in pre-service teachers… needs to be reviewed with reference to the respective national teacher education framework and school curricula within which it is located.' (2009: 339). Each of the States and Territories in Australia has different governing bodies. Presently, in New South Wales, the NSW Institute of Teachers set the graduate standards of teacher education programs. For primary H-PE there are three key areas of graduate teaching competencies. These are listed in full at Appendix 1 and fall under the headings of: (i) Knowledge of subject content; (ii) Knowledge of pedagogy; and (iii) Knowledge of NSW curriculum requirements (NSW Institute of Teachers, 2010: 10). These will be mentioned again later, however given the limited time allocated to H-PETE, it makes meeting these graduate outcomes difficult to achieve.

4.2.1 H-PE *generalist* Teacher Education

Since health and physical education are linked in the Australian and New Zealand context as 'H-PE', this has presented challenges for mapping the literature of H-PE teacher education in a straightforward way. In most cases, the literature on teacher education has focused on physical education teacher education; 'PETE' as it is known. In this chapter, it is necessary to draw on such PETE literature to describe primary generalist teacher education, however with Tinning (2012), I suggest a renewed acronym of H-PETE[16], in an effort to draw special attention to generalist Health Education Teacher Education (HETE)[17]. Thus, from herein I will refer to H-PETE.

While there is little literature specifically on generalist H-PETE, in many ways there are the same considerations to be made as those at the heart of specialist H-PETE. For instance, there are expectations as to what function teacher education can have as a change agent in the educational arena and the future of teaching. At the same time, primary H-PE brings with it different curriculum content and priorities to that of

16 Tinning (2012) writes: 'to represent its current mission, the acronym should be (H)PETE. I have bracketed the health (H) to signify this is a new conceptualization and one not shared by many countries' (p.3 book chapter in press - citation from authors draft copy). In this thesis I have used a hyphenated H-PETE, rather than a bracketed 'H' to reflect the local, Australian context whereby this thesis is situated.
17 At times I purposefully use the HETE rather than H-PETE acronym to differentiate the work of health education from physical education.

secondary school H-PE. This is largely based on the different needs, ages and varied social contexts of children from young people (read adolescents). These elements, together with the limited H-PE coursework allocated in primary teacher education, presents a difficult task for teacher educators to convey knowledge and skills to PPGTs. Given the limited time H-PE teacher educators have to work with PPGTs, this perhaps makes what they do (the content, assessments and outcomes), even more important to research and reflect upon.

Specialist and generalist students

An important difference between specialists and generalists is that generalists typically have different biographical 'dispositions' compared to their specialist counterparts. In one study, Morgan and Hansen (2008b) found generalist primary teachers biographical experiences of sport and physical education were not always positive which in turn, influenced their values and beliefs of the importance of the subject area. Despite this, some researchers from the field of health promotion see generalist teacher education as a productive site to change health promoting values and beliefs of teachers (see for example Scriven, 1995; Speller et al., 2010). These researchers, from the field of health promotion, are dedicated to the task of shaping PPGTs' values and attitudes towards health promotion through pre-service teacher education in the hope that they will model and advocate healthy lifestyles in schools over time.

While there is debate about how appropriate it is to have generalists teaching H-PE, on the other hand, research on specialists suggests the health 'dispositions' or biographies of specialists are likely to draw on biomedical discourses and in so doing, espouse narrow pro health promotion beliefs and values of the body. Garrett and Wrench (2012), for example, suggest that values and beliefs of specialists include emphasising the role of personal responsibility and objectifying the healthy body as slender for females and muscular for males (Garrett & Wrench, 2012). Garrett and Wrench (2012) found that among the 145 participating human movement students in their study, there was very little 'critical' engagement with hegemonic beliefs about health and the body. Rather students were likely to use notions such as BMI and exercise prescriptive language to describe healthy people. Research suggests that specialists, also, are likely to have backgrounds conducive to sporting and biomedical knowledge, beliefs and values (Fernandez-Balboa & Muros, 2006; Tinning, 1997). The point here, is not to suggest that some primary teachers will not identify with similar biographical 'dispositions' as those

found in these studies of specialists, but that for many primary teachers, there are likely to be differences in their lived experiences of health and the body.

There are also important contextual differences between specialists and generalists. One significant contrast is that generalist pre-teachers have very little coursework time and thus lack the exposure to the range of knowledge or skills that specialists are likely to encounter. Writing from the US context, Graber et al. (2008) argue that generalist H-PE teacher training is not enough: 'one, three-credit course is hardly sufficient for preparing a classroom teacher to instruct a complex subject matter in a dynamic open environment such as a gymnasium or playground' (Graber, Locke, Lambdin, & Solmon, 2008: 153). This same belief was expressed by all of the teacher educators interviewed as part of this study. The time allocated is further complicated by the necessity to cover both 'health' and 'physical' education content and pedagogical knowledge along with meeting graduate outcomes.

4.2.2 Mapping the terrain of TE and teacher educators orientations in H-PETE

Teacher educators orientations

There are different paradigmatic approaches to learning to teach that underpin both teacher education programs and research on teacher education. In and of itself, a variety of perspectives and interests are not detrimental to the project of teacher education (Lather, 2006). Cochran-Smith and Lytle (1999: 249) point out that philosophies of teacher learning 'lead to very different ideas about how to improve teacher education and professional development, how to bring about school and curricular change, and how to access and licence teachers'. In addition to teacher educators' subject area knowledge, beliefs and experiences, there are different orientations to teacher education programs, and teacher educators' methods in preparing students learning to teach. Tinning (2006), in *The Handbook of Physical Education* maps the different theoretical orientations of practice in PETE programs by synthesizing the work of others (Bain, 1990b; Doyle, 1990; Feiman-Nemser, 1990; Fernandez-Balboa, 1997; Kang, 2003; O'Sullivan, 1996; Rink, 1993; Vendien & Nixon, 1985; Zeichner, 1983). His approach is to follow Zeichner (1983) in particular, as a basis for grouping six theoretical orientations common to the task of PETE: (i) traditional craft orientation; (ii) behaviouristic orientation; (iii) personalistic orientation; (iv) critical orientation; (v) academic orientation; and (vi) reflection orientation. The 'traditional/craft orientation' positions students as receivers of

knowledge, with the student themselves having little input into their own development and expression. This orientation has a practical focus, whereby the graduate is in an apprenticeship of training to eventually 'master' teaching. This approach was popular in the 60s and 70s, and as Collier (2006) suggests has recently attracted policy and accreditation interest as part of economic rationalist beliefs in teacher training. The 'behaviouristic orientation' could also be referred to as 'positivistic' or 'technocratic' orientation due to the way it privileges a behavioural psychology model of education. This involves the 'competency' of students being assessed through observable teaching skills based on reliable, measured instructional models. The 'personalistic orientation' focuses on the development of the self through cognitive, developmental psychology and humanistic theories. Accordingly, this approach seeks to achieve graduate maturity and respond to individual students' needs. A 'critical orientation' seeks to have students understand the social construction of knowledge or the inherent morality embedded in schooling. The aim is for students to understand the ideologies that underpin educational practices. There is an emancipatory element to this orientation through efforts to examine inequities such as those associated with class, gender, sexuality and bodies. Critical pedagogy is often associated with this orientation (Kincheloe, 2008). The 'academic orientation' refers to the rise of disciplinary knowledge in PETE, and the expansion of the field beyond 'mere crafts'. Content knowledge is a central tenet of this orientation, and in the case of H-PETE this entails biophysical and sociocultural sub-disciplines such as biomechanics, exercise physiology, sociology, history etc. The 'reflection orientation' Tinning (2006) refers to as a major trend in teacher education over the past decade. Tinning suggests that a reflection orientation could be referred to as a sub-category as it permeates other orientations. However, there are many approaches to 'reflection' and this is often determined by the orientation within which it is used, for instance, critical, technical or practical reflection. To reiterate, this is not a conclusive list of orientations nor by any means are they mutually exclusive in teacher educators or H-PETE programs' organisation. However, the purpose of naming and describing some of the common orientations is that they help to pitch the theory in relation to what frames instructional approaches and valued knowledge in TE. While different approaches equally acknowledged here, Collier (2006) points out that scientism and technocratic rationality have historically played a dominating role in PETE. This is despite the emergence of alternative perspectives, which Collier argues have 'seldom made a dent in the dominant view' (p.390).

4.3 Two sites of teacher education

In the remainder of the chapter I trace the different orientations to H-PETE at two teacher education institutions. I consider how the course structures and teacher educators' subject positions and pedagogical intentions in relation to what they would like students to know and do. Two universities were selected for participant recruitment – Moore University and Cavendish University. Empirical material was sourced from both undergraduate and postgraduate primary teacher education degrees at both the universities. After completing the surveys and interviews, with PPGT participants at each of the sites, teacher educators were purposefully selected to participate in an interview on the basis of their involvement in teaching HPE coursework in the primary education degrees. Every effort was made to interview the same teacher educators who taught the PPGT participants in this study. At Moore University, this was possible. However, at Cavendish University, because one of the teacher educators who taught the cohort of PPGTs interviewed was no longer working at the institution, this was not possible. Instead, two of the current teacher educators who had taught parts of the H-PE program to students were interviewed. The H-PE teacher educators were invited to participate via an email. The interviews were conducted either at their office or at an institutional meeting space. All teacher educators signed a participant consent form before participating in the interview. In total there were three teacher educators from Moore University – Geoff, Tanya and Nicole and two from Cavendish University – Olivia and Leah. Table 2 provides an overview of the teacher educator participants. In order to maintain the confidentiality of the teacher educators and their affiliated teacher education institutions, every effort has been made to de-identify associated texts. Pseudonyms are used in all cases.

The interviews took between 60-80 minutes and covered the terrain of teacher educators' backgrounds, health issues facing young people today, the school's role in young people's health, the importance of HPE in the primary school and what the teacher educators would most like student-teachers to take from their course/classes. Questions were open-ended and I encouraged a conversational style in order to elicit an open, 'comfortable' response from the teacher educators. All of the participating teacher educators were emailed an electronic copy of their transcript and given the opportunity to make any changes to the document. This was in no way undertaken to get closer to the 'truth', but rather as an ethical consideration for what might appear later in published

work. It was also undertaken for the participants to be comfortable with their involvement, should they want to make any changes. Two of the participants decided to edit their transcripts. Because of my position as a research student and colleague in the field of H-PE teacher education most of the teacher educators interviewed were known to me. Three of the teacher educators (from both sites) have also listened to me publically present some of the analysis and discussion in this chapter at conference. One of the teacher educators Penney, from Moore University was interviewed as part of the data collection, however she was not teaching coursework the year the PPGT participants completed the H-PE subject. For this reason, her transcript is not used for the analysis reported on in this chapter.

Table 1. Teacher educators' backgrounds

Site	***Name***	***Courses involved in***
Moore University	Geoff	B.Ed and GDE (PE) year of PPGT participants
	Tanya	B.Ed and GDE (Health and PE) same year as PPGT participants
	Nicole	B.Ed and GDE (Health) same year as PPGT participants
Cavendish University	Olivia	B.Ed year of PPGT participants in the third H-PE course
	Leah	B.Ed & M.T (taught courses the year after PPGT participants)

The aim of the interviews was to explore each of the teacher educators' relationships to discourses of health and the body and their orientations towards teaching primary generalist teachers. In each interview I sought to elicit the participants' knowledge orientations and positions in relation to discourses underpinning the field of H-PE. Interviews were transcribed and then coded using QSR NVivo (Windows, version 9) analysis software. The analysis of the interview texts was informed by a poststructural approach which included tracing the discourses of health mapped in chapter three (e.g. healthism), but more importantly the knowledge orientations to H-PETE teacher education outlined in the first part of this chapter.

When utilizing a poststructural understanding of texts as discursively constructed, the notion of truth is not thought of as static and created by the individual (Öhman, 2010). This means that the analysis of texts was not about what the teacher educators 'really' thought or knew, but rather an analysis of what manifested in their language and how it was said. This opened up possibilities for exploring the ways participant teacher

educators constructed orientations of health and physical education among the field of discursive possibilities (Gore, 1995; Weedon, 1987; Wright, 2004a, 2004b).

The notion of subject positions was utilised to characterize archetypal ways of knowing and doing teacher education, similar to the theoretical orientations to PETE programs proposed by Tinning (2006) and summarised in section 4.2. I consider these orientations, informed by the notion of 'subject positions', more specifically in relation to the generalist H-PE teacher educators interviewed. The notion of 'subject position' refers to the relationship an individual takes to a particular discourse. Davies and Harre (1990) initially formulated the notion of subject position in their work on selfhood. The concept of 'positioning' as a term has corresponding traces to that of 'role' within conventional social psychology, yet it communicates a more fluid and dynamic sense of multiple 'selves' or the subjectivities one embodies. It is also attentive to the ways we are 'interpellated' into subject positions as the demands of particular environments or communities of practice contribute discursively to our knowledge[18]. For example, Sirna, Tinning and Rossi (2008) point to the ways teacher education students 'perform' different 'selves' in either university coursework or different school department offices depending on the social forces at play. Whilst the notion of interpellation as outlined earlier in this thesis is useful, it also suggests that 'dominant' or universal subject positions are allocated to us, with no chance of resistance. This overlooks the role of agency or people's and social groups' ability to resist dominant discursive or essentialist truths. In this thesis, a plurality of discourses is thought to give rise to differing and at times contradictory ways of speaking.

Subject positions can be understood as archetypal-like dispositions, or roles that a teacher educator takes on from a range of discursive possibilities. They are discursive accounts of reality and therefore not fixed, but rather, subject to different formations and practices in time and space. In differentiating 'subjectivities' from 'subject positions', it is understood that subjectivities are socially and culturally produced through the uptake of subject positions or what can also be called discursive positions. These positions are embodied and subjectively fashioned (McLeod and Yates, 2006). Consequently the notion of subject positions is useful for explicating the ways teacher educators are positioned in relation to what knowledge is valued in primary HPE, rather than other

18 Refer to page 87 for a description of how interpellation is used in this thesis.

aspects of their selfhood. The next section will identify and describe the ways the teacher educators assigned value and meaning to H-PE in their talk. To augment this empirical material, I also utilise subject outlines and course programming documents. This data is important to understand the 'conditions of possibility' (Foucault, 1970: 168) available to PPGTs through teacher education in order to make meaning in relation to health.

In what follows, I map the patterns of primary generalist H-PE coursework and teacher educators' epistemological positions and relations to discourses of health and teacher education. The two sites of teacher education will be examined separately before discussing the current state of play in primary generalist H-PETE.

4.4 Site A: Moore University

To provide an overview of the delivery of H-PETE at Moore University, this section will draw on each of the subject outlines, together with interviews with three primary HPE generalist teacher educators, Geoff, Tanya and Nicole, who all taught in both the Bachelor and Graduate Diploma of Primary Education programs. At Moore University, two programs of primary teacher education were offered at the time of data collection:

(i) Four-year, Bachelor of Primary Education (B.Ed); and
(ii) One-year, Graduate Certificate in Primary Education (GDE)

In both of these degrees, students were required to complete one compulsory core 'PDHPE' subject. Each of these core PDHPE subjects were weighted at six points of academic credit, out of a total of 192-credit points required to complete the B.Ed and 48-credit points for the GDE. Each compulsory six-credit point subject consisted of three hours face-to-face coursework per week. This involved: (i) a one-hour mass lecture where attendance was not compulsory; (ii) a one-hour compulsory lecture (for half of the semester it was PE based and the other PD/H based); and (iii) a one-hour tutorial where the focus was on exploring teaching methods, mostly in relation to the syllabus. For the B.Ed degree, it was possible for PPGTs to choose further H-PE electives in addition to the six unit compulsory PDHPE subject. H-PE electives, however, were not a popular option, unlike its popularity in previous years up until the mid 2000s (conversation with previous program director). In recent times, including the year of data collection, it has been common for electives not to run due to low enrolment numbers. Depending on both students' interest in completing a HPE based elective, and their timetable of study,

there were a couple instances where two students were able to complete a H-PE practicum based elective. However, this was in exceptional circumstances. One explanation, from Tanya for the lack of student interest in the HPE electives, was that many students are now required to complete Maths related subjects as their elective units because of NSWIT graduate requirements. Put briefly, the majority of beginning teachers from Moore University graduated after completing only one compulsory H-PE related subject.

The H-PE coursework for the B.Ed and GDE offered at Moore University was alike in both methods and approaches to content knowledge and delivery. For the most part, each of the courses were taught by the same teacher educators – Geoff, Tanya and Nicole (See Table 2). Both subjects took the NSW Board Of Studies (NSW BOS) K-6 PDHPE syllabus as a central focus of teaching and learning. The B.Ed core subject fell in the first semester of the second year of a four year (eight semester) degree, and the GDE core subject fell in the second semester of a one-year degree (comprised of two semesters). There were notable similarities and differences between these two subjects in the undergraduate and postgraduate degrees. To expand on these I will describe the rationales and outcomes for each subject, before situating H-PETE and the orientations of teacher educators and programs at Moore University more generally.

4.4.1 H-PETE orientation - learning rationales and outcomes

In the B.Ed and GDE H-PETE programs at Moore University, there was a strong emphasis on familiarising PPGTs with the NSW BOS PDHPE syllabus (2007) and persuading them of the importance of the subject area in classroom programming. The subject rationale for the B.Ed (Figure 6) begins with a quote from the syllabus to situate its purpose. There is a clear focus on the 'early years' as a key developmental period to establish 'lifelong commitment to health enhancing attitudes and behaviours'.

Figure 6. Subject rationale | B.Ed Moore University

> In our rapidly changing society there is increasing community awareness of the importance of healthy lifestyles. The resultant good health is characterised by improved quality of life, less sickness and disability, happier personal, family and social experiences and the opportunity to make choices in work and recreation (Board of Studies, NSW, (1999), PDHPE, K-6 - Syllabus, p6).
>
> There is much evidence to support the 'early years' as a key time to lay the foundations for physical, social and emotional well-being. It is the purpose of the Personal Development, Health and Physical Education (PDHPE) Key Learning Area to establish a strong foundation for a lifelong commitment to the development of health enhancing attitudes and behaviours. This subject will focus on curriculum and content knowledge in PDHPE.
>
> *Topics will include:*

- Current health issues impacting on children.
- Planning and pedagogy in PDHPE: creating safe and inclusive learning environments, developing resilient learners, catering for diversity, dealing with sensitive and controversial issues, the Health Promoting School Framework.
- Subject specific knowledge: mental and emotional health, safe living, healthy choices, self and relationships, fundamental movement skills, physically education in rhythmic activities (Gymnastics and Dance) and Games and Sports to promote lifelong physical activity.

The B.Ed subject rationale is inflected with the purpose of a broader agenda to address current health issues for young people. There is a specific mention of the Health Promoting School Framework (HPSF) model in the rationale, and this was something that each of the teacher educators referred to as important in their interviews. It was seen to be particularly useful to primary teacher education, as it provided a ready made model that could be implemented in any school in relation to any health issue.

Figure 7. Learning outcomes | B.Ed Moore University

Through successful completion of this subject students will be able to:

- Demonstrate appropriate knowledge, skills, values and attitudes required to effectively teach PDHPE in primary schools and early childhood settings.
- Plan contemporary and inclusive PDHPE lessons that acknowledge the diversity of students.
- Display consideration of various learning and developmental stages of students.
- Analyse the barriers affecting the implementation of effective PDHPE programs and investigate and recommend ways to overcome these.

The learning outcomes of the subject reflect an approach to skilling up students and shaping their values and attitudes in order to promote healthy lifestyles through their teaching. Furthermore with limited time, it is not surprising that the B.ED PDHPE subject's outcomes (see Figure 7) were more concerned with students' practical competency in teaching the PDHPE learning area than with content knowledge. This is not dissimilar to what Tinning describes as a 'behaviouristic' orientation to teacher education. In this approach there is a focus on the development of 'specific, observable teaching skills that (are) known to be associated with pupil learning' (Tinning, 2006: 371). It is possible to identify this approach in the outcomes related to students' attention to the 'developmental stages' of pupils when implementing PDHPE. However this is not an exclusive approach, there are also traces of what Tinning calls a 'personalistic' orientation – where programs 'seek to develop psychological maturity, and teaching experience is predicted upon such maturity'. What Tinning (2006) calls a personalistic approach in my judgement is similar to the notion of student 'dispositions' – a common trend, particularly in US based teacher education (Dottin, 2009). In essence, the notion of

'dispositions' is used to reflect 'habits of the mind', and is tied with 'personal maturity' identified in the personalistic approach outlined by Tinning (2006). This dispositional/ personalistic approach is reflected in the subject's learning outcome of students needing to demonstrate 'appropriate knowledge, values, beliefs and attitudes' required to teach PDHPE 'effectively' along with overcoming barriers to the implementation of PDHPE in the school and attention to 'diversity' and 'inclusivity'.

The GDE PDHPE core subject had a similar approach to the B.Ed, placing the syllabus as a central focus to practice and knowledge. However different language is used to describe the outcomes and rationale of the subject (see figure 8). This is reflected in the acknowledgement of the social, and political expectations of health promotion in teachers' work, rather than the more imperative language used in the B.Ed rationale. For instance, there is mention of 'student welfare' and 'wellbeing' generated through the school setting, rather than a focus on the future and a 'lifelong commitment to the development of health enhancing attitudes' stated in the B.Ed rationale. In contrast, the GDE rationale states: 'teaching and education are coming under increasing pressure to address issues related to societal concerns and student welfare'. The variance in the rationales and outcomes for learning between the B.Ed and GDE, may partially be due to the nature of the GDE subject outline as a combined document for both primary and secondary pre-service teachers. The GDE subject is delivered to both PPGTs and pre-service Secondary teachers as specialists for Key Learning Areas (KLA) other than H-PE - for instance Maths, Science and English. For these students the subject's focus is on developing secondary teachers ability to participate in and contribute to school sport as well as a health promoting school environment. Because of this, the rationale of the GDE core subject, compared to the B.Ed appears to have a 'holistic' focus on the role of the school and teachers in fostering safe, consistent learning environments through communication and connection with students. The incorporation of the health promoting school framework in the GDE subject rationale was also part of this school based welfare and wellbeing approach (see Figure 8 & 9).

Figure 8. Subject rationale | GDE (Primary and Secondary) Moore University)

Teaching and education are coming under increasing pressure to address issues related to societal concerns and student welfare. All beginning teachers are now expected to develop knowledge, skills and attitudes which will enable them to address issues such as mental and emotional health; self concept; risk taking; bullying; sexuality; diversity; body image and physical activity, in order to promote the health and wellbeing of children and young people. Teachers need to be aware that regular participation in physical activity during childhood and adolescence is associated with a wide range of physical, emotional, cognitive, spiritual and social benefits.

All teachers, whether primary or secondary, play a vital role in ensuring the health and welfare of students within the school setting. It is therefore part of the responsibility of teachers to promote the physical and emotional wellbeing of students by providing environments in which they feel safe, where they can communicate with others and can contribute in ways that are accepted and valued. In addition, schools have a responsibility to provide opportunities for students to be involved in safe, well structured sporting and physical activity programs where they are encouraged to develop skills that can lead to lifelong participation in physical activity.

While there seems to be a greater focus on wellbeing as well as explicit listing of content other than the physical, such as 'bullying', 'sexuality, and 'self-concept', similar to the B.Ed rationale there is an emphasis on the importance of developing students skills abilities for life long participation in physical activity. The HPS also features prominently in the learning outcomes of the subject:

Figure 9. Learning outcomes | GDE (Primary & Secondary) Moore University

Through successful completion of this subject students will be able to:

- Describe the concept of the 'health promoting school'
- Identify a number of important issues related to health, welfare and physical activity and describe how these may impact on children and/or young people.
- List community agencies/services/resources, which may be appropriate to support the school in its endeavours to promote health and physical activity.
- Recognise the importance of physical activity and sport in the development of the whole person.
- Outline the unique pedagogy and safety implications that apply when teaching physical activity or conducting sporting activities
- Demonstrate increased confidence in teaching sport and physical activity in the secondary school. (Secondary)
- Exhibit an understanding of the NSW PDHPE K-6 Syllabus and Support Documents. (Primary)
- Demonstrate the ability to plan and deliver lessons/units of work in PDHPE. (Primary)
- Recognise their responsibility for providing a safe and responsive environment for physical activity and sport.

In either case, for both the B.Ed and GDE compulsory H-PETE subjects, health is the overarching rationale. This is expressed through the B.Ed outcomes and rationale with a more explicit focus on developing the 'appropriate' knowledge, values, attitudes and beliefs in order for students to then establish a lifelong commitment to health in the early years. For the GDE, drawing heavily on the Health Promoting School Framework (HPSF), this was expressed through the engagement of community resources, physical activity, and a sensibility to safe and supportive learning environments. Both the B.Ed and GDE programs locate the syllabus as a central part of the PPGTs' learning in the subject area.

Assessment

The B.Ed students were required to complete three assessment tasks. The first was a 'research paper' where students were required to: 'identify and discuss the issues that generalist primary teachers may encounter when they try to implement PDHPE lessons'.

From this students were asked to make recommendations that would assist teachers and schools implement the K-6 PDHPE syllabus. The assessment statement of purpose read: 'current research into the place of PDHPE in the early years of a child's education has found that teachers acknowledge the importance of PDHPE but often avoid teaching it'. The second assessment task required students to develop integrated lesson plans focusing on 'components of an active lifestyle'. Here, students were required to develop a practical lesson on dance, games and sports or gymnastics demonstrating an understanding of the K-6 PDHPE syllabus. The third assessment task was an examination assessing knowledge of the syllabus, and content and pedagogy of primarily physical education. It included multiple choice and short answer questions.

There were three assessments for successful completion of the GDE 'PDHPE' subject. The first two were related solely to Physical Education and required students to plan 'three integrated and sequential PE lesson plans' utilising the syllabus. Following this, students had to implement one of their planned lessons as a class presentation. The criteria for assessment for both of these PE related tasks, was the ability of the PPGT to demonstrate appropriate application of the syllabus outcomes and indicators into a PE lesson. As part of this, they needed to demonstrate organising a group safely, clarity in instruction, and the appropriateness of activities and involvement of class members. The third assessment task was in relation to health education and was worth 50% of the overall grade. The PPGTs were required to compose a Personal Development and Health (PDH) unit of work incorporating teaching strategies. Students were assessed on their 'pedagogical description' and inclusion of a variety of activities. PPGTs were also assessed in relation to the inclusion of resources supporting the unit. The focus of this task was to give students an opportunity to practice developing a unit of work similar to what is required of them in schools. The assessment did not require students to consider historical underpinnings or tensions in content knowledge, but rather, students were required to develop activities that were well sequenced and followed the outcomes selected from the syllabus. From what I could tell from the interviews with the teacher educators, the three GDE assessment tasks were about familiarizing students with the syllabus and developing their practical skills for its implementation.

Like many primary generalist teacher education programs, at Moore University there was little time programmed for the teacher educators to work with students in developing

their capacities in health education. This was due to both the nominal time given to the subject in TE programs, but also because at least 'half' of the core subject was directed toward PE in both assessments and content expressed in the subject outline and course structure.

References and reading list

Both programs provided a list of recommended reading texts in the core H-PE subjects at Moore University. These provide some insights into what students were encouraged to 'know' and 'do'. The three 'major texts' assigned to the B.Ed core subject as listed in the subject outline were: (i) *Teaching Health and Physical Education in Australian Schools* (Tinning, McCuaig, lisahunter, 2006) and both (ii) the Board Of Studies (BOS) PDHPE Syllabus (1999) and (iii) PDHPE K-6 Modules (1999). There were additional 'recommended readings', these were mostly movement skills based methods resources such as *Get Skilled: Get Active* (NSW Department of Education and Training, 2000) and *Dance…. Count Me In!* (Snook, 2007). From this list, the Tinning et al. (2006) text stands out as an overarching reading that covers a broad scope and goes some way to addressing the 'issues' and debates of primary H-PE content knowledge, assessment and methods of instruction. However, when I asked teacher educator Tanya whether the text was incorporated into the subject, for instance, through tutorial discussions or required readings, she said that there wasn't enough time, and in the case that any students had read it, it was on their own accord. Tanya stated she was doubtful that many students had read the text and that the other texts on the recommended reading list were more likely to be utilised by students because they were pragmatically orientated, especially for the second assessment task. It could be argued that the course readings indicated an orientation towards H-PETE at Moore University of 'training' or 'skilling' pre-service pedagogues in the implementation of the syllabus and policy documents, particularly around movement, rather than 'health' education. This orientation was confirmed by the content of health lectures and tutorials, which gravitated towards 'knowledge' as a didactic construct for students to 'learn'. For instance, the main topics of lecture and tutorial time were about implementing the syllabus and addressing the assumed health issues of children today – such as mental health, sedentary lifestyles and the overuse of technology. The topics of subject content included teaching about healthy eating, children's mental and emotional wellbeing, health promoting schools, promoting resilience, bullying, child protection, fundamental movement skills, teaching games, gymnastics and dance.

4.4.2 The teacher educators' knowledge orientations

The analysis of interviews with three teacher educators, Geoff, Tanya and Nicole is drawn on in the following section to make sense of their values and beliefs in relation to primary generalist H-PETE at Moore University.

The centrality of the PDHPE syllabus

At Moore University the teacher educators' response to the limited time allocated to H-PE was to direct energy toward developing students' understanding of the syllabus. There seemed to be a particular focus, among the interviewed teacher educators, on the importance of lobbying for H-PE status and time in the school and teacher education curriculum. Nicole for instance spoke about what she would most like students to take from the course:

> …. it's not a lot of time (the subject) so I sometimes think that we are cramming it… then the main thing I hope they get from it is just a basic understanding of the syllabus because I can't give them every single piece of information so I want them to understand the syllabus so that they can navigate that themselves and know maybe how to go and find information about it and just to get a bit of an understanding of the skills… also to understand the importance of it for primary and the importance that they play in that, because I always say to them that they are crucial to the whole thing and I explain that the syllabus goes from primary right through to High school and it's a flow through so that they're so important for that first information that is in the syllabus to be given because it then flows into high school and they are the start of it, so I try and make them feel even though and it's true… I say to them, "you think that health and physical education is just in high school but really you are the start of it, and you are really important to the process"
>
> *(Nicole 173-193 | Moore University)*

In particular, Nicole emphasised the importance of teachers as future custodians of children's healthy 'development' in the primary school through their teaching of PDHPE. She emphasised the role of primary teachers in laying the foundation for development of children's skills, attitudes and knowledge in relation to health: 'they're important for [implementing] that first information that is in the syllabus'. Like Nicole, Tanya's position was also contingent on syllabus documents that call for teachers to build the foundations which will foster 'healthy' behaviours, attitudes and skills, personal health choices, and ultimately children's adoption of an active lifestyle.

Advocating for the learning area of H-PE

Underpinning the responses from the teacher educators was the assumption that PPGTs were likely to devalue teaching the H-PE KLA. As part of this it was taken for granted

that generalists come with a disposition toward PE and health that is dissimilar from specialist students. In order to make sure PPGTs were likely to enact the ideals of the syllabus, Tanya saw her role as promoting and defending the 'value' of the subject area to the students:

> Well look we are probably trying to push them, and we probably try to brainwash them, that firstly they can do it, that this isn't a scary subject to teach and you can actually do it, you know because you don't personally feel you were very active, or that you had very good experiences that, well I can't do it, so I guess that's the first thing that we really push, that everyone can teach this and there is no need to farm things out you know you don't farm Maths out, you don't have Math's experts coming in, so your role is to also teach this. I guess the other big message we try to push is to really do a health promoting school approach, and to really push integration because at least then it might get taught (ha!)
>
> *(Tanya 120-128 | Moore University)*

As this quote suggests, Tanya's investments lie with advocating for the subject area of PDHPE in order for PPGTs to value and in turn spend time teaching it and thus develop 'healthy' children in schools. This is not a difficult position for her to take, as Tanya herself speaks to the commonly identified issues of primary H-PETE. She advocates the subject area in a kind of battle against its marginalisation. Her response then becomes to promote the importance and 'fun' of movement – a position in accordance with her own success in, and love of, movement. Her approach is to entice PPGTs to value the subject in ways that are consistent with her own and governmental health imperatives. She draws on common ways to promote health, such as a whole school approach and teaching across the KLAs:

> … so we always provide lots of examples of how you can integrate this with other KLA's and so you know even when it comes to going to the sports you'd be going well how might I be integrating this with something that you are doing in HSIE well you might be doing a particular you know cultures of other worlds, well lets do physical activities or sports from other worlds, so to try and I guess for us to think well if they are going to at least do something if they try and integrate it may be more likely to happen and less likely to drop off and to look at doing integrated units of work and something around some health aspect and some physical activity aspect certainly anything can link to dance dance so that's probably the second thing to really do whole school health promoting school approach integrate it
>
> *(Tanya, 129-136 | TE Moore University)*

In a context where H-PE is seen to be: (i) under pressure and (ii) of fundamental importance to the health of children there is little space for reading beyond the syllabus, as was apparent with Tanya's approach to the prescribed text and course readings. As already mentioned, there was little potential for the 'prescribed' text, *Teaching Health and*

Physical Education in Australian Primary Schools (Tinning, McCuaig, lisahunter, 2006) to be read and prompt the PPGTs' engagement with complex content knowledge and different meanings of 'health'. Under these circumstances, there appears little opportunity for questioning and considering the broader social and cultural discourses that inform the learning area.

Tanya emphasised the problems associated with bringing in outsider providers. From her position, rather than have a 'one size fits all approach' (that she attributed to outside providers), she encouraged PPGTs to use their educational and contextual background as teachers:

> you know and that's the problem with bringing outside providers in they, you know one size fits all and it doesn't always fit, so yeah that's why, I mean and certainly when we talk about that and it comes up, like outside providers come up as an issue in a subject, we don't put them down, but we talk about the pro's and con's, well at least it is better than nothing, for some schools that's all they'll get if they don't get it, but it's an equity issue so for instance so Happy Harold day you have to pay up, I don't know I think it is sponsored, but for schools that have a dance specialist come in or a dance specialist come in or a gymnastics specialist come in, in most cases it's a user pays and when you talk to students who have seen it, okay what happens to those kids, oh well they go, they sit down and watch or they go to the library and I go well is that an issue?
>
> *(Tanya, 540-550 |TE Moore University)*

Across the interviews with Geoff and Tanya, and to a lesser extent Nicole, the dialogue tended to gravitate towards physical education, rather than health education. While as the interviewer, I may have been able tailor more questions in the direction of health education, the two areas were often spoken about together with a preference for PE. Geoff, who with Tanya was responsible for the PE component of the course, discursively drew on a constructivist rationale for primary H-PETE and the importance of learning game play, strategies and tactics. In reference to movement education, Tanya and Nicole primarily drew on a rationale for its purpose in relation to early skill development as a means to participate in physical activity successfully. In one interview passage, Tanya made a clear distinction between physical education for developing skills and movement capacities rather than 'sporting' performance. When asked, 'what would you most like students to take from the course?' Tanya hinged her response on the need for student teachers to be capable of 'knowing' the syllabus so that they can 'guide' the development of children's skills, values and attitudes, in her case in relation to physical activity:

> (PE) it's not sport, sport is totally separate and we don't look at what sport is until right towards the end of the session … it is a KLA and you're educating through the physical for physical benefits and it's not just about being physical so we really drill into the syllabus and really reinforce it is about knowledge and understanding and it is about values and attitudes but it is about the skills and why the skills are important and why the skills then guide what you teach and what sorts of activities and strategies you pick, so you know that's, I guess, they are the key messages that we would like to get them leaving with
>
> *(Tanya | Moore University)*

Tanya points out that developmentally appropriate skills are not just about activity for its own sake, or sport competition, but rather for increasing participation and future participation in physical activity through enjoyment. The underpinning focus here is to cultivate children's participation in healthy lifestyles:

> … and enjoyment of physical education, so that students are likely to have positive experiences. This aim is to develop PPGTs' 'positive' attitudes and beliefs, is in the hope that the PPGTs will carry these into their teaching.
>
> *(Tanya | TE, Moore University)*

Tanya's approach to 'appropriate' knowledge, values, attitudes and beliefs is to dispel students negative associations with the subject that they may, or may not, have come into the course with. She is well aware of the little time afforded to H-PE coursework and so her response is to bolster students confidence and values, attitudes and beliefs towards the subject area. Tanya draws on a developmental skills discourse which assumes competency in movement skills will lead to positive movement experiences and in turn lead to a long-term commitment to physical activity in the future.

Like Tanya, Geoff instantiated the of value 'educational PE', or 'movement literacy' rather than health or sport based HPE. He clearly differentiated between 'physical activity' and 'physical education'. However the difference between Geoff and Tanya was that, where Tanya advocated skills based PE, Geoff suggested Game Sense (GS), and a focus on movement literacy as an 'intellectual' pursuit – something often underplayed in the learning area of PE. In contrast to Tanya and Nicole, Geoff wanted the PPGTs to take an understanding of PE as different from physical activity; 'not just having kids turn up and getting them active, that there is actually teaching involved'. With a strong commitment to a GS approach, Geoff aspired to challenging students' conceptions about PE, rather than advocating for the subject area or persuading the need to get children active and healthy. Because GS is not a historically common way of doing PE,

Geoff described the difficulties he had in getting specialist students to move beyond their own ideals and experiences of movement activities, largely because his approach challenged the students' previous experiences and activity patterns. However he described how generalists were often much quicker and responsive to the GS approach he was promoting.

Like Tanya and Nicole, Geoff also assumed students were from a 'disadvantaged' position with poor experiences and low interest in the KLA, and what was needed were strategies that addressed this. He talked about giving the students practical, 'meaningful' examples of movement activities so they have some sense of how to put activities together. Geoff saw this as an important role of the primary PE teacher educator. From his experience, Geoff assumed most of the PPGTs came from a 'very low movement skill base' with 'poor attitudes to physical and health education low self-esteem, low self-efficacy'. Geoff describes how some students had 'been fairly competent for the first time' in his courses. He attributed this to their what he perceived to be a lack of quality PE in their own schooling. This affirmed his belief in his own approach to movement education and that it can be used to create successful PE experiences:

> there was also some great experiences, but sad experiences where people had been fairly competent for the first time ever and its too short a time they had six hours to learn what is a difficult subject and try and treat it with meaning and we are working against probably thirteen years probably twelve years of often disengagement
>
> *(Geoff, 72-76 | TE, Moore University)*

Geoff background experience and interests lie in physical education. Clear about his position and commitment, in the following quote, he notes the historical context of the subject area and its links to sport and health unfavorably, stating his position as one in support of educational based PE rather than sport or health based H-PE:

> I think from my position I guess they will go forward under the same umbrella as physical and health education because they are interrelated, from my background I was always, am always interested in movement, I'm a physical educator teacher first, who sees the importance of teaching health and sees the links and is aware of the links, happy to teach the links but I think that the Physical and Health Education as is, we've lost the education in the physical, the development of physical literacy and its gone towards physical activity, but the health has gone forward in leaps and bounds, historically I know why they have, health has gained that importance, but I think Physical and Health Education hasn't resolved its issues with its links with sport.
>
> *(Geoff 153-163 | TE, Moore University)*

Geoff, making his position clear, blames the joining of health to the learning are of PE as a catalyst for what has become a HBPE focus on physical activity. While he 'is happy to teach health', his ongoing preoccupation is to focus, through GS, on an educational approach to PE. Predominantly he sees the emergence of 'health' in the learning area as a distraction from quality PE.

Scientific rationalities

Both Tanya and Nicole approached health content knowledge, as 'progressing' with its scientificity or deterministic nature inevitably 'advancing' in the future. Both Nicole and Tanya emphasized the importance of keeping up to date. Tanya also explained: 'I like to get them to understand that they need to keep up to date' or, 'you have to keep up to date because things will probably change again, so I talk about keeping up to date and being flexible as a teacher'. Tanya and Niccole discussed the changing nature of nutrition guidelines, emphasizing how important it is for teachers to track and be aware of such new information. For example, Nicole commented: 'we certainly revisit aspects of nutrition so that they've got what is the latest, latest and greatest… they learnt the diet pyramid and now (its) the diet plate'. Similarly, Tanya said: 'I mean a lot of them are still talking about the pyramid and we sort of push them off to the Nutrition Australia where they are talking more about a plate'. It is interesting that both Nicole and Tanya chose to talk about the food pyramid being out of date, skipping the nature of the knowledge behind the change. Rather they spoke about its authoritative source, Nutrition Australia. The nature of Tanya and Nicole's dialogue was about the 'advancement' of rational knowledge, governmental or scientifically endorsed knowledge. In these accounts of what students were desired to know and do, there is an underlying relationship to knowledge as something that is located within scientific investigation and advancement, in a sense, a universal truth about how things should be done at a particular point in time. This is not surprising given the dominance afforded to medico-scientific knowledges in PDHPE for its 'authentic' and 'reliable' status (Fernandez-Balboa & Muros, 2006; Kirk & MacDonald, 2001b). Further to this, there is an acceptance of 'current' and 'correct' information based on 'fact', due to its association with other parties or social structures and institutions of authority.

> They want to know the whys and where's for everything, like I get the impression from them that you mention something and they go 'oh wow' and it's like you realise something's that you are telling them that they didn't know, and that makes me go 'far out' what else haven't I or what else can't I get across in this time?

(Nicole, 211-213 | TE, Moore University)

There is a sense of urgency to get the 'right' message across to students, as both Nicole and Leah construct a positivistic subject position in relation to what students need to know. Preoccupations with positivistic methodologies have long been established in HPE and with this comes the assumption that teaching and learning are technical phenomena (McKay, et al., 1990). 'Knowledge' can be treated in this sense as something to project onto students, rather than something to be questioned or taken into consideration with the students' existing subject experience and knowledge. The students in this sense were positioned as 'becoming' skilled and competent in knowing 'right' health practices. This orientation to knowledge takes on a form dependent on 'expert' knowledge, rather than a consideration for the ways pre-teacher histories shape practice and educational aims. This is similar to what Bullough Jr. and Gitlin (1991: 38) refer to as a process of 'banking' bits of information into the minds of the apprentice or the student. However, if knowledge is treated as 'banking' in teacher education, then students are invited to assume the same of their own pupils. The limitations of treating teaching and learning this way is that 'learning' is reproduced as merely the accumulation of information. In particular it relies on a common model of health education that is characterized as knowledge and skills = behaviour change. Lupton (1995) describes how the belief in curriculum to change the conduct of children derived from health psychology. The practices assumed to create 'healthy' child citizens through health education included problem-solving skills, decision making skills and communication skills. These have had continued purchase in curriculum documents today (Leahy, 2012) and teacher educators, like Nicole and Tanya's positions. The principal impetus underpinning this approach is that children can and need to take on more responsiblity for their health.

Seeing 'health'- teachers as 'healthy' role models

As part of fostering the 'appropriate' knowledge, values, skills and attitudes to health education, both Nicole and Tanya stressed the importance for teachers to embody 'healthy' attitudes and beliefs. In the case of Nicole, she defines this through the role of nutrition as a means to weight management. In the following account, she characterises those PPGTs who are 'overweight' as having suspicious nutritional practices and therefore little credibility as teachers of nutrition in schools:

> … especially when we are talking about nutrition and I am very aware of the people in the class… for some reason I am extremely aware of the people that are sitting in the class and

> the people that are overweight, now I shouldn't do that and I don't say anything, but I am very aware that they are there, and so I sometimes think it would be hard to talk about nutrition if you are you know a very overweight teacher, I don't know I don't want to put down people who are overweight because I know in my life I have got bigger and whatever, but I just don't know if you can have credibility there.
>
> *(Nicole, 662-670 | TE, Moore University)*

Nicole's response is indicative of the ways both healthism and obesity discourses are discursively thought of and reproduced in what is considered healthy. In many ways she assumes those PPGTs who she labels as 'overweight' to be at fault for their own weight. In addition to Nicole's observation and comment on students' bodies, Tanya also made an informal comment about PPGTs who are 'overweight', as being 'the ones that actually need to be participating in PE rather than getting out of it'. This was mentioned in a hallway conversation in relation to her frustration with a few of the 'overweight' students who were 'skipping' movement based tutorials for personal reasons unidentified, but questioned for their legitimacy.

The importance of a fit healthy body is a discursive construct well documented in the HPE literature (Kirk & Tinning, 1994; Macdonald & Kirk, 1999; Webb, et al., 2008). Given both Nicole and Tanya's background as specialist physical educators, with strong investments in maintaining their own bodies, there is little room for these ideas about health to be questioned. Health in many cases was cast in the physical sense. Constructing the body through a physicality lens means that 'there are perceived expectations for bodies in physical education to be 'healthy bodies' (and) for teachers to be 'appropriate' physical, fit, healthy and skillful 'role models'' (Webb, et al., 2008: 353). In addition, McCuaig and Tinning (2010) have outlined how in contemporary healthscapes there is an obligation for the HPE teacher to model and promote 'healthy' living. In one instance of the interview, Nicole exemplified this belief in expressing the need for teachers to exemplify 'healthy' behaviour and the imperative to 'practice what they preach'. In addition to Nicole's concern with teachers needing to be physical 'role models', she quite explicitly talked about them needing to embody the correct health practices, even beyond their time at school, otherwise they forfeit their pedagogical (read 'health' promoting) credibility:

> I think the school, and also as a teacher, they are a role model for everyone, so if they are going to say something then I think they have to be careful that they don't carry that out they might be a smoker and then they are talking about not-smoking then they have lost all of their credibility, so I think schools then have to enforce that teachers at least in the school environment, you can't really do much when they are out, but at least in the school

> environment are practicing potentially what they are preaching which might make it difficult for some teachers
>
> *(Nicole, 655-662 | TE, Moore University)*

In these accounts, similar to what Vander Schee (2009a) describes as teachers as health missionaries, health is normalised as something to perform, manage and achieve. Nicole suggests that a teacher should be a 'healthy' role model not only within the school but also outside of the school, despite her acknowledgement that the regulation of 'healthy' behaviour beyond the school grounds becomes difficult.

Discussion points

At Moore University the PDHPE subject area was largely valued as a rationale for health and its role in the development of children's healthy lifestyles. Getting in early with 'foundational development' so that children are able to enjoy life long physical activity and be physically literate was a reoccurring theme throughout the interviews. Particularly for Nicole and Tanya, the purpose of primary H-PETE was largely to foster appropriate values, skills and attitudes towards health and the body in order to pass them on to the children they teach. It can be argued that this epistemological orientation is embedded in the belief that children need to be provided with the 'building blocks' of healthy attitudes early in life if they are to be 'successful' participants in an ongoing healthy lifestyle. Such an approach is underpinned by biomedical and psycho-biological discourses, that locate physical education during the school day to be 'an important part of the prescription for arresting current health trends related to low physical activity rates' (Sherman, 2008: 33).

The subject outline, taken together with the interviews suggest that there was little opportunity for what Calderhead (1996) and more recently, Tinning (2006) would call a 'critical' orientation to content knowledge. And while Geoff was critical of health based PE, there was little room for engagement with the social complexities of individuals' realities and the varied perspectives of health education beyond health promotion. The approach rather was to provide students with information on nutrition, mental health, bullying and physical activity. In a University environment where little time is devoted to the subject, the syllabus becomes an important and convenient device around which to locate the subject content. What is emphasized is the importance of PPGTs' understandings of the role they have in teaching the subject for children's lifelong health.

The only visible trace would be Tinning, McCuaig and lisahunter's (2006) edited text, *Teaching Health and Physical Education in Australian Schools* which goes some way to providing multiple perspectives on health education, and in particular the *dispositif* health imperatives. For instance a Chapter in the book by Gard (2006) titled 'H-PE and the 'obesity epidemic' presents an account of obesity from a critical-social perspective. This is linked directly to the implications of amplifying this issue of obesity through the H-PE learning area. However, there was no regulation or even encouragement to make use of this course reading, rather, it was 'optional' for students to take up on their own responsibility.

I would argue that Moore University was unable to deliver critically oriented knowledge of health education to PPGTs for a number of reasons. Firstly there was minimal face-to-face time for the subject area in the program. Secondly because the teachers own knowledge orientations towards health education, particularly Nicole and Tanya's, meant that little critical work, if any, was instantiated in H-PETE. The rationale drawn on from the syllabus, together with the assessment tasks, readings and teacher educators' interviews confirmed an overarching health promotion approach to H-PETE at Moore University. There was a particular focus on the 'physical' aspects of health, which seem to emanate from the historical ties of health as a subject area joined to physical education.

The H-PETE program at Moore university was implicated in reproducing one of conundrums of HPE: the tension between health 'promotion' and health 'education'. A long held belief informing school health programs, projects and curriculum packages that that if young people receive knowledge about a health issue, they will then act upon it in their everyday life. Yet, it has been shown that this model is flawed, especially in the context of traditional school structures, teachers' limited practice and skills and a lack of time and resources (St Leger, 2006). Partially the problem is that health education and health promotion are difficult to delineate by definition. Indeed the two are often interwoven, for instance Green and Kreuter (1991, cited in Glanz, Rimer, & Viswanath, 2008: 10) define health promotion as "any combination of health education and any related organisation, economic and environment supports for behaviour conducive to health and well-being". What this means is that there is a moralising of individuals' behaviour and their choices, over a focus on educational or strengths based approaches

to health as communicating knowledge and the social production of knowledge in relation to health and the body. The tension here arises from the individualization of health that leads to victim blaming. This can hinder teachers' and students abilities to examine the complex range of social, cultural and political influences on health (Rose, 1999; Rose & Miller, 1992).

Another thread of influence was a developmental approach to the achievement of PPGTs health and physical wellbeing. This can be read as an attempt to shape the conduct of PPGTs in order for them to in turn shape (as a 'role model') the conduct of children. The neo-liberal subject (Davies, 2005) is central to such hopes of H-PE teacher education. As described particularly in chapter three, as part of a neo-liberal approach there is a focus on the healthy subject both in the present and the future who is individually responsible, self-survellient and autonomous. A developmental focus, along with limited coursework time, presents a technocratic orientation to the range of perspectives and opinions towards health in the H-PETE curriculum at Moore University.

4.5 Site B: Cavendish University

Cavendish University is an inner city teacher education institution offering two accredited primary teaching courses. Each of these mirror the options available at Moore University, however compared to the one year GDE, Cavendish has a two-year Masters of Teaching in postgraduate studies:

(i) Four-year, Bachelor of Education (Primary) (B.ED),

(ii) Two-year, Masters of Teaching (Primary) (MT)

The Bachelor of Education (Primary) has three compulsory subjects in H-PE each worth four academic credit points. There are 12 credit points in total dedicated to H-PETE out of a 120-credit point degree. Each subject focuses on: (i) 'Physical activity' (first semester of the second year); (ii) 'Active and Healthy Primary Schools' (first semester of the third year) and (ii) 'The Health Promoting School' (second semester of the third year).

The Masters of Teaching (Primary) includes one subject of H-PE coursework weighted at four academic credit points. The general impression I got from the interviews with both students and teacher educators was that the MT H-PE coursework was particularly brief with little time for engaging almost any health concepts. Partially this was due to the subject extending into students' professional experience placements in schools (PEx five

weeks of the semester) and scheduled coursework falling on a public holiday for one of the semester weeks. This left at best four sessions for PE content, two sessions for health content and two sessions for syllabus programming and the HPS framework. The lack of content and face to face course time was most apparent when compared to the B.Ed degree, with three, 4 credit point subjects allocated to H-PETE.

In this next section, interviews with two teacher educators together with subject outlines of the Bachelor program will be drawn on to understand how H-PETE is approached at Cavendish University. It is important to note that subject outlines have varied slightly over the time period of 2008-2010, and so too have the teacher educators coordinating and teaching in each of these subjects. This section, then, will report on the subject outlines from the year of the PPGT participants' coursework and interviews with teacher educators who were teaching at Cavendish University when the data collection took place (see Table 2 for breakdown). The two teacher educators interviewed, Leah and Olivia, were relatively new to the university and because of this they had not taught all of the required subjects to students. In the case of Leah, she had only taught part of one of the movement based subjects, whereas Olivia taught the third B.Ed H-PETE course to the third year participants.

4.5.1 B.Ed and MT H-PETE at Cavendish University

H-PETE orientation - learning rationale's and outcomes

Based on coursework rationales and outcomes, the subjects in the undergraduate B.Ed program at Cavendish University were broader in their approach to 'knowledge' than the subjects offered at Moore University. This was apparent through both the spread of content and time allocated to the PDHPE coursework overall. While Cavendish interviews mirrored many of the Moore teacher educator interviews, in that they were predominantly invested in persuading their students to the importance of particular knowledge, values, skills, attitudes and beliefs towards health from the syllabus, they also adopted a 'critical' orientation to knowledge. This appeared to be largely related to the epistemological orientation of one of the teacher educators, Olivia, who was instrumental in shaping the reading lists and lectures of the third health based subject. While she was new to the institution, and had little control over the subject rationale and outcomes, her description of her teaching suggests a bent towards a critical orientation. The rationales and outcomes for each of the three H-PETE subjects are listed in Figure 10 and 11.

Figure 10. Subject rationales | B.Ed Cavendish University

B.Ed H-PE Course one

This unit of study is the first of two units aimed at assisting students to develop their teaching skills in Physical Education. It is focused on the development of Physical Education pedagogy for generalist primary school teachers aimed at making children's experiences of physical activity enjoyable, rewarding and educationally valuable. Students will study the theory and practice of teaching physical activity in primary schools with a focus on student-centered pedagogy. Through reading, active participation in lectures, sport and workshops, students will engage with the latest developments in physical education pedagogy and apply it in practical contexts. This will involve exposure to contemporary theories of learning in and through physical education, management and organisational issues specific to physical education, practical workshops and team teaching in a primary school. Drawing on experiences of lectures and workshops students will work collaboratively in planning for learning, organising, managing and teaching physical education with a clear focus on student learning and achievement.

B.Ed H-PE Course two

In this second unit of study related to K-6 Personal Development Health and Physical Education (PDHPE), students will be encouraged to examine and reflect upon the first unit, Physical Activity, and their own physical activity and health status, values and attitudes, and explore the importance of leading active and healthy lives. The unit more thoroughly examines the current NSW Board of Studies requirements regarding K-6 PDHPE and in particular Physical Education (PE). Through an examination of the syllabus, modules and support documents, students will design and evaluate a variety of pedagogies and skills for teaching PE, especially for the active lifestyle, dance, and gymnastics strands. Through an examination of these syllabus strands, the unit asks students to create learning links across PDHPE syllabus strands and other Key Learning Areas. The notion of a Health Promoting School will also be addressed in relation to the need for whole school planning and the place of PE lessons in the school's curriculum. The unit encourages students to value PE and PDH as a lifelong learning experience and to recognise its value in the broader K-6 context.

B.Ed H-PE Course three

In this third unit of study, students will continue to gain experience planning engaging and meaningful teaching and learning activities in PDHPE. Emphasis is placed on programming and planning using four of the syllabus strands: Growth & Development, Interpersonal Relationships, Personal Health Choices and Safe Living. Students explore a range of youth-related health issues including child protection, sexuality, alcohol and tobacco use, body image, bullying and mental health. The Health Promoting Schools model is introduced as a framework for building student-centred PDHPE curriculum, valuing whole-school policies that support young people's wellbeing and fostering community partnerships.

Figure 11. Subject outcomes | B.Ed Cavendish University

B.Ed Course one

This subject was omitted from data collection because of the clear PE and physical activity focus rather than PDH. Subject outcomes were unable to be obtained. The rationale in Figure 10 provides an overview of what students were invited to do.

B.Ed Course two

As a result of successfully completing this unit of study students should be able to:

- Sequence concepts and learning experiences for specific stages of learners in PDHPE by engaging with syllabus content;
- Design creative and challenging learning experiences which cater for a variety of student learning styles and special needs and directly link to learning outcomes;
- Understand and explain the concept of a Health Promoting School and how it influences the teaching of PDHPE;
- Provide a safe and challenging environment for K-6 students to participate in Physical Education and to explore alternative activities that encourage engagement outside of lesson time;
- Demonstrate an understanding of the importance of the principles and pedagogies of dance, gymnastics and active lifestyles (e.g. fundamental movement skills development, dominant movement patterns, music suitability, correct timing, change of direction, elements of space, time and force) and display a satisfactory confidence in teaching, providing feedback and performing skills, routines, and teaching activities.

B.Ed Course three

As a result of successfully completing this unit of study students should be able to:

- Understand the significance of the Health Promoting School framework to effective teaching and learning in PDHPE;
- Display an understanding of the relevant school policies related to the PDHPE subject matter;
- Devise methods to engage parents and the broader community in PDHPE as a way of fostering the whole-school approach to health and physical activity and in keeping with the Health Promoting Schools Framework;
- Confidently address, within a Health Promoting School Framework, a range of sensitive issues/ difficult knowledge relevant to a particular school community and/or learning environment;
- Sequence concepts and learning experiences for specific stages of learners in PDHPE and determine when and how to introduce sensitive issues/ difficult knowledge into the K-6 PDHPE program;
- Collect and evaluate learning and teaching resources that enhance students' learning in PDHPE and which facilitate dialogue and engagement with sensitive issues/ difficult knowledge;
- Design creative and challenging learning experiences with cater for a variety of student learning styles, student learning needs, and directly link to the learning outcomes and assessment.
- Consider the needs and interests of students from a variety of social, ethnic and cultural backgrounds when planning for learning and teaching, especially when addressing sensitive issues/ difficult knowledge in the PDHPE classroom

Students completing the HETE subjects at Cavendish, particularly the third subject that Olivia was responsible for, were encouraged to consider: community engagement; evaluation of teaching resources especially in relation to sensitive and difficult knowledge, and the needs and interests of students from different social, ethnic and cultural backgrounds. Students were required to actively participate in readings, lectures and workshops in relation to sport and physical activity. They were invited to analyze and

reflect upon their professional practice and policy documents, along with justifying the inclusion of PDHPE in the school curriculum as part of the coursework. This was especially apparent in the third teacher education subject, where there was a focus on students considering the different needs and backgrounds of children in relation to PDHPE curricular. Students were required to study the theory and practice of teaching as well as understand student-centered pedagogy in practice. In this sense, the PPGTs were positioned as constructors of knowledge. Including theory in relation to health presents an opportunity for teacher educators to make links with other subjects across degree coursework and to apply focus to educational theories in H-PE.

In contrast to the B.Ed coursework at Cavendish University, as already pointed towards, the MT had limited breadth and depth of teacher educator orchestrated coursework content knowledge, partially due to the integration of the PEx into the semester. The PEx however, explicit in the rationale and outcomes listed in Figures 12 and 13, was integrated into the subject so that students were encouraged to 'reflect on the teaching practicum'. With limited time, it was not surprising that the outcomes of the MT H-PE subject were centered on familiarising students with the PDHPE syllabus and the HPSF.

Figure 12. Subject rationale | MT Cavendish University

In this unit you will be introduced to the Key Learning Area (KLA) Personal Development, Health and Physical Education (PDHPE). The unit will develop students' understanding of what it is to be a teacher within a specific PDHPE context. To do this, the unit will examine the current NSW Board of Studies requirements regarding K-6 PDHPE and will focus on the primary school learning and teaching environment. Through an examination of the K-6 syllabus, modules and support documents, students will develop the necessary skills to design and implement lesson plans for selected content strands.

To help guide this process, students will be expected to reflect on the teaching practicum (embedded in the middle of this unit). During these in-school Professional Experience components, students will have the opportunity not only to observe PDHPE teaching contexts but also to implement teaching activities.

As well as providing students with the opportunity to begin to develop their planning and teaching skills in PDHPE, this unit of study also allows students to practice creating learning links between strands in PDHPE and the Health Promoting School Framework. The notion of the Health Promoting School will be addressed in relation to the need for whole school planning and the place of PDHPE lessons in the school's curriculum and life.

Figure 13. Subject outcomes | MT Cavendish University

As a result of successfully completing this unit of study students should be able to:

- Use K-6 syllabus PDHPE documents and research-based knowledge of pedagogies to develop lesson plans for specific stages of learning;
- Demonstrate an understanding of the primary school as a learning/teaching environment and analyze and reflect upon professional practice and policy documents in this setting;
- Be knowledgeable about the K-6 learning and teaching environment and the diverse needs of K-6 learners;
- Justify the inclusion of PDHPE in the whole school curriculum, the role of a Health Promoting School and the value of lifelong learning;
- Engage with communities of learners and professionals by showing initiative and developing skills and positively responding to feedback and instructions.

Assessments

The assessment tasks of the B.Ed program at Cavendish University had a broader scope in required reading incorporated into the assessments than those of Moore University. For example, the assessment tasks of the second H-PETE B.Ed course (as per Figure 10 and 11) required PPGT to complete two major tasks, weighted at 50% each. The first was a health orientated assessment made up of three parts:

(i) Health education mind map – PPGTs could chose any health topic significant to them and illustrate the relation between it and the PDHPE syllabus strands and the content knowledge of at least one other KLA/ learning area;

(ii) Health promoting schools action plan – students had to apply the HPSF (Health Promoting Schools Framework) and provided readings to discuss how they would address their health issue selected for part one; and

(iii) Reflective essay – a 1500 word reflection on the importance of the health topic within the PDHPE primary school curriculum. The usefulness of existing resources to address the topic, teaching the topic to assist different school communities 'tackle the problem'.

The second assessment for course two required students to prepare in written form and teach either an aerobics, stretching or folk/bush dance lesson. This task is not elaborated on here as the purpose of the assessment was based in methods of delivering physical education rather than health education.

The assessments for the third B.Ed course (see Figure 10 and 11) included a unit of work and a letter to parents linked specifically to the unit of work. These two tasks were weighted respectively at 80% and 20% of the PPGTs' overall grade. PPGTs were assessed on their capacity to assemble a unit of work with 'scope and sequence' that was stage appropriate, integrative of syllabus strand outcomes inclusive of resources, a variety of activities and with explicit links to the HPS, including consideration of parents and the community. The letter to parents required students to provide appropriate and necessary information to parents as part of a HPSF and was to be written in an appropriate tone for parent correspondence. Writing to parents in order to have their support with health initiatives as part of units of work that utilise the HPSF is an example of an assessment activity intended for practical application and health promotion. This activity resembles a certain practical or traditional/ craft orientation to knowledge, rather than a critical or reflective orientation. The aim is for students to promulgate the ideals of health promotion and healthy citizenry through developing a letter that can be imitated when they are teaching in schools.

In the ME coursework, there were four assessment tasks for PPGTs to complete. In contrast to the GDE at Moore University, there was proportionally more focus on methods of delivering PE, rather than health education. The first assessment task required students to develop a 'five lesson plan unit of work' using outcomes from the syllabus. There was no mention of what topics PPGTs were required to formulate, except that the unit must include at least one skills, one knowledge and one values outcome from the K-6 PDHPE syllabus. While I could not interview the teacher educator who formulated this subject and taught it, the incoming teacher educator, Leah, said that the subject was largely PE based. She commented that this subject was being restructured to incorporate more health-orientated content in accordance with the NSWIT graduate standards. The other three assessment tasks PPGTs were required to complete included a presentation of a PE activity, the 'write up' of a PE activity as well the 'write up' of a dance/gymnastics activity. The assessment criteria's were directed toward clarity of instruction, correct terminology, safety, teaching points, correct set up and handling of equipment, correct time allocation, umpiring and usage of equipment. In many ways this subject appeared to be oriented towards a behaviouristic and technocratic approach to student learning. The focus was on enacting traditional PE lessons as was reflected in the description of what students were required to do in their PE activities - a

warm up, stretching routine and modified sport. This was also reflected in the assessment criteria such as: 'demonstrating correct technique'; or 'executes and governs correct number or repetitions, correct length of hold, variety, use of entire body, avoidance of unsafe stretching'. The knowledge underpinning these expectations presents a direct contrast to other forms of pedagogical work in movement education such as a Games Sense Approach CSA (Wright and Forrest, 2007) or movement education.

Reference and reading list

The listed readings in the B.Ed courses at Cavendish University provided more opportunities to engage different knowledge than those at Moore University. The third B.Ed course (see Figures 10 & 11) had thirteen texts listed as references and readings in the subject outline. This included five government documents: the K-6 PDHPE syllabus and modules, two Quality Teaching in NSW public schools documents produced by the Department of Education and Communities (DEC), and the Australian Institute of Health and Welfare (AIHW) report, *A Picture of Australia's Children* (2009). Additionally there was an assortment of literature on the health promoting school including one on preventing eating and body image problems with children (O'Dea & Mahoney, 2000), one on promoting mental health and wellbeing through Mindmatters (Wyn et al., 2000) and two chapters from the same text prescribed at Moore University, *Teaching Health and Physical Education in Australian Schools* (Tinning, McCuaig, lisahunter, 2006): 'HPE in the health promoting school' (McCuaig, 2006) and 'Whose responsibility is HPE?' (Tinning & McCuaig, 2006). The World Health Organisation, Ottawa Charter for Health Promotion (1986) was also listed. Given the subject's focus was on 'active and healthy primary schools', the assortment of references and readings reflects both the hopes of HPS implementation in schools and health promotion as well as engages some of the complexities of implementing programs and curriculum around food and exercise in primary schools.

The B.Ed course three (see Figure 10 and 11) also had an extensive list of 'required' readings, with an additional 'reading list' of 15 articles. These readings were more 'practically' oriented, including the syllabus and NSW BOS resources such as 'My Growing Self', and teaching resources such as DEC 'K-6 Drug education resource', 'Response Ability' or 'Effective teaching strategies' (Killen, 2001). The extensive, 'required' reading was presented in the subject outline as a list integrated with lecture and

tutorial topics over nine weeks (see Figure 14). Teacher Educator Olivia, was particularly influential in formulating the list. In the following quote, she describes the benefit of using readings as a way of shaping the knowledge of PPGTs:

> I actually use that one (Burrows and Wright, 2002 'measure your belly' paper) as a starting point, so it's like reading number one in this unit and it gets them realizing that we can turn ourselves upside down showing them the food pyramid and telling them what the right decision is, but actually making that shift to being convincing and getting kids to make the right decisions is our aim, or you know how do we do things differently.
>
> *(Olivia, TE Cavendish University)*

Olivia is invested in challenging students pre-existing, or popular social paradigms, in relation to food and the body. She uses the readings as a basis for the topics covered each week. The readings are necessary, because of the limited face-to-face time of the course. Across the readings listed in figure 14 is a cultivated engagement from her own 'critically orientated' interests with literature from a sociological perspective that engages some of the debates in relation to young people and health. There is a distinct contrast here in comparison to the engagement with readings at Moore University.

Figure 14. Required readings of B.Ed's third H-PETE subject at Cavendish University

1. Topic: (Review/Introduction)
- Whose responsibility is HPE anyway? (Tinning & McCuaig, 2006).
- The discursive production of childhood, identity and health (Burrows & Wright, 2004).
- Developing children in New Zealand School Physical Education (Burrows & Wright, 2001).

2. Topic: (Constructing the child & sexualities education)
- 'Queerying' gender: Heteronormativity in early childhood education (Robinson, 2005).

3. Topic: (Programming & Planning in PDHPE)
- Broadening perspectives on assessment in health and physical education (Hay, 2009).
- Integrating learning (Tinning & lisahunter, 2006).

4 & 5. Topic: (Mental Health & Bullying)
- Mindmatters, a whole-school approach promoting mental health and wellbeing (Wyn, Cahill, Holdsworth, Rowling & Carson, 2000).

6. Topic: (Obesity and healthy eating)
- Do the 'right' thing: Chewing the fat in physical education (Burrows, 2005).
- "Measure your belly": New Zealand children's constructions of health and fitness (Burrows, Wright & Jungersen-Smith, 2002).
- The 'obesity crisis' and school physical education (Kirk, 2006).

7 & 8. Topic: (Sexuality education)
- Locating the 'sexual voice' in health and physical education curriculum (Leahy, Rasmussen & DinanThompson, 2009).
- Primary school sex education programs: Views and experiences of teachers in four primary schools in Sydney, Australia. (Milton, 2003).

9. Topic: (Body image and identity)
- School-based health education strategies for the improvement of body image and prevention of eating problems: an overview of safe and effective interventions (O'Dea, 2005).
- Preventing eating and body image problems in children and adolescents using the health promoting schools framework (O'Dea & Mahoney, 2000).

The only evidence of readings in the subject outline for the MT subject was a reference to the NSW BOS K-6 PDHPE syllabus (1999) and the general PDHPE curriculum support area of the BOS website. On paper, the MT H-PE coursework seems to pay little attention to health content knowledge or pedagogy (the year following data collection, incoming teacher educator, Leah, updated the subject outline with similar content to that of course two of the B.Ed H-PETE). The degree to which the subject was able to deal with content may have been contingent on the kinds of experiences students had on PEx, rather than organised content knowledge through lectures and tutorials.

4.5.2 The teacher educators' knowledge orientations

In this section I consider the knowledge positions in relation to H-PETE of the two teacher educators interviewed at Cavendish University. Olivia and Leah had different roles and responsibilities in the primary education programs. Leah was largely responsible for the PE aspects of coursework, rather than the health and personal development, whereas Olivia took the helm of the PDH component. Olivia's background and research interests were primarily health oriented with a particular focus on issues of gender and sexuality, whereas Leah's background was mostly in physical activity interventions and movement education.

Leah: Health promotion through quality health education

Leah's account of PDHPE in her interview gravitated towards the importance of interventions and health-based approaches to teaching. She was responsible for the second compulsory HPE Bachelor of Education subject and largely saw her work as linking the activities and experiences of PPGTs to the syllabus. Echoing Tanya's comment on the importance of developmental foundations through movement skill development at Moore University, Leah's orientation to teacher education demonstrated a commitment to instilling certain skills, values, beliefs and attitudes in relation to PE, in order for PPGTs to be competent and confident in teaching physical activity and fundamental movement skills to pupils. For example, she states, 'we want to increase their competence and confidence in especially the physical education context'. This commitment was apparent through her engagement with teaching the 'practical' aspects of coursework, along with her research background and expressions of knowledge in physical activity participation. Leah's background was in researching 'healthy lifestyles' particularly through physical activity interventions as a way to reduce adolescents' sedentary behavior.

Leah was a younger teacher educator compared to the others, in particular those at Moore University, and came with an enthusiasm for movement and health. As she states, 'we want to increase their competence and confidence in the physical and health education context because that's my passion'. She had a clear investment in promoting healthy interventions and programs, both in PE and health, to encourage 'lifelong' physical activity and health habits. In response to the question 'what would you most like students to take from the course?' Leah heavily drew on a discourse of health promotion, to describe her desire that PPGTs should value the implementation of the 'health promoting schools framework'. She also had the aim of developing healthy child subjects, who will engage in 'lifelong physical activity':

> lifelong physical activity would be one of the key things, it is probably not as well enhanced or promoted as the health promoting schools framework, so we use that as a framework for the K-6 with the primary pre-service teachers because hopefully there are programs that are happening in their school or there is an opportunity to get programs happening in their school where they go out on prac or at the end of their degree where they could, obviously see the functional use of it, but also be able to improve it. So, yeah we spend a lot of time on health promoting schools framework and we look at current programs such as Crunch and Sip and Asthma Friendly school so we look at in the broad spectrum but they can see how they fit into the framework, what does that mean in terms of you teaching that content, you know what's happening out in the classroom, outside the school environment in the ethos and what's happening in terms of community partnerships. So yeah that's probably the framework that is probably really thrown down their throats, in terms of lifelong physical activity, yeah we probably look at it in terms of the syllabus and the content but it's probably not a thing that is really promoted
>
> *(Leah, 429-444 | TE, Cavendish University)*

As reflected in this quote, Leah's approach is consistent with a neo-liberal concern to foster self-governance through fostering young people's beliefs and engagement in 'healthy' practices (Nettleton, 1997). Similar to Nicole and Tanya at Moore University, Leah's interest in lifelong physical activity extended beyond the PDHPE KLA in schools to encouraging teachers engagement with a Whole School Approach (WSA) of HPSF for health promotion. Leah had a consistent position throughout the interview in relation to the role schools have in developing healthy citizens.

Leah was particularly attentive and committed to helping PPGTs competently implement the syllabus document through providing the knowledge of the practical resources to do

so. There was a real sense of duty and obligation to skill them up in the aim of quality teaching in the learning area:

> I think that schools play a huge role but then I am also scared that because we are only giving them a little bit of information, the pre-service primary teachers won't be able to go out there and to be able to do informed teaching… so it's a bit scary in that way, like I think we have a huge role, schools play a huge role, generalist teachers play a huge role and I think it is their role and it's very important, it is the school's place to be able to educate in these areas, but then I'm also aware that we are probably doing them a disservice in not being able to provide them with the knowledge and the skills to be able to do that in a way that's appropriate or of quality, so it's a bit of a catch twenty-two.
>
> *(Leah, 658-668 | TE, Cavendish University)*

Leah sought to impassion pre-teachers to take up nutrition and mental health initiatives through the HPSF. Whilst she appeared to employ a 'practical' rather than 'theoretical' approach to knowledge and coursework, there was some evidence in her responses that suggested she would have liked to go further, that is, to assist students in understanding the differing perspectives which underpin health knowledge:

> so we look at both (lesson planning and development, growth and development, interpersonal relationships and personal health choices) of those quite simply in two weeks, so to cover those issues, and I know it's a huge feedback point for those students especially with last year they were saying, 'but Leah it's all good to be able to get this content and to be able to understand about okay these are the health related issues and this is how we can teach them', this is maybe how we can integrate them you know with each other or between strands or with perhaps other KLA's` so we get a functional sense of what they are, but we have no time to discuss or debate or even unpack their values as a group to say okay you know these perspectives if you are sitting on this side of the fence what do you think about if you taught using that perspective what do you think students ideas would be, so you know we don't even get an opportunity, there's is nothing, there is on exploration of any of that which is a huge injustice obviously…
>
> *(Leah | TE Cavendish University)*

Like all of the teacher educators in the study, Leah concluded by attributing the limited time allocated to the subject for the lack of opportunity to engage with topics in more depth.

Olivia: A socio-critical approach to health education

> I think we have to confront the dominant discourses operating in schools because that is actually going to be the more powerful discourse, but then we also have to think of the implications of buying into that kind of thing
>
> *(Olivia, 26-29 | TE, Cavendish University)*

Although Olivia negotiated the difficulty of solely embracing one approach in teacher education, her interview responses point to her as at least wanting to be a 'critical pedagogue'. This however seems to leave her in something of a bind in relation to knowing what is 'best' practice, wanting, on the one hand, to challenge dominant discourses of health, and on the other not sure if she should subscribe to conventional health messages:

> Sometimes I feel caught between wanting to teach critical content around health and also knowing that I have this sort of responsibility to train teachers up if you know what I mean, you have to kind of do what you do, are you doing them a good service by not giving them the kind of conventional health messages, because those are the dominant ones that will be in schools, or is it our responsibility about creating different types of teachers?
>
> *(Olivia (6-10) |TE, Cavendish University)*

For Olivia, the 'conventional', refers to the truths of the 'dispositif' of obesity and health imperatives chartered in chapter three. However, Olivia gives consideration, and is at times confused as to how to serve students best. In so doing, she expresses concern over not giving them the 'conventional health messages' or what might also be thought of as practical resources for teaching.

Olivia drew on the work of Michael Foucault in her interview to consider the 'governmentality of schooling', and in doing so, explicitly challenged the 'dominant' health messages: 'I think it's just outrageous that schools have become these clinical spaces you know where they are under the clinical gaze to steal Foucault's terms, I actually wonder where we've gone wrong, how we've lost the plot you know'. While passionately stating her 'critical' orientation to knowledge production, she also saw such a position as having 'consequences' that might mean she is not taking up the responsibility of 'training up' the PPGTs.

In describing her position, she especially drew a distinction between her own position and that of other 'health and human movement' colleagues in the faculty, 'I always think primary education is my refuge because I'm usually with like minded colleagues… you get a reluctance to buy into that kind, you know, boofy kind of PE stuff'. In positioning herself in opposition to the dominant discourses of the body in H-PE she distances herself to her human movement colleagues who are 'doing big intervention programs and are really attached to those types of things (healthy bodies)'.

In some instances, Olivia sought to encourage a broader discussion of health than those prominent to health promotion. She constantly negotiated this in relation to the needs of PPGTs. At one point she positioned the primary students as receptive to a 'critical' position stating, 'they want a more diverse set of tools that they can relate to these tensions (obesity discourse)', however throughout the interview she also attempts to resolve her concern that students need more than just a 'critical' perspective, reflecting, 'I realized you have to moderate that (critique) somehow to make it consumable for the students, so it is actually applicable to the school context that they are entering into'. This tension was a theme that reappeared throughout the interview, for example, at another point she reflects 'I thought okay this is pushing them (students) a little too far', after having a guest lecturer present a theoretical lecture on childhood gender and sexuality.

Olivia's sensibility toward a critical orientation, however, is not without tensions. For example, in the following quote she draws on health promotional discourse which asserts the need for students to be informed and capable to help children make the 'right' decisions about health and their bodies. While Olivia readily rejects the focus on obesity, she advocates for mental health and the need for children to have better coping skills. Her position is sensitive towards mental health agendas, perhaps because this is socially underplayed in comparison to obesity discourse and the physical aspects of health:

> I think we go on and on about obesity and it's like what about young people's mental health, like what about if actually every child left primary school, knowing who they are in terms of having a sense of their identity and being able to articulate that and then also if schools actually took seriously mental health issues for young people so that they are actually transitioning into secondary school with some strong coping skills I just think the obesity epidemic has been such a distraction for other issues, so I can actually accept some of the arguments around increasing risk for young people of early onset diabetes and all of the other obesity, or overweight related issues, I can accept that, I can accept that we have an increase in the rates of obesity, so I can hear that, where some people can't, but what I struggle with is who cares, like in terms of our health priorities why is this getting so much air time, is our school really the place where this actually should be solved if it is a real problem, or should our focus actually go to sort of issues of mental health, helping kids communicate better and problem solve better and be part of a community in different ways, maybe that's really idealistic, but I don't think so actually, I think it's just outrageous that schools have become these clinical spaces you know where they are under the clinical gaze to steal Foucault's terms, I think it's quite, I actually wonder where we've gone wrong, how we've lost the plot you know,
>
> *(Olivia, 420-437 | TE, Cavendish University)*

There is some emotion here in Olivia's description of health education because she is frustrated, as are so many 'critical pedagogues', with the preoccupation with obesity and risk-based discourses in school health education. At the same time, while Olivia appears to be espousing a 'critical approach' by critically resisting deterministic notions of the obesity epidemic, she is less active in her 'critical' position when it comes to matters of mental health. While Olivia makes the familiarity of healthy interventions in schools to reduce children's weight seem 'strange' and questionable she is less ready to problematise mental health discourses. She states the focus should be placed on 'helping kids communicate better and problem solve better' as an antidote to mental illness.

Olivia's desire to position herself 'critically' in relation to dominant discourses of healthy schooling can be linked to her background education and occupations, where she engaged in gender studies and critical orientations to health education. However, it is clear that applying a 'critical' knowledge orientation in practice is not a straightforward task for her:

> that sort of whole school health promoting school stuff is used to change the cafeteria food and promoting healthy eating, but not all schools are taking it as an opportunity to foster you know cultural understanding, to actually look at power relationships between young kids and try to find more complex ways then slapping a bullying policy on to it. So that kind of more complex, more thoughtful reflection on wellbeing in my own opinion isn't actually transferring to all primary schools
>
> *(Olivia, 394-400 | TE, Cavendish University)*

Olivia moderates her critical agenda with a pragmatic response to the dominant ways of doing health education. In the end, Olivia finds a comfortable position in her desires for students to engage in more 'complex' and 'thoughtful' reflection of school programs. However she doubts whether this level of reflection is having much effect in schools:

Discussion points

Whilst both Olivia and Leah's orientation to knowledge and discourses of health and body differed considerably, they both respected each other's varied expertise as serving an important role for students. At the same time, there were acknowledged differences in their approaches to knowledge orientations. As Olivia stated 'I am trying to kind of do something that is more useful and a part of that has been working with people say like *Leah*, who are quite invested in that sort of interventionist project'. It was apparent in the ways Olivia and Leah referred to each other's courses and had an understanding of what

they were trying to achieve. Statements such as 'I don't really concentrate on body image so probably that's again more in [Olivia's] area' – implying she was theoretically out of her depth, or '[Leah's] unit they do Fundamental Movement Skills, dance and gymnastics and so again I think they will be quite positive (experiences)'. In most instances this was indicative of how they were aware of the ways their subjects worked together to produce the breadth of knowledge and experiences for students, 'at the end of this year again we can sit down [Olivia] and I and work out okay did they achieve the outcomes'.

Compared to Moore University, students at Cavendish University were more likely to be invited to consider discourses of health and the body through health promotion, school interventions and critical approaches to health in their coursework. The latter was played out particularly in the third compulsory B.Ed HPE subject at Cavendish University where students were encouraged to engage with a variety of 'critical' literature from the field of H-PE - suggesting an interest in providing students with a socio-cultural and political perspective of the primary syllabus and H-PE knowledge. This approach was largely driven by teacher educator, Olivia, who invited students to consider topics such as 'the discursive production of childhood', 'heteronormativity in early childhood', 'constructions of health and fitness', all of which were listed in the reading list of the subject 'The health promoting school'. These topics provide evidence that as part of Olivia's subject at Cavendish University, what Tinning (2006) would call a 'critical orientation' towards knowledge was fostered. In the other subjects a more traditional or 'positivist' approach was likely to be taken.

4.6 Discussion: Orientations in primary H-PETE

I start the discussion with a personal comment. I found the analysis of the different sites of teacher education and their teaching subject positions useful to my own thinking about the task of teaching and teacher education. It has generated awareness and attention to the ways meanings of health, movement and pedagogical work is represented and negotiated in university learning spaces. In particular how individuals, including myself, take particular approaches in their work and why this has come to be. Like Hargreaves, I came to thinking about why teachers were constituted by particular positions:

> ... teachers, like other people, are not just bundles of skill, competence and technique; they are creators of meaning, interpreters of the world and all it asks of them. They are people striving for purpose and meaning in circumstances that are

> usually much less than ideal and which call for constant adjustment, adaptation and redefinition. Once we adopt this view of teachers or any other human being, our starting question is no longer why does he/she fail to do X, but why does he/she do Y? (Hargreaves, 1984: 216).

Apparent across the interviews with the teacher educators was their orientation toward what was important for students to 'know' and 'do'. Patterns of knowledge contoured the teacher educators' beliefs, values and attitudes towards the task of H-PETE. As exemplified through the interpretations of Moore University and Cavendish Universities H-PETE programs, there is convincing evidence that teacher educators' subject positions in relation to health and body influence the implementation and design of coursework.

Where power-knowledge is seen to discursively operate in and through individuals, subject positions are not seen as fixed or static truths. Rather, the subject positions are emblematic of some of the common clusterings of approaches to teacher education and what is valued for pre-service teachers to know and do. Whilst some of the teacher educators interviewed in this study appeared to embrace one orientation toward health education teacher education, it is important to note that the ways the teacher educators instantiated their subject positions were likely to be partial and subject to social and cultural forces at play in a particular time and place - namely in this case, the interview. At the heart of the different subject positions identified are different paradigmatic ways of thinking about knowledge that underpin perspectives in and through the field of H-PE.

While some teacher educators (particularly Nicole, Tanya and Leah) did not question the role of schools in health promotion, for others (particularly Olivia and Geoff) healthy schooling was a complex, moral and at times problematic site of educational 'empowerment'. Thus, differing orientations are important to consider in relation to what pedagogical work is being done in teacher education. The ways PPGTs are invited to engage with coursework is likely to be highly dependent upon how teacher educators orientate themselves, and are oriented, towards health knowledge. While knowledge orientations are central to the ways instruction, learning and curriculum are assembled for pre-teachers (Kirk, Nauright, Hanrahan, Macdonald, & Jobling, 1996; Macdonald, 2002), in the case of Moore and Cavendish Universities, what largely overshadows the complexities of these orientations is the little time dedicated to coursework.

Across both Moore and Cavendish Universities, the primary generalist degrees were conceived of as a space where there is very little time to provide students with the knowledge and strategies to teach H-PE in schools. In this context, the complexity of health dissolved into advocating for physical activity and children's informed decision making in relation to health imperatives. The intensification of teachers' work and high stakes testing has not helped this situation in either schools or teacher education (Dodds, 2006). The focus in the course, then, is to persuade PPGTs that they can, should, and hopefully want to teach H-PE. The syllabus, along with its core underpinnings in physical activity and health promotion are placed at the centre of coursework. This is what is manageable for the teacher educators in the time available. Because of this, if anything, the syllabus and the HPS framework are two areas that are likely to be taken note of by students. The 'intellectual/theoretical' work of university study was minimally present and instead a 'practical'/hands on approach was the response. In addition, often practical resources and activities largely constitute what is considered relevant and legitimate learning for the real world of teaching in schools. As others have identified (Taguchi, 2007; Thomson, 2000) theory/ practice binaries in teacher education present difficult challenges for renewal of a critical approach.

It is apparent that the orientation of 'technocratic knowledge provider' is likely to reproduce the dominant discourses of health and body embedded in medico-scientific constructions. The trouble is, perhaps, that these ways of thinking (mapped as the *dispositif* of health imperatives in chapter three) frequent accounts of health in the media, public health promotion, and initiatives in the primary school. In an overarching context of neoliberalism, subjects are likely to find themselves within limited ways of knowing, or intellectual work (Davies, 2005) in relation to health. The neoliberal subject, as Davies characterizes it is involved with: consumption, individual responsibility, the self adrift from values, surveillance and autonomy. Davis (2005: 13) argues in this context that 'students must be trained in philosophy – to understand the range of discourses through which they, and others, are constituted'. In contrast to more taken for granted approaches to knowledge, values and beliefs, the critical orientation is likely to interrogate dominant discourses of health imperatives underpinning pedagogical practices and curriculum. By highlighting the social construction of knowledge it would question, for example the obesity discourse, the consequences it has for the ways we

normalise bodies and health. For teacher educator Olivia, this was the case, however, this position can at the same time leave little time for content about how HE might be enacted. I will take this discussion up further in the final chapter.

Questions arise as to how the pre-service teachers make sense of all this and what responsibility does teacher education have for explicating discursive positions of health and the body? What do these different subject positions mean for the ways content knowledge and pedagogy are assembled in the environments PPGTs are exposed to and invited to engage with? And lastly, what does this mean for the ways curriculum is enacted in primary schools? These questions are important for teacher education programs and pedagogues to consider. Many of these questions are beyond the boundaries of this research. However in the following chapters I provide some insight into how PPGTs position themselves in relation to knowledge of health and the body, and then later what we might do with this knowledge. In the analysis of PPGTs' meanings of health, I aim to capture some of the 'fluid' and 'dynamic' elements of experience and subjectification that, in Ellsworth's (1997) account, are likely to seep into pedagogical intentions.

Chapter 5

PPGTs' subject positions in relation to health and the body

Introduction

Meanings of health and discourse positions in relation to health and the body

Finding out about health in 'totally pedagogised societies'

5.1 Introduction

Earlier in this thesis I described how the *dispositif* of health imperatives works to generate normative perspectives of health and classify bodies as un/healthy. In the previous chapter I mapped the orientations of two universities' generalist H-PETE programs for the ways they invite and provide possibilities and constraints for PPGTs to engage with knowledge of teaching H-PE in the primary school. This next chapter extends on these conceptual analyses of contemporary healthscapes and the materializations of teacher education by considering the ways PPGTs make sense of health and the body. I describe how the relations of contemporary healthscapes are enmeshed in PPGT participants' beliefs and attitudes, namely, their subject positions in relation to health and the body. This serves to address the second major research question, 'how are discourses of health and the body manifest in PPGTs' constructions of self and others?' To do this I not only map participants' subject positions, but also describe the resources they draw on to constitute their beliefs and knowledge.

The chapter provides a discussion of the themes derived from an analysis of surveys and interviews conducted with pre-service teachers from both Moore and Cavendish Universities. While all of the interviews and survey responses have informed the analysis described here, there were six particular survey questions (three Likert scales and three open-ended response questions) that stood out from others in the analysis. In accordance with the findings, this chapter is framed around the analysis of these six survey questions and is organised around two overarching sections: (i) PPGTs meanings of health and their discourse positions in relation to health and the body; and (ii) PPGTs sources of health knowledge. The discussion of these themes is a precursor to a closer description in chapter six of three individual PPGTs' subjectivities in relation to health and the body.

5.1.1 Methodology

As outlined in chapter one, 136 participants completed an online survey and 23 participants took part in semi-structured interviews. Six of these interviews were conducted as 'pilot' interviews with students from the cohort of the year preceding those students who provided the data derived from the 17 'main' interviews and 136 surveys. Table four provides a breakdown of data collection (in chronological order from left to right).

Table 2. PPGT participant numbers and sites

Site	'Pilot' PPGT interviews	Online survey	'Main' PPGT interviews
Moore University	6	79	10
Cavendish University	0	57	7
Total	**6**	**136**	**17**

The survey

The purpose of the survey was to elicit PPGTs' meanings of 'health' across a large sample and identify themes and discourse positions in relation to the ways the PPGTs talked about health and the body. The survey was administered online through an institutional generated email. Permission of the Directors of the programs at each site was granted and a link to the *SurveyMonkey* website was included, where the survey was hosted. The target population group was made up of 272 PPGTs from Moore University and 188 from Cavendish University, a total of 460. Of these potential students 136 participated. As mentioned earlier, female participants were overrepresented in the cohort, which was anticipated given the high ratio of females to males enrolled in each of the four courses. Whilst limited comparatively in the depth provided by the interview responses (Brandl-Bredenbeck & Kampfe, 2012), the survey provided a different medium free from the face-to-face relations of the interview.

Likert scales were used to elicit responses to attitudinal questions such as, 'Do you think someone's size or shape has anything to do with their health?'. There were also open-ended short answer questions that asked the respondents to explain their Likert ratings (see Appendix 7 for the full survey). Open-ended questions were included in the survey design to provide data for a discourse analysis of participants' responses. While questions in relation to 'ideas about your body' (sections 8, 9 and 10 of the survey) were initially considered worthy of inclusion in the survey design, they were not utilised in the analysis described here because they offered little in addition to what is provided. Six specific survey questions that stood out are utilised to illustrate the analysis. These are each referred to in more detail throughout this chapter where described in relation to the findings.

Responses to the survey were entered into Microsoft Excel to aggregate and then graph the responses across the cohorts of both Moore and Cavendish Universities, as well as for the B.Ed and postgraduate coursework participants. Bar graphs as well as tables were

generated from Likert scale responses to visually represent the data and are described in more detail where relevant to the analysis presented in this and the next chapter.

Whilst conducting the analysis I became doubtful of some of the survey questions and how they might lend themselves to interpretations of health concerned with individual rather than social aspects of health. For instance, one question that asked participants to rate their health from 'healthiest to unhealthiest' on a Likert scale inherently deployed the binary notion of health that I initially set out to critique in this project. If I were to design the survey again, I would consider including questions that specifically engaged with, and prompted responses about people's understandings of the social and non-dualistic aspects health. Nevertheless, there was scope for these types of responses, particularly in the interviews, should the participant's respond in that way. Furthermore, the data collected still revealed critical patterns in relation the students' meanings of health and the body and their relationship to the contemporary healthscape.

The interviews

Both the pilot and main interviews were analysed in the same way. The main difference between each phase of the pilot and main interviews was that the pilot interviews tended to be shorter in length and I was developing my experience as the interviewer. Given the interview questions did not vary significantly between the two phases of data collection, both 'pilot' and 'main' interviews were used for the analysis described in this and the next chapter. An overview of the spread of participants and the site and coursework participation is provided below in table 5. For the most part the Bachelor students at both sites were younger in age and were completing their first degree after finishing school. However, a few of the Bachelor students from each site were mature age completing coursework after either having had children or undertaking previous employment unrelated to teaching. The GDE and MT students were often in their mid twenties and had completed another degree with a few years of work related to their initial degree. The different backgrounds of participants presented an interesting point of contrast in lived experience and knowledge perspectives of individual participants. However, while the differences between cohorts, age or gender were apparent in certain instances, this was not great enough to make generalisations across groups in relation to their meanings of health.

Table 3. PPGT interview participants

Site	*Name*	*Age*	*Course*	*Phase of interviews*
Moore University	Marnie	22	B.Ed	**'Pilot' Interviews**
	Rachel	36	GDE	
	Lanie	28	GDE	
	Jimmy	27	GDE	
	Beau	28	GDE	
	Vala	24	GDE	
	Amelia	21	GDE	
	Brent	24-28	B.Ed	**'Main' Interviews**
	Keira	21-23	B.Ed	
	Lonia	35-45	B.Ed	
	Savannah	21-23	B.Ed	
	Violet	21-23	B.Ed	
	Will	22	B.Ed	
	Pip	24	GDE	
	Camille	25	GDE	
	Kai	25-28	GDE	
Cavendish University	Veronica	35-45	B.Ed	
	Caitlin	28-35	B.Ed	
	Jacob	27	B.Ed	
	Phoebe	22	B.Ed	
	Anika	38-45	MT	
	Drew	25-35	MT	
	Sofia	35-45	MT	

Each of the pilot and main interview transcripts, once transcribed, were coded in QSR NVivo (Version 9). The transcripts were also read in hard copy and the audio-recordings were re-listened to, in order to trace the emergent themes and patterns across the texts.

Discourse analysis

A poststructural approach to discourse analysis informed the coding and analysis of the interview and qualitative survey responses. An assortment of theoretical and practical applications guided my understanding of discourse analysis (including mostly Foucauldian but also Deleuzian concepts). Foucauldian analytics, as Youdell (2011) interprets, and was detailed in chapter 2, inspire an understanding of the ways discourse produces truth:

> As conduits of productive power, discourses are not descriptive but creative – they have the potential to produce and regulate the world in their own terms as if they were true. Particular discourses may well be taken as reflecting 'truth', the way things are, but for Foucault these are not reflections but the very moment and means of the production of these truths (Youdell, 2011: 25).

The 'moment and means' of truth production, here, is made up of the empirical material of the interview and survey texts. One way of approaching this type of analysis is to adopt the notion that 'individuals emerge through and as part of their entangled intra-relating' (Barad, 2007: ix). This can also be thought of as intra-relations within the *dispositif* of health imperatives. Thus the 'moments', as Youdell (2011:25) puts it, of production in interview and survey instantiations of discourse are thought of here as intra-relations between the historical milieu of the present and the individual (Barad, 2007).

In their book chapter on 'Foucauldian Discourse Analysis', Arribas-Ayllon and Walkerdine (2008) describe discourse as relations, rules and procedures:

> discourses are not "things" but form relations between things; they are not objects as such but the rules and procedures that make objects thinkable and governable; they are not autonomous entities but cohere among relations of force; and, finally, discourses do not 'determine' things when there is always the possibility of resistance and interdeterminacy (Arribas-Ayllon & Walkerdine, 2008: 105).

Working with the interview texts involved tracing the objects, in this case of health and the body, that are thinkable and the governable, as well as forms of resistance. Put differently, the texts were read for the ways discourses of health and the body were taken up, negotiated and resisted by the participants.

Attempting to trace the thinkable and speakable statements in the PPGTs' written and spoken texts proved not a straightforward process. There are, however, distinguishable characteristics of a Foucauldian style of discourse analysis that guided this process.

Arribas-Ayllon and Walkerdine (2008: 100) suggest that 'the analyst must recognise discourse as a "corpus of statements" whose organisation is relatively regular and systematic'. I also found it helpful during the analysis to consider the methodological approach used by Honan (2007) in her paper on 'writing a rhizome' where she identifies the linkages and connections between participant responses as discursively operating though 'rhizomatic flows' of a particular moment of time and process (i.e. the interview):

> The ways in which discourses connected to each other and others, through the rhizome of the text and following lines of flight into other rhizomes, made sense to me when I began to think of these discursive systems as plateaus, in that they are particular assemblages of meaning that inform others and each other, that do not stand alone (do not stand in the immovable sense at all), and only make sense when read within and against each other (Honan, 2007: 536).

In this sense, discourses are connected to each other across the texts, by way of the meanings the participants connect to in the wider healthscape in which they are embedded. Throughout this process, sets of knowledge or particular discourses constitute the 'practices through which certain objects are formed' (Arribas-Ayllon & Walkerdine, 2008: 99).

As an extension of discourse analysis, Jager and Maier's (2009: 49) notion of 'discourse positions' was useful for describing how individuals espouse particular 'discourse positions' in relation to health and the body. To clarify, the notion of 'discourse position' as a term has corresponding traces to that of 'role' or 'subject' within conventional social psychology (Davies & Harré, 1990), yet it communicates a more fluid and dynamic sense of multiple 'selves' or subjectivities one embodies. Butler (1993: 8) contends that there is no singular matrix of power relations 'that act in a singular and deterministic way to produce a subject and its effect'. In this sense, a subject position constitutes one fluid element of subjectivity, in relation to a particular discursive truth. By treating the *dispositif* of health imperatives as a contemporary 'event' in this thesis, the question that informs the analysis in this chapter is about how individuals are positioned in relation to obesity discourse and health imperatives.

There were robust connections between the discourses traced earlier in the *dispositif* of health imperatives and PPGTs' responses to survey questions about meanings of health (e.g. Questions 13, 17, 18 and 20). However evident from the discourse analysis is that some responses aligned more closely with the tenets of the discourse, some less so and

some others were coded in minor themes which suggest other ways of thinking about health. While different distinguishable positions emerged across a range from agreement to disagreement, patterns of meaning associating health with risk and health imperatives tended to dominate the empirical material. In what follows, I present the findings through graphic representation, descriptive statistics and discourse analysis of positions in relation to health and the body.

5.2 Meanings of health and discourse positions in relation to health and the body

5.2.1 Personal accounts of health

Health in three words

In this section, I begin by illustrating with a tag cloud[19] the themes derived from responses to one survey question: 'what are the first three words that come to mind when you think of health?' I deploy this 'tag cloud' as a visual metaphor to depict the ways some health knowledges are more discursively visible than others. A tag cloud, also known as a word cloud, provides a visual representation of words, where the size of the word reflects the total sum of times a word has been tagged, or mobilised, in comparison to others. Tag clouds are a feature of online and print communication, most often used by websites and blogs to visualize and link socially-organised information (Bateman, Gutwin, & Nacenta, 2008). Their main function is to represent variables of interest or popularity and to capture the attention of users for quick access to content related keywords, based on how many 'tags' or text based searches a particular word has had. In the tag cloud below, the frequency with which participants mobilised particular words in their response to the survey question, 'what are the first words that come to mind when you think of health?', are visually displayed. For instance fifty-four participants wrote 'exercise', whereas only five wrote 'physical activity' (a full list of responses and their frequency can be found at appendix 2).

19 This tag cloud was made using the data listed at appendix 5.1 with the online software at http://www.wordle.net/advanced

Figure 15. Word cloud – survey Question 13: 'What are the first words that come to mind when you think of health?'

Each of the words can be thought of as rhizomes of semiotic flows (Deleuze & Guattari, 1987:72), where the larger words of 'exercise', 'wellbeing', 'diet', 'physical' and 'nutrition' have momentum like a 'stream… that undermines its banks and picks up speed in the middle' (ibid: 25), in comparison to the others such as 'sickness' or 'relationships', where flows of these words and others are more viscous or hidden. On the surface, this tag cloud is made up of a small number of words that are highly visible (or discursively powerful), such as 'exercise', 'nutrition', 'diet', 'wellbeing' and a large number of words that are barely legible. If the scale were bigger, the smaller words in the image would be readable (a larger version of this tag cloud can be found at appendix 2). The image demonstrates across a group of 127 responses the more dominant groupings or flows of words that the PPGTs initially considered when they think of 'health'. The tag cloud can be used to point to the matrix of subject positions the PPGTs collectively inhabited in other survey and interview responses, with some ways of speaking the 'truth' about health considerably more important to their positioning than others.

The word 'physical' deployed in the tag cloud could be representative of different meanings, for instance: physical activity; a state of being; fitness; the absence of illness or diseases; a way of differentiating the body from the mind or metaphysical; one's medium for experiencing the world; and one's material body. However, for the most part, given

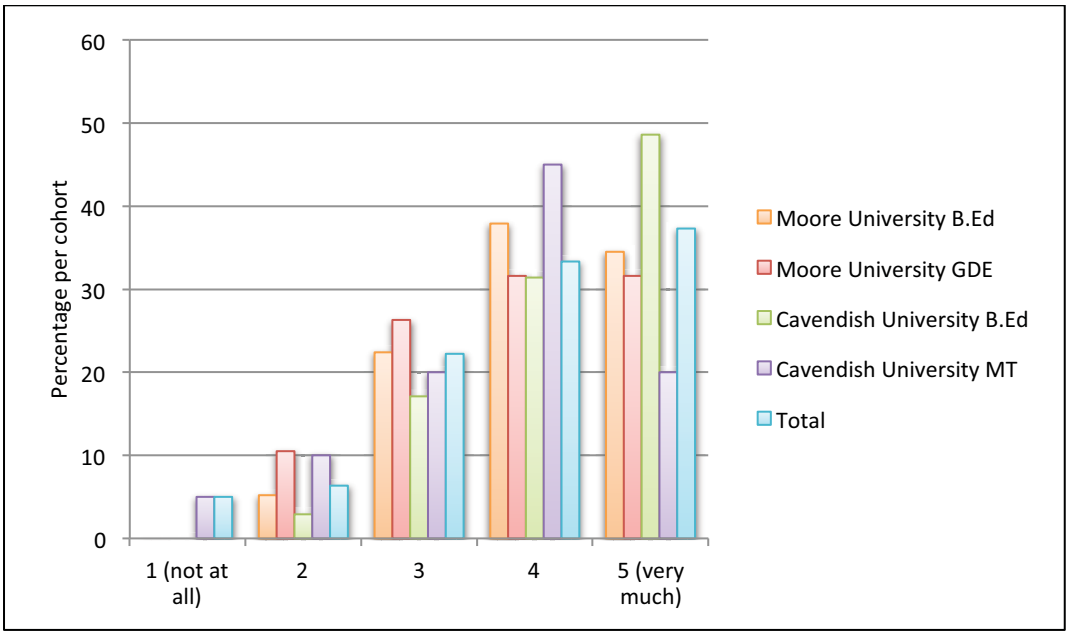
the analysis of other survey responses, I suspect the word 'physical' as deployed in response to this survey question is representative of the ways the participants defined exercise within a narrow framework of energy 'consumption' and 'expenditure' (i.e. exercise and diet).

The glass ceiling of 'health'

I deal specifically with responses to two Likert ratings and one open-ended survey question in this section to illustrate the analysis.

Overall, in response to the Likert scale question, 'how would you rate your health?', the participants' ratings across the different cohorts of universities and degrees were consistent. The B.Ed students tended to rate their health slightly lower (i.e. between 2-4), than the postgraduate students (i.e. between 3-5). For the most part, participants rated their health as 'good' (3-4), i.e. not low (1) and not high (5). Responses to Likert scale rating 'to what extent would you like to improve your current health rating', further confirmed that although they might rate their health as 'good' (Likert rating of 3-4), most of the PPGT participants wanted to improve their health rating. Of the participants, 71% across all cohorts indicated they would 'very much' or 'much' (a Likert rating of either 4 or 5) like to improve their health (see Figure 16 and Table 7[20]).

Figure 16. *Question 18* (Likert scale): To what extent would you like to improve your current health rating?



[20] Numerical tables of the data illustrated in graphs though this chapter can be found at appendix 9.

When we take the responses to this question with 'how would you rate your health', one result stands out: while not a large number of participants rated their health highly, (i.e. a Likert rating of 5), a large number strongly wanted to improve their health. Put differently, 7 participants selected a Likert rating of 5 (healthiest), whereas 47 participants selected a 5 (very much) for wanting to improve their health. The idea that one's health is never quite good enough and that it can always be improved seems to ring through this data. This finding, apparent in many other survey question responses, suggests that there is a glass ceiling of an imaginary 'health' ideal at play, where participants have a constant desire to exercise more and eat 'better', no matter how 'healthy' or 'unhealthy' they perceive themselves to be.

How to get 'healthy'

What may be more pertinent to this illustration of participants' meanings of health are the responses to the open-ended question, 'what would you do to improve your health rating?' This returned 129 responses. Not surprisingly, ideas represented in the tag cloud were reflected in the themes that emerged from in the analysis of this survey question. 'Health' continued to be defined within a narrow framework of energy 'consumption' and 'expenditure', i.e. exercise and diet. Most of the participants listed in their response either more exercise and 'healthy' eating, or both of these in various formations. Fifty-nine participants coupled 'exercise' and 'food' in their response. This was expressed in slightly different ways, however the common thread that grouped these responses as a theme was that they utilised both 'exercise' and 'diet', with little reference to anything else. Typical examples included: 'More exercise and further reduce chocolate'; 'Eat better food. Less junk food. Exercise more'; and 'Do more exercise, make healthier food choices'. Others were a little longer, and more explicit with medicalised language about strategies to improve health, for instance: 'Increase my aerobic activity, take part in Pilates/yoga to build core strength, make my own meals so that I rely less on take-away food, reduce binge drinking'. Some responses, although not many, expressed a dislike for exercising, 'I have an extremely unhealthy diet however to compensate I know that I need to exercise more'. Many of the responses coded at this theme explicitly referred to the notion of balancing 'energy in and energy out' as a means to improve their health and the struggle to 'improve' their health: 'I hate exercise and avoid it at all costs'.

If we look to the remaining 70 responses, 'exercise' and 'diet' continued to feature across the data, however, both were not listed together in the one response. Sixty-two participants deployed *either* 'exercise' or 'food' rather than both concepts together. When food was spoken about it was usually in reference to 'healthy/ unhealthy', 'good/ bad' or 'junk food'. When physical activity was spoken about it was in relation to doing more exercise, being fit, 'cardio workouts', 'go to the gym more'. These responses were coded under the one theme of 'exercise *or* diet' and at times included additional concepts in their response, however, for the most part these responses were made up of just food or exercise related language. Responses typical of these 62 included: 'exercise more often'; 'sign up to booty camp'; and 'lose weight, more exercise'.

Taken together the number of responses that included references to 'exercise *and* diet', and 'exercise *or* diet' accounted for 121 of the 129 responses. This left eight responses that did not mention 'diet' or 'exercise' explicitly. A few could be linked indirectly to the theme of 'exercise *or* diet', for instance: 'eating foods with more iron' and 'drink more water' (while these are about 'food', they are not specific to 'good/ bad' or 'healthy/ unhealthy as were those responses coded elsewhere). With only five other responses left out of 129, of these, two were quite different to the others in the data set: 'create a lifestyle that doesn't impede on my ability to be productive' or 'resting, spending quality time with loved ones, eating well, meditation, reading about spirituality'. The content of these two responses, particularly the inclusion of 'spirituality', was a marked exception to the other 129 responses.

A few other themes, although minor, also emerged in addition to 'exercise *and* diet', or 'exercise *or* diet'. 'Sleep, rest and less stress' was a minor theme in the data and taken together these words were only mentioned 15 out of the 129 responses coded elsewhere. Other themes that emerged on a smaller scale were 'drink less alcohol' which featured as part of six responses and 'quit smoking' as part of seven responses. 'Weight loss' was also mentioned in six of the responses. Four of the responses mentioned the need to 'fix' 'current health problems' or 'illnesses/ injuries'. However, combined, all of these themes were relatively insignificant across the data. Rather, references to exercise and diet saturated the survey responses.

At first I was surprised (although now I am not and rather a little concerned) that so many of the responses were in relation to physical aspects of health, particularly given they were spoken of in relation to energy in and out, or bad/good or un/healthy foods. There was little, if any, mention of mental, social or spiritual aspects of health. The survey question that prompted these responses, assumed that participants would want to, or know how to improve their health. The wording of the question 'what would you do to improve your health' infers a response which would reference individual actions. However, the particular language employed by participants suggests that the notion of individual responsibility for health extended beyond the nature of the question, to statements of methods and ways to 'measure' and 'achieve' health in rational ways. This was manifest through language such as 'increase frequency', 'need to find time to exercise more', 'diet control', 'need to develop a more regular exercise routine', 'reduce unhealthy food intake'. What I took most from the analysis of these responses was that there was an overarching focus on the 'physical' aspect of health – the self-management of the body by way of exercise and diet regulation. However, it was not as common for participants to mention, weight, size or shape in relation to health, which made me question the relationship of aesthetics to the meanings afforded to health. Others (for example, Bordo, 2003) have also traced how there is a persistent focus on trying to achieve the 'ideal body', regardless of how 'healthy' one is or how much exercise one does. This position promotes a preoccupation with health and engenders feelings of guilt when one is not working to improve their health in some way. Given the dominance of responses about exercise and food, this suggest that even when the participants rate themselves as 'healthy', they still feel the need to exercise more and/or watch their diet. This lead to the development of this sections heading: the glass ceiling of 'health'.

5.2.2 Defining the 'healthy' other

So far I have described the meanings that PPGTs assign to their own personal health. For the most part these meanings were overwhelmingly about physical aspects of health - specifically exercise and diet. In this section, I describe, by drawing on an additional open-ended survey question, how these meanings of health go beyond the personal to how health is thought of and governed in relation to others. To do this, responses to survey Question 14, 'how would you define a healthy person' are utilised. The responses to this question provide an indication of how the various elements of the healthism discourse, individual responsibility, regulation and control are again at play (as they were throughout the other survey questions). Two overarching themes emerged from the

analysis of these responses that represent similarities to other survey question analyses: (i) health as a (perennial) project of the self and (ii) health as a state of being. While these were not always mutually exclusive, for the most part the participants' responses could be clustered in either of these themes.

Health as a 'state of being'

For most of those participants whose responses were not coded as 'health as a project of the self' (described next), a healthy person was defined in relation to the possession (or not) of particular attributes related to health and/or illness. These responses tended to list characteristics of the person: for example, one who is 'free from illness'; 'emotionally stable'; or 'someone who has a good physical, mental and emotional state'. These responses suggested the situational condition of a 'healthy' person, rather than describing health as contingent on particular actions of the self. Responses coded here often echoed parts of the World Health Organisation definition of health (see page 79) with their references to health as a 'a state of being', or 'the absence of illness and disease', rather than signaling a deficit of 'healthy' practices, such as 'exercising' or food consumption, or the need for continual management, control and governance of one's everyday life. Some participants also noted the 'qualities' of a healthy person such as 'within a healthy weight range', 'fit', 'happy with their body'. In some of these responses, a person's health was equated with their particular weight status and thus health was thought to be 'readable' from the physical body. This was most evident in 15 of the responses that made direct reference to weight or Body Mass Index (BMI) as part of their response to defining a 'healthy person'.

Health as a (perennial) project of the self

The second theme in relation to defining a healthy person, and was most significant, included responses that suggested health was an individual project in perpetual need of individual renewal. Of the 132 responses to the survey question, 'how would you define a healthy person', 72 were thematically grouped as defining 'a healthy person' in terms of what one 'does', that is, actions/practices. Responses grouped under this theme usually consisted of one or two lines of typed text (20-40 words) and used language that pointed towards individuals' need for 'control' over their health. The name given to this theme 'health as a (perennial) project of the self' responds to the many of the responses that suggested health is a never-ending project of individual responsibility. Some typical examples from responses coded at this theme included language such as: 'someone who

looks after themselves by eating a balanced, nutritious diet'; 'Someone who looks after their body'; 'someone who makes a conscious decision to maintain their health… and takes pride in this'; 'someone taking precautions'; 'eats correct foods to obtain a healthy diet'; or 'takes responsibility for their lifestyle choices'.

These responses all point towards the consistency and power of health imperatives, where the assumption is that it is up to the individual to take responsibility for making the 'right', 'correct' decisions in looking after themselves. A couple of responses as part of this theme went further to specifically prescribe what one would need to do to be a healthy person, pointing to the influence of medical discourses. This following exemplar response of prescriptive language was uncharacteristically long in comparison to the other participants' responses, and summed up the range of responses from those coded for this theme:

> Someone who eats a variety of fruits and vegetables and only eats take away/junk food on occasions (i.e. not regularly). Their diet should be based on the recommendations in the Australian guide to Healthy Eating. They also need to be active, either through their daily lifestyle or specific exercise. To me health also incorporates [the practice of] good personal hygiene, such as washing your hands, brushing your teeth etc. I consider binge drinking and smoking to both be unhealthy practices.

The governance of health imperatives in order to achieve health are made explicit here, though both the certainty of the language and the prescriptions listed. In this excerpt, the boundaries of a 'healthy' person are stretched to the corners of one's everyday life and are marked by one's capacity to be disciplined in undertaking 'healthy' practices of the self. The above response is inflected with authoritative imperatives of what a person 'should' and 'needs' to do in order to be 'healthy', validated by the pull of *The Australian Guide to Health Eating*. Central to this method of thinking and speaking about health is the belief that particular 'healthy' practices will allow us all to live a 'better' life (Cheek, 2008). A key component of healthism, and indeed a clear theme in the 72 responses that drew on 'healthist' descriptions of people, is that one must change, manage and observe one's behaviour in order to become a virtuous 'bio-citizen'. Defined by Halse (2009: 45), the bio-citizen is 'a product of an era of escalating anxiety in the public imagination about an international pandemic of overweight and obesity'. The very idea of a bio-citizen has come into prominence over the past thirty years through what have been characterized as neo-liberal health agendas (Lupton, 1999). It would seem the PPGTs were clearly affected by the importance of self-governance in these health ideals.

The practices of 'healthy eating' and 'exercise', then, are symbols of the virtuous individual. By defining health as something which one 'does' and can 'create', these practices are inescapably entangled in what it means to be 'healthy'. In this sense, health is a constant self-project, and, borrowing Ball's (2003) commentary on performativity, one that is largely difficult to think differently about:

> we must become adept at presenting and representing ourselves within this new vocabulary and its prescribed signifiers and the possibilities of being 'otherwise' to or within are extremely limited (Ball, 2003: 218).

In many cases, the participants' unquestionably subscribed to the notion of performing bio-citizenry to define a healthy person. As an extension of this, because the focus is on the physical, there is a certain health aesthetics, or symbolism at play in what it means to be 'healthy'. While a number of participants mentioned weight, BMI or losing weight, this was not an obvious theme, at least in response to this survey question.

A conclusion to begin

Based on my interpretation, it can be concluded thus far that many of the survey responses constructed 'health' relative to an individual's work on the self. There were many responses that were informed by ideas about personal responsibility for lifestyle and health practices. This finding was similar to what other studies have identified as people's meanings of health (Howell & Ingham, 2001), particularly in relation to what was described in chapter three, where exercise and diet characterise the health imperatives of late liberal capitalism (or neoliberalism) (Cheek, 2008; Holmer Nadesan, 2008). Signifiers such as 'exercise' and 'diet' or the physical state of a person make up the exemplar bio-citizen. Such statements of exercise and diet appear in what Foucault (1972: 118) might call, '[a] superabundant proliferation… signifying elements to this single 'signified'… this primary and ultimate meaning springs up through the manifest formulations, it hides beneath what appears and secretly duplicates it'. Such a social construction or discourse of bodies Shilling (1993: 129, cited in Kirk, 2004: 53) argues, has emerged for people as an individual project buttressed by two ideas: firstly, the widespread normalisation of the notion of the body as malleable entity, with multiple possibilities for alteration and, secondly, the assumption that the unfinished project of the body is necessarily fashioned through an individual's choices. Because of this, there is a conflation of physicality, 'health' and self-identity in everyday life. Given the literature that points to 'obesity discourse' as a significant shaping narrative in what it means to be

'healthy' (Gard & Wright, 2005), the question arises as to whether the ubiquitous interest in 'exercise' and 'diet' as indicated by the participants' responses can be traced to their beliefs and ideas about the relationship between the physical body and health in other aspects of the data. The survey and interview questions that dealt explicitly with the PPGTs' beliefs of relationship between the physical body and health are utilised in the next section to demonstrate the extent to which PPGTs consider the role of the material body in 'health'.

5.2.3 Discourse positions in relation to health and the body

Locating the PPGT participant discourse positions

The notion of 'discourse position' is adopted to characterise the system of ideas or standpoint(s) from which subjects participate and evaluate discourse. According to Jager and Maier (2009), '[s]ubjects develop a discourse position because they are enmeshed in various discourses. They are exposed to discourses and work them into a specific ideological position or worldview in the course of their life' (p. 49). They argue that,

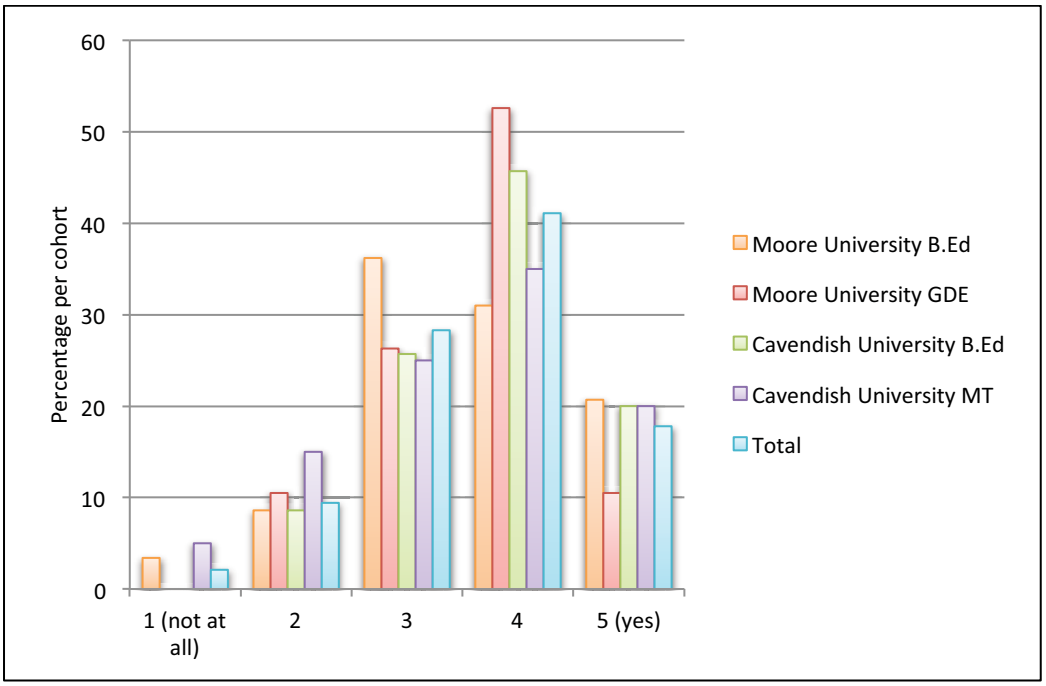
> [w]ithin a dominant discourse, discourse positions are fairly homogenous, which itself is already an effect of dominant discourse. Dissenting discourse positions often belong to complete counter-discourses... However, these counter-discourses can pick up arguments from dominant discourse and subvert their meaning (Jager & Maier, 2009, p. 50).

Discourse positions can be identified through an analysis of language, written or spoken as subjects/individuals draw on particular patterns of language (discourses) to constitute their speaking positions. As Jager and Maier assert '[A]ll the entangled discourses strands in society together form the overall societal discourse. A society is never homogenous but consists of different subcultures' (p.50). The notion of 'discourse position', then, allows for an analysis of the ways pre-service primary teachers' take up, resist or 'traverse' specifically dominant discourses of health and the body.

The analysis described in this section draws on responses from two questions from the survey. The first question stated 'do you think someone's size or shape has anything to do with their health?' with participants asked to respond to a scale of one to five; one representing 'not all' and five representing 'yes'. The second question followed on directly, requesting an open-ended short answer response: 'Please explain why you chose your selection to the previous question'. Reports were generated using Microsoft Excel from the Likert-scale data to provide a descriptive spread of the written responses. The

open-ended responses were collated and initially read to form an impression of the diversity of responses and then coded for continuities and patterns of discourses drawn on by the subject positions. Three categories were then constructed from the responses to each individual open-ended question and also collectively across the survey. The range of Likert scale responses are illustrated in Figure 17 below and Table 8 (appendix 9), then briefly discussed before the analysis of open-ended responses and interview texts.

Figure 17. Question 20 (Likert scale): do you think someone's body size or shape has anything to do with their health?



The responses to the Likert scale have been included to illustrate the patterns in participants' positions on the relationship between the body and health. The majority of the participants' chose 4 or 5 (together 58.9%). These responses were categorized as in 'Agreement' with dominant discourses associated with health and the body, that is they 'agreed' with the proposition that there is a relationship between health and the body. The degree to which this was so becomes more evident when an analysis of the open-ended explanations was also analysed; this is discussed further below. Many participants also selected a rating of 3 (28%), suggesting they were ambivalent about their position in relation to the question. Given the nature of the Likert question forced participants to decide on a numerical rating, it is also possible that those participants who wanted to provide more detail in their response, selected a rating of 3 because they were limited in explaining anything beyond neutral response. Given the open-ended responses discussed

further below this is likely, given there were participants who didn't interpret the question in such a straightforward way. There were also three PPGTs who selected a '1', and 13 who selected a '2' as their response. Together, the three '1' responses suggest an interesting resistance to any relationship between body size and shape. If we look to the open ended responses of these three participants, they tended to write that it is 'too hard too tell' or 'you just don't know'. Common to each was that they drew on other ways to describe health other than weight:

> Because you do not know someone's pre-existing health conditions as to why they may be a certain size. Certainly, excess eating may lead to excess weight, but minimal eating may cause excess weight, you just don't know. You cannot choose your genes (Moore University B.Ed - Likert rating of 1).

In this response and the one below, medicalised language, such as 'medical condition', 'genes' or 'different metabolisms' was drawn on to describe why you 'can't tell if someone is healthy or not'.

> People have different metabolisms and are able to burn food (energy) without having to exercise therefore maintaining a slender build which does not mean that they are healthy (Moore University B.ED - Likert rating of 1).

The third response from a participant at Cavendish University directly countered the assumptions inherent in the question by extending the meaning of health to include the state of the 'mind and spirit':

> Being a normal weight or even thin does not make you healthy - it's about muscle development, diet, etc. Health is more than the physical body it also includes the mind and spirit (Cavendish University MT - Likert rating of 1).

These responses suggest what has been described below as a 'Disagreement' position.

While the Likert scale responses helped the process of analysis by guiding the identification of discourse positions across the participants, the open-ended responses that followed (demonstrated by the three responses above) provided much greater insight into the PPGTs' meanings of health and the body. The codings of the patterns of language in the open-ended responses suggested three positions or ways of talking about health and bodies, which were also reflected in the quantitative results described above. The interview texts and particularly those responses to interview questions about the participants' meanings of health were then read with these positions in mind and coded in QSR NVivo. The language used in the interviews was mapped across these three positions, with considerable consistency in position evident in each interview. What the

interviews also provided were some explanations as to how the students' lived experiences and education were related to the differences, however this will be taken up in the next chapter.

From the analysis of the survey and interview data, the three positions, termed: (i) Agreement; (ii) Disagreement; and (iii) Negotiation emerged. These are used in the discussion that what follows to describe the ways the pre-service primary teachers' situated themselves in relation to dominant discourses associated with the relationship between health and the physical body. The first of these, Agreement, was consistent with a discourse position that 'agreed with' and consistently talked about bodies and health in terms of the precepts of the dominant health discourse. They did so to the exclusion of alternative descriptions of bodies and what it means to be 'healthy'. The second, Disagreement, could be aligned with a 'counter discourse' of health and included those responses that challenged the role of the physical body as an indicator of health and in doing so looked at other ways to describe bodies. A last set of responses was coded as Negotiation characterised health as not only indicated by physical appearance, but also took into account other indicators of health, thus in their response negotiating what it means to be 'healthy' or the role of the physical body in 'health'. They drew on ideas from both dominant and counter discourses of health.

A healthism discourse position: Agreement with dominant health discourses

The responses coded at Agreement, suggest a discourse position that does not question the relationship between health and weight; associates good health with diligent dietary and exercise practices; and sees a healthy weight or a 'fit' appearance as within an individual's reach. 45 of the 130 (35%) open-ended survey responses were coded at Agreement. This percentage is not different to the Likert scale ratings of the question (see page 182). The main characteristics of these responses were: (a) language demonstrating a great deal of certainty - the idea that 'this is the way things are' and your body is unquestionably a proxy for 'health'; (b) the assumption that individual actions alone lead to health outcomes; and (c) the use of medicalised language to describe bodies, such as 'weight', 'overweight' and 'obese'. As the following examples suggest, the responses were often short in length and grammatically in the present tense, adding to the certainty or 'truth' of the position: 'Overweight or underweight greatly affect health', 'If you are fat you are unhealthy' and 'People who exercise stay in shape'.

The language of healthism was a strong pattern across the responses coded at Agreement. These responses often held the individual accountable for their lack of 'healthy' practices. At times blame was assigned to those individuals whose 'choices' contributed to their 'condition'; they were characterized as not taking responsibility for their weight, size and shape and apparent lack of 'health'. For instance: 'Because people have a choice over their selection of food and whether or not they do exercise'; and 'Because I feel that if they are overweight they are not eating healthy or exercising enough'

What is interesting in these texts, and most others coded at Agreement is that they often feature the use of the word 'weight' rather than 'size' or 'shape' to formulate their response. In doing so, weight becomes the focus of critique and justification, rather than size or shape. The conflation of these terms weight, size and shape, then limits what is explored in their response. For example, the medicalised terms, 'overweight' and 'underweight', are drawn on in a diagnostic sense. This contrasts with responses coded elsewhere (Disagreement and Negotiation), where notions of size and shape are used in quite different ways. Other knowledge assemblages common to an Agreement position attributed a lack of 'good' nutrition and physical activity to a whole range of illnesses. Some responses even went on to diagnose the future risks for particular types of bodies, drawing on biomedical language to describe bodies: 'There are lots of physical and mental ailments associated with being overweight'; 'Being overweight or obese can affect their health, the same as being very underweight'.

An Agreement position was also evident in some of the interview texts, with five out of the 23 interview participants predominantly speaking from this position, for example, Jimmy's response to the question, 'how can you tell if a person is healthy or not?':

> Outwardly you can tell if like somebody is obese you can tell um in that sense physically, if someone is obese you can go well they are probably not eating right, they're probably not getting the right sort of exercise um they probably already have or are suffering from some health issues or will in the future…
>
> *(Jimmy | GDE | Moore University | Pilot interview, 2008)*

In the first instance, Jimmy's sense making of an unhealthy person is one who is obese: physical appearance or body size and shape are drawn on to construct his meaning of an unhealthy person. He moves on to make assumptions about the 'obese person's' health behaviours and then goes further to offer a prognosis based on the health 'risks' that will

follow. In this case, simply physical activity and nutrition are deemed the solution to cure 'excess' weight. This assumption is evident in the words of another participant, Phoebe, also took up an Agreement position:

> If someone is overweight I would probably think that they were unhealthy. So it would sort of be their eating habits and exercise habits I would put it down to… If they are overweight, I'm not sure if there are any medical conditions where you are overweight, but anyway maybe diabetes or something I'm not sure. But I am sure there is something, so it might be what they are eating or their physical habits, it might be a medical condition.
>
> *(Phoebe| B.Ed | Cavendish University | Main interview, 2009)*

Similar to Jimmy, there are traces throughout Pheobe's response of 'provisional linkages', to borrow Grosz's (1994: 167) term, between 'overweight' and an individual's eating and exercise habits. Both Jimmy and Phoebe's responses were grouped at Agreement, particularly because of their assemblage of ideas about individuals, as being 'at risk' of disease, suffering from 'medical condition', obesity or at risk of a shorter life expectancy because of their lack of 'healthy' practices or 'choices'.

An understanding of 'health' informed by notions of body appearance makes it difficult to resist or dispute the role of size and shape in 'health' and easier to 'agree' unequivocally that size and shape are fundamental to what it means to be healthy. The relationship between body appearance and health is a powerful discourse position taken up by these participants; they are able to write with certainty because their position accords with contemporary ideas about health that have considerable social legitimacy.

A counter discourse: Disagreement with dominant health discourses

The patterns of language in the responses coded at Disagreement were in direct contrast to those coded at Agreement; they proposed a counter discourse position. For example, responses coded for this position: (a) did not associate body size or shape with health; (b) directly challenged the enunciation of size and shape as constituting a 'healthy' body; (c) described health in ways other than the physical; and (d) pointed towards the problematic nature of health as indicated by appearance. These types of responses were least common with 29 of 130 responses in the open-ended component of the survey coded at this position. Of the quantitative results, only three participants rated '1' not at all to the Likert question and thirteen rated '2' unlikely. The following examples from the short answer responses indicate a belief that different body shapes and sizes can be healthy regardless of their size or shape:

> Health has more dimensions than just physical. Someone who looks slim/ toned/muscly may be physically healthy but may have unhealthy beliefs about food and poor body image. They may have trouble dealing with the pressures of stress of life, or be unable to maintain loving or happy relationships with others
> *(survey response, Cavendish University, Female 21-25yrs MT)*

> Some people are naturally bigger and whilst eating healthy and doing plenty of exercise may still be bigger than others who don't
> *(survey response, Moore University, Male 18-20yrs B.Ed).*

These responses coded at Disagreement refuted the idea that the healthy body is the inevitable outcome of eating or exercise choices. The responses also employed a range of vocabulary to describe different bodies, for example the descriptors of: 'football players', 'muscly', 'barrel chests', 'big woman', 'large and curvy' and 'slim'. Such variety contrasted significantly with words such as 'weight', 'overweight' or 'fat', commonly used in the responses coded at Agreement. The responses grouped at Disagreement also suggest resistance to representations of size and shape as indicators of 'health'. In contrast to the responses coded at Agreement they draw on other truths to construct health, for example genetic make up and mental and spiritual wellness. However, like the responses at Agreement, the language used often suggests certainty. This certainty, however, was about challenging the 'truth' that a person's health can be read off their body size and shape:

> Some people may be thin but not fit. They are just like that genetically or have a fast metabolism. Larger people such as football players, that can be of solid builds and can also be fit and healthy
> *(survey response, Moore University, Female 21-25yrs B.Ed).*

> It really depends on the person and their situation. You could see a big woman and think she's unhealthy, where in fact she had a baby the week before, or a persons lifestyle requires them to eat a lot, for example a weightlifter. Also the world is filled with individuals who have different shapes. A person may be big on the outside, but on the inside are quite healthy. It's too hard to judge someone
> *(survey response Moore University, Female 21-25yrs, GDE)*

In these responses, individuals were rarely held accountable or blamed for their size, shape and apparent lack of health. This position was also evident in seven of the 23 interview texts. For example, when asked 'How would you tell if a person is healthy or not, or can you tell if a person is healthy or not?', Rachel challenged the idea that the appearance of the body was an indicator of health:

> I don't think you can really, because you know you can have the fittest people in the world and they could smoke, or how they actually get to that point is not healthy how they do it, like you know like they don't have, like they don't eat, or they eat the wrong sorts of things, and so I don't really think you can tell by looking at someone if they are healthy.
>
> *(Rachel| GDE | Moore University | Pilot interview, 2008)*

What is particularly interesting here is how Rachel immediately responds in terms of 'appearance' (coded as 'fitness'), suggesting her recognition of the dominant discourse. However, she goes on to reject the idea that appearance is indicative of health. On the other hand, she does associate health with individual choices and behaviour; a healthy person is one who eats 'enough', eats the 'right' sorts of foods and doesn't smoke. Other participants taking up a Disagreement position in the interview, such as Drew negated the role of weight as essential to health by positioning mental health as important, an 'invisible' indicator of whether someone is 'healthy'.

> I don't think so, I think everyone has a different outward appearance, and I would, I know some really skinny people that I don't think are actually that healthy at all, just based on the amount of complaints that they give about their health. I also think that as I said before mental health is an important component as far as I am concerned, you can't really tell the mental health of someone with out having a talk with them for a few minutes.
>
> *(Drew| M.Teach | Cavendish University | Main interview, 2009)*

Drew, and to some extent Rachel's responses deploy the dominant symbolism of skinny or 'the fittest' people in order to disagree with the question 'to you think you can tell if someone is healthy or not?'. They have to refer to the dominant discourse about what is socially deemed to be healthy, in order to then challenge the notion of health as a physical object. This demonstrates even further their Disagreement position through their direct acknowledgement, and then direct refutation, of the discourse. The disagreement position identified here, in many ways is a less overt instantiation of what Gard (2011) refers to (and was described in chapter 3) as obesity skepticism. In particular, the disagreement shared by the participants in this study mirrors the positions of those who 'speak out' in the public domain, that is, the active refusal of fat activists, lobbyists, and empiricists to accept widespread assumptions of a simple relationship between health and weight. There are however also differences to the obesity skeptics as Gard (2011) refers to them, because they are a highly theorized group made up of a range of positions. Thus limited parallels to the analysis can be drawn here given the survey and interviews solicited pre-teachers to respond to questions in relation to health, whereas the obesity skeptics are outspoken with pointed arguments in the public domain.

A negotiated position: Traversing discourses of the 'healthy' body

In comparison to the Agreement and Disagreement positions, the third position was far more layered and constituted by elements of different discourses. This position was named 'Negotiation' because the responses coded here included those that were not 'fixed' in relation to their agreement or disagreement with the dominant health discourse that situated body shape or weight as the objective of health. The characteristics of these responses included: (a) negotiation of what it means to be healthy, often challenging the reduction of 'health' to a particular body size, shape or weight for all people, but also acknowledging that the physical body plays some role in health; (b) use of modal language that indicated less certainty and acknowledged exceptions to discursive truths, for example: 'yet', 'somewhat', 'then again' and 'on the other hand'; and (c) drawing on multiple 'truths' of a healthy body, sometimes challenging the notion that a 'healthy body' is not always 'fit', 'toned', 'slim', and of a 'normal weight'. The participants traversed, and at times drew on contradictory discourses to formulate what were often longer and more complex responses compared to those coded at the other two positions. This is indicated in the following quotes:

> Sometimes genetics and health problems can effect (sic) body type, but yes in some instances body size or shape can be a direct effect of health choices
>
> *(survey response, Cavendish University, Female 21-25yrs, B.Ed)*

> Somewhat, this is one component of health, body size and shape (very thin or overweight–obese) can signal other health problems that a person is facing. It is only one indicator of many. For example, body size and shape doesn't necessarily tell you about the health of a person who has a muscly lean body, steroids could still be destroying their kidneys
>
> *(survey response, Moore University, Male 21-25yrs GDE)*

> Sometimes genetics controls the size you are but within yourself you may be fit and active, eat well etc and it won't change the size that you are. Then again many large people are unhealthy
>
> *(survey response, Moore University, Female 21-25yrs, B.Ed)*

In these responses there seems to be an attempt to provide a coherent story about size, shape and health, yet this was achieved by traversing various, and at times contradictory discourses. Some of these responses commented on the survey question itself, with comments like, 'it's too broad a question', whilst other participants drew on their own experiences to position themselves differently from the status quo, for example:

> I think that it can certainly be an indicator of someone's health but it is sometimes misleading. I have always been slim and my weight does not really fluctuate depending on my size. I loose weight when I am overstressed as my appetite decreases proportionally. It is at these times that I would consider myself unhealthy. On the other hand I know people who are vigilant with their exercise and eating habits but they find it very difficult to stay slim
>
> *(survey response, Cavendish University, Female 21-25yrs B.Ed)*

The responses coded at Negotiation were significantly less 'fixed' in nature, opening up multiple possibilities and circumstances. However possibilities were not limitless; many of the responses, while acknowledging exceptions to body size as indicating health, in the end leant towards the dominant discourse position. For example,

> Shape isn't as important, unless your shape is putting undue pressure on your joints or increases your risk of disease e.g. large waist and heart disease. However size, being over, within or under your healthy weight range can greatly affect your health
>
> *(survey response, Cavendish University, Female 21-25yrs B.Ed)*

This response is similar in its knowledge production to those coded at Agreement; however, it and other similar responses use some modal language, which suggests less certainty in relation to the discursive truths that are being produced. In contrast, a few responses, such as the one below, drew on a counter discourse, challenging taken for granted notions of a 'healthy' body:

> Because body size or shape is only part of someone's health, although sometimes shape is genetic and does not always signify inner health.
>
> *(survey response, Cavendish University, Female 21-25yrs B.Ed)*

The Negotiation position was the most prominent, with 11 out of 23 interview texts coded at negotiation. It is most likely that this result was different to the open-ended survey responses because participants had more opportunities through their interviews to position themselves in different ways (some contradictory). In the following example, Lani refrains from presenting a 'fixed' position on 'a healthy person'; rather she negotiates between different discourses of health and the body when asked 'how would you describe a healthy person, somebody who is healthy?'

> Well obviously like a healthy weight its just to me you can sort of just tell if someone's, I think you can still be healthy if you're a bit overweight, just a little bit like you don't have to be all perfect so I think yeah you can still be healthy, some people's bodies are just like a bit bigger or a bit smaller, um I don't know a

> healthy person is um I don't know, I don't know, I've never really thought about that, but yeah you don't really have to be really skinny or anything to be healthy.
> *(Lani| GDE | Moore University | Pilot interview, 2008)*

The way in which Lani works through the various possibilities suggests, as she says, that she has not thought about health and appearance much before; it could also suggest that she is negotiating what she believes to be the most 'appropriate' position from her reading of the research. In thinking formulating her response, however, she works her way through the various possibilities: 'you can tell from a person's appearance'; but then again you can be a little bit overweight and still healthy, and some bodies are naturally bigger or smaller and so on. In this text, Lani is still not 'fixed' on one position, her response suggests uncertainty and for the purpose of the discussion to follow, a possible openness to other ways of understanding health.

5.2.4 (Re)producing discourses of 'healthy' bodies

According to Foucault (1977b), the discourses available for people to draw upon, provide both a means and limit to what can be known, produced and practiced. Therefore teachers, including those in schools and universities, have the potential, through their interactions with students and young people, to not only (re)produce dominant ideas of what constitutes a healthy body, but also to be productive in doing pedagogical work of challenging or negotiating them. If we are to accept that discourses are positioned within a hierarchy of social currency at a given point in time (similar to the visual metaphor of the tag cloud) the data here demonstrates the power of the dominant health discourse in constituting the pre-service primary teachers' health knowledge. Many of the pre-service teachers took up a discourse position, which was in accord with, or negotiated through, the dominant health discourses of diet, exercise and the 'physical' with a high degree of certainty and consistency to varying degrees.

Jager and Maier (2009: 50) suggest that discourse positions are 'homogenous at their core and become more diffuse with regard to less central issues'. This is useful in thinking about PPGTs' positions, as not all interviews reflect one position throughout, although many came close. In the case of health discourses, it is not surprising that the dominant discourse, healthism, has considerable pull to the 'core' or centre. It draws on neoliberal discourses of individual responsibility and the obesity crisis, which are re-cited in public education initiatives, the media and schools and has the legitimacy of scientific and medical knowledge (Crawford, 1980; Johns, 2005; Rich & Evans, 2005). Because of this,

alternative meanings of health are much more diffuse and have far less 'airplay' in the media and schools and many courses preparing primary generalist teachers in HPE (as demonstrated in chapter 4). The counter discourse position taken up by a moderate number of participants in this study were less homogeneous, more likely to draw on personal experience, and draw on some of their certainty from recognising and rejecting the tenets of the dominant discourse position. Despite many participants deploying language consistent with one of the three positions, gaps and fractures to a coherent position emerged with a close reading of the interviews. The analysis, which continues with narratives of lived histories in chapter six, will explore this further.

5.3 Finding out about health in 'totally pedagogised societies'

5.3.1 Knowledge sources: pop culture, schooling, friends and family

In this section, I discuss the clusters of knowledge sources that the PPGTs identified as contributing to their understandings of health. Tracing biopedagogical sites (flows of knowledge reproduction or assemblages) in relation to health and the body revealed particular sources that were valued by the participants more so than others. To carry out the analysis, I considered Rabinow and Rose's (2006) question: 'who is considered competent to speak the truth?' This allowed me to trace the ways PPGTs' subjectivities were entangled in particular discursive and material intra-actions of the *dispositif* of health imperatives. Experienced at the level of the self, some truths were more powerful or valued more highly than others when it came to the PPGTs' identified sources of health knowledge.

As an organising structure, this section utilises responses to one opened-ended survey question: 'What sources of information do you think have developed or influenced your understanding of health or health related practices?'; as well as responses to one interview question: 'Where do you think you got most of your understanding/information about health from?'. There were other instances where sources of health knowledge were apparent in responses to other interview questions and these responses were also coded at sub-themes under 'sources of knowledge'. These additional responses confirmed, if anything else, the responses to the survey and interview questions described here.

The responses to the survey question provided an organising structure for the analysis presented in this section. A total of 123 participants (72 from Moore University and 51 from Cavendish University) responded to the survey Question 22 'What sources of information do you think have developed or influenced your understanding of health or health related practices?'. The responses were manually coded under six sub-themes emergent from the data: (i) school; (ii) university coursework (particularly compulsory PDHPE subjects); (iii) the internet, media and popular culture; (iv) family and friends; (v) sports coaches, gyms and personal trainers; and (vi) doctors and health professionals (e.g. nutritionists). Table 6 below presents each theme and the number of participants who identified the specific sources of health knowledge as part of their open-ended survey response. Any one participant's response could include a number of sources, with many participants listing just one source as their response and others listing up to five. Four additional minor categories have been included in the table, however these will not be discussed due to the small numbers who included these as part of their response.

Table 4. Sources of health knowledge

Sources	***Number of participant responses (n = 123)***
The Internet, media and popular culture	81
School	63
Family and friends	62
University coursework	36
Sports coaches, gyms, personal trainers	22
Doctors or health professionals	14
Life experience	3
Personal interest	2
General knowledge/ Common sense	4
Other	7

From Table 6 and from the number of texts coded at similar nodes, it was apparent that particular sources of knowledge were valued as more competent or authoritative than others. In particular, media, university, schooling, family and friends were all consistently named sources of health knowledge. Many of these sources are not surprising for their role as sites of health knowledge, however it was a little unexpected for 'the internet, media and popular culture' to feature so highly amongst the responses.

A key shaper: The Internet, media and popular culture

The sub-theme of 'media and popular culture' was created to represent responses that included at least one of the following words when describing the sources for their information about health: 'media', 'news', 'magazines', 'Internet', 'television', 'newspapers', 'radio', 'books'. Eighty-one out of the 123 participants who responded to the survey question mentioned at least one of these words as part of their response. However, for the most part, responses coded at 'media and popular culture' listed multiple 'media sources'. Typical examples from this theme include: 'Television, newspaper articles, magazines'; or 'My family, *magazines, TV, the Internet*, university PDHPE classes'. Twenty-nine participants listed the word 'media' itself as part of their response. For example: 'media (TV shows)'; 'media/TV/Magazines'; or 'media aka newspapers, radio and television'. 'Magazines', 'newspapers', 'radio', 'television' and 'news', or derivatives of these, were the main sources listed. A few of the responses mentioned either advertising, documentaries or government initiatives, ten participants mentioned 'books' or 'reading literature' and eight wrote 'the Internet'. Aside from what has been described here, there was little else among the responses coded at 'media'.

A similar pattern as to the role of media as a source of information was also apparent in the interviews. However as expected there was much more depth and scope in the responses as participants were able to move beyond just listing 'resources' to talk about their engagement with 'the media'. Compared to the survey responses coded at 'media and popular culture' the interview responses had two foci, namely 'the Internet' and 'all other media'. Nine of the 23 interview participants spoke about 'all other media' (not including internet) in their initial response as a place where they get information about health. Responses of media and popular culture and the Internet are dealt with separately here.

There were considerable qualitative difference in the ways the participants' described their engagement with 'media'. For instance, Camille was initially 'skeptical' of the TV show *The Biggest Loser*, but then went on to conclude that the ideas about 'health' and bodies presented in the program were 'positive':

> Yeah TV programs, there is a lot… of those shows coming in at the moment… I watch the Biggest Loser, that show I think when it first started I was really sceptical, 'cause I was like gosh that has negative connotations associated with it… and I think in general it's helping people that really need help to kind of get

> healthy and feel better about themselves and I think it ends up being, I think it is a positive show I think in the end. Like I get into it and watch it!
>
> R: what are the main messages that you think people take from it?
>
> … to look after your body, like you know make sure you get physical exercise, make sure you eat the right foods and if you are overweight or obese then to do something about it… it can kill you.. it comes from the contestants 'cause they are kind of like 'this is my last chance'…
>
> *(Camille | GDE | Moore University | Main interviews, 2009)*

Camille negotiates the understanding she derives from the media through popular notions of risk that invoke affective feelings about longevity and abjection, i.e. 'in need of saving'. In what could be referred to as *The Biggest Loser* assemblage, relations of power about the physical body and the management of life are realised by personal trainers, nutritionists and the participants themselves. These truths about health are also taken up by Camille as they connect with her own desires and understanding of health and the body, which are tied up in exercise, diet and weight. Camille was not the only participant that mentioned *The Biggest Loser* in a 'positive' light as useful to the project of 'doing' health. Amelia, for instance, when prompted in the interview about what sources of media inform her knowledge, stated '… The Biggest Loser and stuff like that, that's good, because you get ideas and people then look at themselves compared to those on TV'. In this instance, Amelia negotiates her own and others' self-practices through a culture of 'weight watching' made possible by such media and popular cultural representations of health. While McLachlan (2009) has suggested that reality shows similar to *The Biggest Loser* may be powerful tools for teachers to deconstruct popular meanings of health with children, Camille and Amelia's responses, as well as three others in the data set suggest this is unlikely to be the case, given they subscribe, for the most part, to the messages it promulgates. In these instances the health knowledge affirmed by the program coalesced with Camille and Amelia's pre-existing beliefs.

To draw out some of the qualitative differences, of the other nine participants' responses coded at media, Drew expressed his total disinterest for the show. In the section of the interview related to 'health knowledge' he describes: 'my fiancée watches that, what's that show with those people (where) they try to loose weight… I find it painful so I don't watch it at all'. In contrast to Amelia and Camille, Drew rejected the messages espoused by the TV show (and other media) where 'health' reduced to weight, exercise and diet, reflecting: "it seems to be a bit of a double standard like you know you see on News

shows and those sorts of things how you know "oh my god models are too thin" etcetera, etcetera, etcetera, but at the same time the very next show… they're all like twig thin" Whilst Drew was intensely critical of representations of 'health' in the media: "I think its absolutely an issue (obesity)… but in terms of the effect media has I think that, you know… it's a double standard I wonder if its positive or negative to peoples views to go on what is healthy".

Across the interview texts there were other instances where participants directly challenged the influence of unrealistic and 'illegitimate' ideas about health promulgated in the 'media'. Despite this, the same participants' resistance to popular notions of health fell short of their own emotional and social investments in the body. A quote from Amelia exemplifies these tensions and contradictions among some of the responses:

> I think that is the massivist (sic) issue (focus on weight in the media) ever like I come from a family of four girls so it's hard because a lot of people, like I always see people reading magazines and like you watch stories on the news and a lot does rely on that, and I think it is so wrong, because people should not, like people shouldn't be subjected to feel bad about themselves just because they don't look like a movie star… I suppose you read it (pop culture) and you do, you can't help but feel bad about yourself because you don't look like that (pictures of super skinny people), so it is hard to ignore, I don't really know how you could ignore it, it's everywhere.
>
> *(Amelia | B.Ed | Moore University | Main interviews, 2009)*

While on the one hand, Amelia seems to recognise the omnipresent influence of media, magazines and pop culture, at the same time she describes herself as unable to resist these messages and the negative feelings they prompt for her. Amelia's quote like others in the group demonstrates how health knowledge, with the help of 'media', expands to the corners of their every-day lives, where truths about aesthetic ideals and the new public health yield moral implications for individuals' sense of self (Petersen & Lupton, 1996).

Many of the interview responses that were coded at 'media' as an identified source of health knowledge came from participants who were interested in practices and meanings of 'health' associated with exercise, diet and weight. Not surprisingly, this appeared to be gendered, as all eight out of nine participants whose responses were coded at media were females. For some participants, TV programs such as: *What's Good For You; You Are What You Eat (with Jilian McKeith)* were provided as examples. For two of the participants, however, Pip and Lonia, their responses coded at media were quite different to the other

seven women. Their response suggested a more skeptical approach to 'health truths'. For example Pip stated: 'I guess I would have to say media [is a source of health knowledge], a constant source of bombardment as to what's healthy, what's not healthy… the media, the television, newspaper, the Internet is probably where I see it the most'. Pip also talked about *The Learning Channel* as a program she liked to watch as it has 'loads of different stories on health… survival stories I guess where people have dealt with ridiculously crazy experiences'. Pip's uptake of the 'media' was somewhat different to the others mentioned earlier for the types of programs she considered engaging. Another participant Lonia, whilst identifying the Internet as influential earlier in the interview, also distanced herself from other forms as a convincing knowledge source:

> I can't say that I read any type of, I'm not a magazine reader. I read the newspaper on a Saturday, I see a bit of TV, the media doesn't have a big impact on my life…
> *(Lonia | B.Ed | Moore University | Main interviews, 2009)*

The reason 'the media' and 'the Internet' were not conflated as themes in coding the interview responses was that responses in the interviews were different to the survey. Partially this was because almost all survey responses that listed 'the Internet' also listed 'media', 'TV', 'newspapers' as part of their response with no further depth. But for the most part, the eight interview participants who spoke about the influential role of the Internet as an identified source of health information did not talk about other forms of media. The responses coded at this sub-theme ranged from Veronica, who identified The Internet as her foremost source of knowledge and talked at length about herself as a 'critical consumer', to Violet, 'I just tend to look them up (WebPages), whatever I want to look up in Google and it takes me to medical sites and things like that'. In the following quote (of an already significantly abbreviated text) Veronica, in contrast to Violet, outlines the frequency with which she utilises the Internet in her sourcing her health related knowledge:

> I use the internet a lot and I am picky about where I get my information from, I don't rely on media as in newspapers and things like that, but I'll go to health organisation or I'll even look into parliamentary reports… The internet would be my main source… probably because of the convenience… I like going to lectures or going to places where people discuss it with you or whatever, but it is not always easy, it's easier to go on the internet and you can do it at any time of day… I think there was one called childhealth.org… I like to find Australian based ones as well… but yeah it depends on what I am looking for… every Joe is an author these days… I don't want to just believe, and even some of the organisations that are out there promoting their interests or their specific viewpoint, they can just set

> up… and sometimes even government, they often say when you research that you kind of go out seeking an answer and you'll often find the answer, so you know, so they often say that in argument to government reports and things that they'll find what they want to find… I try to revisit things, I think that helps as well. So you go and look at something, then go away and think about it and then you come back and then you look at it again and sometimes you get a different perspective of it 'cause you've had time to think about it.
>
> *(Veronica | B.Ed | Cavendish University | Main interviews, 2009)*

For Veronica, the Internet is convenient, but she argues that one needs to be discerning in their use of pages. As she states 'every Joe is an author these days'. Her position is one of skepticism and analytical engagement, as she talks at length about the ways that she is astute in using it as a resource; 'Australian based ones' 'Government reports', 'I'm after legit information' and of comparing information.

Anika, another participant spoke about the Internet at various points throughout her interview as an implicit source of knowledge. In her description below, she tends to suggest that those who use the Internet are informed and therefore better off in their health:

> I think that's the thing with the Internet now is that when something comes up you can look things up. My son had appendicitis and he diagnosed himself at 2 o'clock in the morning… 12hrs later he got his appendix out…
>
> …the thing is my mother in law she has been much more successful I think because she goes on the internet and started looking up things and finding out what she could do where as my sister in law who had the full blown diagnosis (celiac) and was really sick took longer because she didn't do the research to figure out what she could eat and what she couldn't eat… even if it is diagnosed by a doctor, often the dealing with it there's so much support on the internet.
>
> *(Anika | M.Teach | Cavendish University | Main interviews, 2009)*

Rather than talk about her own use of the Internet, as did Veronica, Anika praises her mother in law's use of the Internet to manage her celiac diagnosis, whereas she assumes that her sister in law's wellbeing could be better had she participated in her own Internet research. Anika infers that everything is on the Internet if one is willing and capable of looking. By speaking about the Internet in this way, Amelia implicitly responsibilises the individual for their self-governance of health, a position supported by consumer groups but criticized by some who caution the potential of 'Dr Google' to do more harm than good (Bray, 2012).

The role of the Internet in Veronica's life is an experience mediated by her beliefs about what knowledge is more credible and specific to the task at hand. This was evident in the ways she spoke about the different sites where she would look up 'stuff appropriate for children' as opposed to 'just reading for me'. For Camille and Amelia, who spoke about the 'positive' aspects of *The Biggest Loser*, their experience of 'media' was mediated by their own pre-existing beliefs about exercise and diet and reducing weight as an important project to 'health'. They were both younger participants, one of whom lived in a share house where these types of reality programs were frequently viewed with others. This in turn was quite different to the immediate lived experience of Lonia, who 'dabbled' in the 'newspaper on a Saturday' and 'a bit of TV'. Lonia's everyday life on the other hand was mediated by her busy commitments as a mum to two children, studying and working along with her rejection of 'expensive' and time-consuming 'upkeeping' of 'health' and 'slender ideals' through exercise and diet.

While the role of the media in mediating knowledge of health and the body was a significant theme across the data, the qualitative interview responses tell us that this is experienced in multifarious ways. The media was by far the most reported theme constituting the PPGTs' responses to where they get their health knowledge in the survey. 'Media' as a word encompasses not only the various mediums of social knowledge translation such as TV, newspaper, radio etcetera, but also it is loaded with many interpretations and critiques as a field of research (Seale, 2002). It is a useful, perhaps easy, as a term to deploy collectively to describe where health information comes from. However, the theme of 'media' is representative of a plurality of powerfully discursive and popular cultural notions of health and the body. While many of the participants took up particular shows with interest uncritically, others didn't even consider the 'media' as a direct source or 'valid' place to come to know about health.

Compared to more traditional forms, the media, and more recently social media (Rich, 2011a) and reality media are likely to be key players in the transmission of heath imperative truths (Silk, Francombe & Bachelor, 2011). Many reports demonstrate how patients and health consumers are more likely to get information from news stories rather than 'scientific' studies (Fox & Ward, 2006; Frank, 2006). Thus as Epstein (1996) argues, it is increasingly important for individuals to understand how the mass media 'filter and translate scientific information'. Furthermore, social media, and web 2.0

platforms also provide new ways for individuals and public health initiatives to create healthy identities and share them with others (see for example, Eckler, Worsowicz, & Rayburn, 2010; Hanson et al., 2011; Mitra & Padman, 2012). Providing spaces for engagement with media sources in teacher education and deconstructing truths about health would perhaps break down some of the social labeling of 'media' in a negative light, as did Drew, and provide spaces for PPGTs to engage more deeply with the flows of knowledge it generates, and the richness and diversity with which teachers can engage, deconstruct and reconstruct truths. If nothing else, given the prominence given to media in participants' surveys and interviews as influential in their understandings of health, teacher educators need to consider the implications this could have for PPGTs' content knowledge in relation to health and the body.

A 'healthy' blueprint: School and 'PDHPE'

A great deal of literature points to the influential role of teachers' own experiences of schooling on their professional identities. Beginning with Lortie (1975), and his highly popular metaphor of the 'apprenticeship of observation', there has been considerable support for the notion that teachers own schooling experience is highly influential in the cultural transmission of teaching practices. The oft-cited argument is that 'teachers teach the way that they were taught' (Heaton & Mickelson, 2002: 51). It would seem, in relation to health knowledge, that the PPGT participants in this study could be described in similar ways. Sixty-three survey respondents wrote in one form or another that their schooling experiences were an influential source for their understandings of health. These responses included reference to either PDHPE specifically as a compulsory part of schooling (Years 7-10) and/or the Higher School Certificate elective (Years 11-12) or just the word 'school'. A similar trend appeared in the interviews with seven of the interview participants mentioning 'school PDHPE' (often school PE) or a similar phrase in their response to the question about what has informed their understanding of health. Each of the seven interview participants talked about the subject with a great deal of warmth and appreciation, even a 'love' for the subject. Savannah, for instance, spoke quite passionately about the KLA in her initial response to the question 'where do you think you have got most of your information about health from?':

> School, yeah definitely, especially year eleven and twelve, I think also because I love doing PE … and I've been brought up doing sports and dancing and just stuff like that, so it's just school… but the most would be HSC PE… I think in the primary school, honestly I can't even remember PE I just remember going out

> and doing sport but then like you get the, even Year 9 and 10 you know you learn about health and all that so I think, oh and Happy Harold… but more secondary school, I think you know the teachers should follow you up more, like personally I think you should be doing PE until Year 12.
>
> *(Savannah | B.Ed | Moore University | Main interviews, 2009)*

What is particularly interesting here is how Savannah associates PE (rather than PDHPE) and her movement experiences in her youth with how she has come to know about 'health'. At another point in the interview she stated: "I classify myself as healthy, that's just because of how I've been educated at home and like school has a huge impact on me and so I know what it is to be healthy sort of thing". Savannah referred back to both her primary and high school health experiences at other points in the interview: "healthy eating was a big thing, especially because of Happy Harold like back in the junior school"; and what she 'knew' from completing the PDHPE elective in year twelve: "yeah healthy eating I think was just the most because then you learn about the cardiovascular diseases, it is seven priority groups now, you know like cancers and all that stuff, and causes".

Another participant, Jacob, who was a third year B.Ed student at Cavendish, also initially referred to 'school' as a recognised place where he has come to know about health. In his interview response to the question 'where do you think your perspective on health has come from?' he, like Savannah, drew on his sporting background and interest in movement as part of how he considers 'health':

> I remember, like in health at school, not in terms of, in High School… I remember feeling like I was learning a lot about health like in the early years of high school, Nine and Ten Sports Science, doing that, but just PDHPE in High School…
>
> *(Jacob | B.Ed | Cavendish University | Main interviews, 2009)*

It could be argued that Savannah and Jacob's involvement and 'love' of the PDHPE learning area has shaped their experiences and belief of the importance of H-PE in schools. It is likely that particular practices and notions of health based on PPGTs' schooling experiences attract more attention than others. In particular, there is concern for how sport and PE might be conflated with health based on PPGTs' own schooling experiences.

Through trusted opinions: Family and friends

The importance of everyday interactions and the circulation of knowledge through informal sources such as family and friends was a significant theme. Sixty-two of the 127 survey responses mentioned friends and/or family as a source of health knowledge, nominating either a specific friend or a family member, for instance, 'my mum', or a phrase such as 'family and friends'. Often responses coded at this category would describe authorities from friend or family members' knowledge derived by listing their 'expert' occupation or experience. For instance: 'friends studying nutrition', or 'my best friend who is a dietician'. The importance of authoritative sources was confirmed from participants' other responses throughout the surveys and the interviews.

Eleven of the interview participants identified family and friends as a significant influence on their health information. One participant, Will, considered his family and the people around him as most influential to his practices and how these have continued in his everyday life. In his initial response to the interview question about how had he come to understand health, he replied:

> I think mainly just my family and friends, like the people around me who I've learned off, when I was obviously growing up your parents teach you a lot and other siblings and then when you are going through your teen years you spend a lot of time with peers and you learn off them, like one person might have this new diet and you are like it's working for them and you might do that as well, or whatever, just from the people around you I think just people in your life have a massive impact on your health.
>
> *(Will | B.Ed | Moore University | Main interviews, 2009)*

Like Will, Beau, another participant had a similar engagement with family as an instrumental source of knowledge. Beau's response, however, was more characteristic of other responses coded at this theme, as he speaks specifically about the family practices around food, rather than the influence of 'friends and family' loosely. Beau considered his family, particularly the experience of growing up with his brother who is diabetic, as central to how he has come to know about food. This continued to influence his relationship with food at the time of the interview:

> … also related to ah having uh a family history of diabetes, food is very important in my house and in my upbringing and it's always the first consideration before anything else it's important to think about what are we going to eat. When do we eat? And these are ah quite central to my lifestyle and to the lifestyle of my family in that it's, it is catastrophic if you know we're not eating right because it can be you know the effects of diabetes it's not just for the individual but also for the family around so when the clock gets close to 6.30 for example which is dinner time and has been since I was young, everybody knows that that time it is and

> there is a great responsibility on everybody to make sure that … everybody gets fed at that time, um so that's where my awareness of food I guess and its not like an obsession but it you know its held in high importance…
>
> *(Beau | GDE | Moore University | Pilot, 2008)*

To highlight the qualitative differences in the theme of family and friends, for Vala another participant, her mother played a significant role in shaping her meanings of health and the body. Vala talked about her mother's preoccupation with her own and her family's health and how many of their conversations were about food and weight. When asked, 'what do you think has shaped your understanding of health', Vala replied:

> My mum (laughs) she's just always been really healthy and everything as I said everything that we have in our house is health food or anything that we get is low fat and we just you know we only ever have like an ice cream as a treat or something like that and that's just always been the way and we don't eat any McDonalds and things like that, but I think that when, cause she actually went to 'fit and free' to loose weight and then she became friends with the woman that ran it and then they ran it together and then the other woman left so she was running it, so like my mum, like she's put on a bit of weight again but like so we are constantly working together just to be a healthy family like we've got a, like we're not so lucky with the fast metabolism (laughs) in our family so its just something that we work on together but also I guess my unit (previous university coursework) came into it as well like a lot of the things that I learnt more specific the biochemical side of how it gets digested and like low GI high GI things like that, where as my mum was more the basics like you know just make sure your eating healthy and don't eat fat because of whatever reason.
>
> *(Vala | GDE | Moore University | Pilot, 2008)*

As the quote demonstrates, Vala's relationship with her mum involves much discussion and open dialogue in relation to 'health' and weight, for instance she recalls at length a description of her mum's weight loss practices and her involvement in the 'fit and free' program. The family practices around health have clearly had a significant influence on Vala's health beliefs: 'we are constantly working together just to be a healthy family'. She aligns herself with her mother's concern of not having a 'fast metabolism' and talks about methods of managing her own weight and food practices. At the same time, university coursework including nutrition and psychology subjects (as part of a previous exercise science degree), also contribute to Vala's perspective on health. In particular, her previous coursework has affirmed and provided her with a vocabulary to talk and think about what she eats and the amount of exercise she participates in. Through her everyday relationships with family and coursework, Vala's practices of the self in relation to health are squarely understood through normative and biomedical 'healthy' food practices. Together, these sources of knowledge have made her cognizant of her own responsibility

and self-surveillant in relation to her health and weight.

Zigurus (2004) suggests that parents and families are a powerful influence to self-care practices for their face-to-face role in everyday life. The circulation of health imperatives at the level of the family was one of the most significant sources of health knowledge for the PPGTs in this study. The analysis described here only scratches the surface of the role family and friends play in affirming and circulating health values, beliefs and attitudes, however it is evident that the milieu of family and friends is of substantial significance to PPGTs' health knowledge.

The 'physical' capital squad: Sports, coaches, gyms and personal trainers

According to Fusco (2006), fitness spaces and those who are involved in them are influential to the fabrication of healthy subjectivities and social life. Additionally, as Tinning argues (2010) sports and fitness have had a dominant role in models of H-PE curriculum and coaches and personal trainers are perceived to have authority to speak about truths in relation to health and body fitness. Therefore, it is not surprising that sport and exercise proved to be an influential biopedagogical site for some of the participants. This emerged comparatively as a smaller sub-theme, but was consistent across both survey and interview responses to questions about sources of health knowledge and also more generally in response to other interview questions. Of the survey responses, 22 participants mentioned either coaches or gyms as influential sources of health information. Three interview participants also spoke about their experiences with sports or their personal trainer as a source of health knowledge. Rachel, for instance, talked about her personal trainer as not only providing instructions on how to exercise and eat 'healthily', but also as the measure of whether she was healthy: '… right now for me you know like if my trainer says you know do this and I can do that, then you know that I do have some level of health…' Amelia, another participant referred to a personal trainer's advice published in a magazine as useful: 'it can be helpful if you see (in a magazine), who is it, like Gwen Stefani who is a healthy looking person… you can see that her trainer posts a blog saying what she does, so I suppose it is helpful in that way if people want to get into shape'.

In relation to sports, another participant, Beau, talked about how being a gymnastics teacher has contributed to his understanding of being physically active as part of a healthy life:

> sports were very important in my health and so there's this working with ah gymnastics to a decent level and also teaching gymnastics during the earlier start of my studies um that sort of gave me access to an understanding of my body and the importance of maintaining like a fit healthy body … so that that I guess yeah my background in sport I guess that's sort of pushed the importance of the physicality and the actual exercise when it comes to creating a healthy lifestyle and that's central
>
> *(Beau | B.Ed | Moore University | Main interviews, 2009)*

Other participants also talked about the role of sport in their lives, particularly their childhood and youth as influencing their participation in physical activity for health. These PPGTs' experiences with sport have provided them with resources in relation health knowledge. Given the perceived authority of sports and movement coaches' knowledge in relation to health or weight, like other themes, dominant meanings of health are affirmed.

Low expectations: Doctors and health professionals

The notion that patients are less likely to trust or look to doctors for health information has been identified in the literature for some time (Schlesinger, 2002). New forms of engagement with health information, in particular the Internet, has shaped the doctor-patient relationship and patients constructions of health and illhealth (Miah & Rich, 2008). At the same time, with the interplay of power relations associated with medical information, doctors can be considered a more direct source of authority in relation to illness (rather than health). Doctors' authority to speak on medical matters was also apparent in the participants' responses in this study. Fourteen of the PPGTs mentioned doctors or other health professional in their open-ended response to sources of health information. Of these fourteen responses, most were made up of words like, 'GP'; 'General Practitioner', or 'doctor'. It was also common for responses to make reference to other health professionals, for example: 'my naturopath', 'my physiotherapist' and 'my massage therapist', or 'counsellors and nutritionists'. The prefix of 'my' here denotes a sense of relationship with these people as trusted authorities on bio-medical forms of knowledge. Interestingly, this prefix rarely occurred in the participants' references to GPs or doctors.

Anika, one participant spoke about her relationship with her doctor at multiple points throughout her interview. In the following example, she asserts her own control of her health and unwillingness to hand her needs over to the doctor unless she agrees with them:

> …when you go to the doctor, you know they tend to have a computer in front of them and they've got their little databases and they're often pulling, cause they can't be the experts in everything
>
> Int: So would you still trust a doctor in some senses do you think?
>
> Um, I trust my doctor in general but don't always, I don't always agree with him and he knows that I might not (laughs)
>
> Int: so what makes you trust him somewhat?
>
> I think he's willing to sort of go along with my own intuition. I think what he would say to me is I think you are out of line and this and you really need to, but I think when he is not sure, he's quite willing to let you know 'go ahead and try that, it's nothing that serious so try that first'
>
> *(Anika | M.Teach | Cavendish University | Main interviews, 2009)*

Overall, doctors and health professionals featured relatively insignificant as sources of health knowledge for the PPGTs in this study. It can be speculated that this is because they are positioned as important in the process of fixing medical problems, rather than helping individuals in health as a project of the self, a theme well established in the PPGTs' meanings of health earlier. Doctors are then redundant in the project of the self, as they do not serve a role in the project of self-fashioning and acting on health knowledge that is provided readily elsewhere through sources such as the Internet and magazines, friends and family. In this sense, other sources of health knowledge, for instance, the 'media' seem to fill a more serviceable form of information as to how individuals can alter and shape their material body, i.e. becoming a bio-citizen.

The invisibility of teacher education

The influence of university coursework hardly featured in participants' responses. Those who listed coursework were for the most part undergraduate Bachelor of Education students, at both Moore University and Cavendish University. However, for postgraduate students in the GDE (Moore University) and M.Teach (Cavendish University) teacher education seldom featured as a place where they gained knowledge about 'health'.

For a couple of the B.Ed survey participants, coursework was their only response. For example: 'the compulsory health-related (PDHPE) subject I did last year [subject code]'. However for the majority, 'University coursework' featured among other sources in the participants' responses. The following short answer responses are typical of such replies: 'High school. *University subjects in PDHPE*'; 'Television shows, television ads. *PDHPE subject at uni*, friends studying to be PDHPE teachers'.

Across the interviews, four participants, three of whom were B.Ed students, referred to university coursework, only when prompted, as making a significant contribution to their understandings of health. Phoebe, for instance talked about how it had given her a 'formal' vocabulary or language to describe what she already 'knew'.

> I'd probably have to say that not until I started uni that I actually looked at the categories of it (health)… and looked at probably the PDHPE syllabus I'm like oh okay this is a definition for health this is how you can think about it. It relates to what I already thought but it was more of a, um not a professional, but a, way of describing it in a formal way. And I was like oh yep, there's the mental there's the physical, and then I'm like okay there's the different categories, and this is how you formally say it or look at it… it was brought more to my attention… a language to use.
>
> *(Phoebe | B.Ed | Cavendish University | Main interviews, 2009)*

Despite the seemingly significant influence of coursework as a biopedagogical site, for Phoebe, a little later on in the interview she stated: 'I know I need to exercise, I know what foods are right through education (school) and stuff, so fruit and vegetables and nuts… I'm pretty sure I knew that before uni'.

Lonia another B.Ed participant from Moore University did not find the coursework specific to HPE particularly 'enlightening', but referred to a research methods subject as a place where she picked up a few extra things when prompted 'was there any content throughout the degree that has been health related that has stuck with you?'

> No nothing that really surprised me, I found all the health side of it interesting as far as things go, you know websites and things like that to use for kids in class, um no, actually probably the most information I've got about health is through the research lectures and seeing things [Lecturer A] and [Lecturer B] have put up.
>
> *(Lonia | B.Ed | Moore University | Main interviews, 2009)*

Lonia drew on her experiences from the research methods subject in relation to childhood obesity as a source of certain and verifiable knowledge. 'Lecturer A and Lecturer B' she referred to, are two educators in the research methods subject who

conducted research into childhood obesity intervention and prevention. In contrast to Lonia, Keira, a student from the same cohort and progression, remembered health components in relation to drug education and healthy choices from her coursework experiences. When asked 'can you think of any course based experiences about health', she said:

> Probably our PE subject that we did, because in the health part of it we looked at just teaching kids about like even when it comes to like the drug education and stuff we do there was lots of fun making healthy choices and things like that, so probably the health section, I can't remember everything that we did but we did talk about like how you would teach them about being healthy and making choices that are healthy, and I did a bit of research like on the Australian guide to healthy eating, what's involved in that.
>
> *(Keira | B.Ed | Moore University | Main interviews, 2009)*

It is not surprising that the MT participants did not mention coursework in comparison to the B.ED PPGTs at Cavendish if we consider the minimal coursework they completed in relation to H-PE. As for the GDE students from Moore University, the survey response was not surprising either given the survey was administered at a time when they were two-thirds of the way through their one-year degree and had not completed the compulsory H-PE subject yet. The interviews should have captured this data because they took place later in the year. What emerged overall as a theme was that graduate students from both Moore University and Cavendish University did not see the compulsory HPE subject as particularly influential. Some, like Drew, even used this question as an opportunity to state that he would have liked to had more exposure to the KLA and the theoretical 'significance' of it:

> yeah we did a subject on the PDHPE KLA but most of it tends to be of practical nature so 'this is what you do with kids' and how it works, there needs to be a lot of concentration on why we do it, the rationale behind things we are doing. That's with the physical education we are doing
>
> *(Drew | M.Teach | Cavendish University | Main interviews, 2009)*

The GDE and MT students were more likely to list their former degree coursework as a source of information. In the case of, Pip, a GDE student, this was perhaps because she already had an undergraduate degree in H-PE. However when asked about the coursework influences on meanings of health she drew on degree coursework other than H-PE. This was a rare instance across the data set where knowledge links were made outside the conception of health as 'exercise, diet and mental and social health' to different groups of people:

> I took an Aboriginal health class oh, three months ago so I found out a lot of information concerning Aboriginal health, Aboriginality and some of the aspects of health that they're faced with that maybe the general population aren't faced with as prominently.
>
> *(Pip | GDE | Moore University | Main interviews, 2009)*

While some B.Ed participants noted PDHPE coursework as influential, this was limited comparatively to other sources of health knowledge such as family and friends or media. For the postgraduate coursework students, their experiences of H-PE coursework, given this data, appear to be of minimal influence. Overall, the interpretation of responses suggests that the PPGTs' health knowledge and discourse positions in relation to health was unlikely to come from teacher education and if it did, it only confirmed the participants' knowledge gained elsewhere. For participants described here, their coursework provided little information on health beyond what they already 'knew. The coursework it seemed reinforced participants' pre-existing beliefs about health imperatives and this was either well received, for instance in the case of Phoebe (and Caitlin as will be described in chapter 6) or considered not useful in furthering one's knowledge, as was the case for Drew and Lonia.

5.3.2 Discussion: 'totally pedagogised' healthscapes

This section has mapped the key sources of knowledge production the PPGTs' identified as informing their understandings of health. The identified sources provide clues as to what was considered authoritative, but also the types of knowledge that was trusted as truthful and worthy of improving one's 'healthy' self-practices. A common pattern throughout the responses was that regardless of the knowledge source (family, media, internet, teacher education), a similar message was advocated; a message which reduced health to an issue of weight, exercise and diet. Often the underlying project of improving health through exercise and nutrition was constituted as a neutral, natural or undisputable concept, rather than as a discursive construct of particular historical contingencies and struggles (Vander Schee, 2009b; Webb, et al., 2008).

Evans and Rich adopt Bernstein's (2001) notion of 'totally pedagogised societies (and micro-societies)' to argue the, 'emphasis on individual responsibility [for one's health and body]… is now extended to all sectors of life, as measures addressing families, schools, communities and workplaces' (where health becomes everyone's concern everywhere). There are significant parallels between the analysis described in this chapter to what Evans and Rich (2011: 372) describe as the circulation of modern forms of knowledge

authority in a 'totally pedagogised society', where a "'natural attitude" is moralised, nurtured and established not just through interactions within formal education but in family life and communities…'. The findings interpreted in this chapter also confirm other studies that have identified the ways individuals are made responsible for their own health practices through intra-actions with: media (Crawshaw, 2007; Seale, 2002); family (Evans, Davies, et al., 2008; Francis & Birch, 2005); friends (McSharry, 2009); and schooling (Rich, 2010; Wright & Dean, 2007).

The physical elements of health, and individuals' exercise and diet practices as a means to achieve 'health' was an overarching theme across the survey material. This, in many instances worked to jettison other ways of thinking about health such as social, political, mental and spiritual elements of health and wellbeing. What can be inferred from the responses to the survey questions is that both contemporary ideas about 'diet' and 'exercise' provided powerful truths for the PPGTs to think about ways to 'achieve' health, especially as concepts coupled together. The PPGTs' meanings of health presented convincing evidence that for many them their health knowledge is contoured by the *dispositif* of health imperatives. It is unlikely that the PPGTs would discriminate between the subtle ways information about health circulates and has informed their ideas. This in itself is interesting as it confirms the grip particular truths have in 'totally pedagogised societies'; their omnipresent circulation and normalacy.

The sources of knowledge that were most influential to the individual's constructions of health were those that advocated a position on health aligned with what the PPGTs already wanted to know. In the interviews and surveys the students associated individualised efforts to improve health with 'exercise' and 'food' practices. Given the dominance of particular ways of thinking about nutrition and physical activity as a means to achieve 'health' one can only assume, as is the case in the literature, that these are likely to go unchallenged in the space of teacher education (Ruiz & Fernandez-Balboa, 2005), school subject departments of H-PE (Sirna, et al., 2008; Sirna, et al., 2010) and curriculum planning and teaching materials (Rossi, et al., 2009; Wright & Dean, 2007).

Another reason why health truths are likely to go unchallenged is that nutrition and physical activity are favoured topics in primary PDHPE because of their perceived 'neutral', enjoyable and accessible qualities in comparison to syllabus topics such as

sexuality, mental health, grief and loss which have been identified as areas where teachers lack confidence (Lynagh, Gilligan, & Handley, 2010). This coupled with the uncomfortable experiences that may come with students' questions or disclosures in topics such as sex education (Milton, 2003) as well as the conflicted history of sex education inclusion in schooling (Clark, 2001), makes the topics of health imperatives through nutrition and physical activity an attractive and comfortable curriculum area to teach.

Speaking from my own experience as a teacher educator of a Bachelor of Education (Primary) health elective last year, the area of nutrition and the benefits of exercise particularly attracted student interest as an assignment topic choice. Perhaps teacher education needs to directly address the likelihood of particular choices (nutrition and physical activity) students make when exploring syllabus related content knowledge and pedagogies. This would require pushing the envelope and exploring 'health' in ways that are more complex. One possible way forward might be to consider different 'perspectives' of health and to delineate some of the dominant perspectives such as medico-scientific truths and biological models for health. Given the PPGTs' entanglements in health and body discourses described in this chapter, exploring different perspectives needs to be sensitive to individual PPGTs' emotional investments as well as informed by carefully crafted methods of critical reflection (Ryan, 2011; Ovens, 2004). The final chapter will address some of these and other possibilities for primary H-PE teacher education further.

The next chapter of the analysis will consider more intricately, how individuals come to particular subject positions about health and the body, i.e. 'Agreement', 'Disagreement', and 'Negotiation'. While there are patterns across the responses presented in this chapter as to the predictability of PPGTs' meanings of health, if we examine a little further, the interview texts present further insight into the complexities of discourse. Borrowing language from Foucault, there are 'a plethora of' signified power relations in discourse, where:

> each discourse contains the power to say something other than what it actually says, and thus to embrace a plurality of meanings: a plethora of the 'signified' in relation to a single 'signifier'. From this point of view, discourse is both a plenitude and endless wealth (Foucault, 1972: 118).

The next chapter aims to bring light to these complexities of discourse and lived experience by examining three PPGTs' interview texts more closely. For the most part, each of these different participants' narratives are constituted by different discourse positions, however the tensions and language used to describe these positions presents another layer of insight into the complexity and fragmented forms of knowing within one position.

Chapter 6

Biographical narratives and 'the fold'

Complexities of the self: knowledge and lived experience

Theoretical tools

Sketching individual narratives

Findings: The biographical narratives

Discussion: Discourse positions and graduate teachers' dispositions

6.1 Complexities of the self: knowledge and lived experience

In chapter three, I mapped the *dispositif* of obesity and health imperatives common to 21st century accounts of schooling, popular culture, government and the social landscape. Some of the most resounding ways of thinking about health fall under the discourses of: healthism, overweight and obesity, medico-scientific truths and risk (Bunton, Nettleton, & Burrows, 1995; Evans, Rich, & Davies, 2004; Fullagar, 2002; Gard & Wright, 2001; Lupton, 1995; Rich, 2011b). The analysis of PPGTs' meanings of health and the body in chapter 5 suggested there were three discourse positions of 'agreement', 'disagreement' and 'negotiation'. Overwhelmingly there was a focus on the physical elements of health and health as a (perennial) project of the self. However this was not without differences between subject positions in the data set; the participants who were coded at disagreement, although few, not only recognised the social emphasis on the physical and aesthetic aspects of 'health', but also actively challenged these truths.

Building on the analysis of chapter five, this chapter offers another layer of interpretation in relation to how individual PPGTs come to know about health through lived experiences. Specifically, the theories of 'the fold', and to a lesser extent 'technologies of the self', provide a means to consider the more complex lived experiences of the PPGTs and how through micro practices of the self they constitute themselves as subjects in relation to health and the body. The analysis of the PPGTs' transcripts showed how PPGTs' stories of their lived experiences are essential to understanding how some discursive truths in relation to health and the body are more durable over time than others. Three PPGTs were selected to demonstrate in more detail how different discourses were mobilised when describing relationships between health, weight and the body. This chapter offers an explanation for the ways health imperatives are contested and transformed in the context of everyday experience (Lupton, 1997:108), and how individuals come to know and participate in particular discursive truths. The notion of the self or subjectivity is applied here and, as described in chapter 2, is considered to be in a process of its own productive self-formation, an effect of power/knowledge relations and embodied.

Interviews with PGPTs are the medium used in this analysis of the self. In addition to particular questions being categorised within one of three discursive positions, there was more complexity, fragmentation and nuance in each individual interview text when taken

as a whole. What was particularly apparent when considering the interview as a narrative was that each participant could not be considered 'fixed' in their subject position, or always predictable, although some texts came close. Rather, the lived experiences and unique biographies of each participant played a role in their response to questions that would normally be considered unlikely to elicit far reaching responses of personal experiences. For example a question about whether participants enjoyed or disliked H-PE at school, often returned a response about the influential people in their life or disclosures about self-practices related to sport, fitness or nutrition. At times such assortments of reflections were used to assemble a long response to one question. Often this was dependant on the individual participant and whether they were likely to speak at length or not in their responses. In most cases, participants spoke at length in their responses, and did not require further prompting to talk. Because there were varied emergent contours and unpredictabilities in each text beyond the discourse position introduced in chapter five, the analytical approach in this chapter aims to magnify these nuances of individual experience for the role they play in participants' discourse positions in relation to health and the body. How the participants have come to know about health and the body, as described at the time of the interview is brought into focus.

6.2 Theoretical tools

6.2.1 Discourse, intertextuality and subjectivities

Discourse has already been described elsewhere in this thesis. Here it carries the same meaning with an emphasis that 'all events are rooted in discourse' (Jager & Maier, 2009: 48). According to Foucault (1972), for an 'event' to occur it must have sustained traction for a prolonged period of time in peoples' minds. As already established, one of the main discursive events I take issue with in this thesis is the 'obesity epidemic'. One way of thinking about subjectivity in relation to discourse is that individuals are entangled in it. Barad (2007: ix) writes that 'individuals emerge through and as part of their entangled intra-relating'. Subjectivities, then, related to individuals' meanings of health and the body are formed intertextually in relation to cultural resources and spaces and the interplay between discourses. In contemporary healthscapes, this includes especially I argue obesity discourse and health imperatives. However this is not clear-cut. Intertextuality is related to subjectivity for the ways language is intimately part of cultural and social understanding. The term, intertextuality, proposed by Kristeva (1986), accounts for 'the relations between texts, as well as between readers and producers of texts, which

together enable the production of multiple meanings' (Saltmarsh and Youdell, 2004: 357). Examples of the array of discursive sites where such intertextualities of meaning (discourses that link obesity and weight with health) may merge, include (taken with those mapped in chapter 5): family practices, law, psychology as well as varied forms of media, medicine, education, sport and religion (Wright, 2000a, Gee, 2011; Saltmarsh and Youdell, 2004). In an analysis of the production of meaning, all language, including descriptions of lived experiences, are considered as text that can be analysed (Wright, 2006).

In the process of exploring the varied lived experiences drawn on by participants to construct the three interview narratives, attention was paid to the 'particles' of entanglement (Barad, 2007) that emerged through the intra-relating of stories within the narrative. Enacting this form of analytics meant the ways health was talked about, and how it was thought to be achieved, provided the content to be analysed. An analytic, then, evolved to tease out these entanglements for the ways they constitute the discourse positions, or subjectivities of participants. As Wright explains (2006: 61), '[i]t is through discourse that meanings, subjects and subjectivities are formed'.

6.2.2 How selves take form: Technologies of the self and 'the fold'

Technologies of the self and 'the fold' go some way to explaining the different positions individuals may take up at different circumstances and moments, despite some being more stable or predictable than others. This is not dissimilar to what Lupton (1995) explains when she refers to how at the micro level of the self, subjectivities are constituted by dominant discourses of health in varying degrees of influence. Because of this, certain ideas and practices are thought to have more salience than others and this in turn impacts on individual practice. Lupton suggests, 'rationales for non-conformance to health imperatives may operate simultaneously or variously within the context of an individuals' life course' (p.133). In a similar way to what Lupton is picking up on here, I consider 'technologies of the self' and 'the fold' as explanations for how individuals, at the micro-level of the self, take up particular ideas and practices as part of their entanglement in a grid of truths. In turn, thoughts lead to self-constitution, and this process is subject to change throughout the life course. For instance, all of the PPGTs were able to articulate how their meanings of health had changed over time, and described their friends and families and places as influential to their understanding and knowledge about health in different ways. However, the ways such people and places

were of influence, and the meanings they shared in these stories, provided evidence of the complexity of the competing truths with which individuals' engage.

Technologies of the self

One way of identifying how the PPGTs draw on particular discourses of health imperatives, or others, is through their means of 'truth telling'. Central to technologies of the self is the obligation to tell the truth. Foucault writes, 'why truth? … and why must the care of the self occur only through the concern for truth? [This is] the question for the West. How did it come about that all of Western culture began to revolve around this obligation of truth…?' (Foucault 1997a, p 281). Foucault was interested not in identifying a 'truth' but rather to show how one assembles the truth. Foucault was aligned with a philosophical position which was 'not to deal with the problem of truth, but with the problem of truth-teller or truth-telling as an activity' (Foucault 2001, p169). 'Truth telling' became a central tenet of his later work, as he embraced a Socratic method in his formulation of a set of questions: 'who is able to tell the truth, about what, with what consequences, and with what relation to power' (Foucault 2001, p 170).

The verbalisation of 'techniques' of the self can include confession; which Foucault came to identify not only in relation to sexuality but also the contemporary world. Through his analytics of sexuality, Foucault defined confession (aveu), as 'all those procedures by which the subject is incited to produce a discourse of truth about his sexuality which is capable of having effects on the subject himself' (Foucault, 1980b: 215–216). Besley (2005) writes that confession, in the Foucauldian sense,

> is both a communicative and an expressive act, a narrative in which we (re)create ourselves by creating our own narrative, reworking the past, in public, or at least in dialogue with another. When the subject is confessing and creating its 'self', it seems to feel compelled to tell the truth about itself (Besley, 2005: 86).

The interview, then, as others have argued within a Foucauldian framework (Crowe, 1998), can be regarded as a form of 'confession'. Participants are invited to create a narrative that makes sense to themselves and the interviewer. In such moment the participants construct truths to fabricate a 'coherent self'. The ways PPGTs 'felt compelled to tell the truth', in relation to discourses of health and the body, provided evidence for analysis of their entanglement in the *dispositif* of health imperatives.

The fold

The fold, takes place in relation to the multiple competing truths, or ways of living that make possible to individuals', different practices, and constitute the thoughts of the self at different times. Deleuze's notion of 'the fold' provides theoretical traction for how some truths, or ways of living are considered more desirable, normal or pleasurable than others (to borrow Foucault's terminology). The fold operates through the workings of the mind where each thing is considered different from and related to other things using a logical criteria. The 'fold', then, is considered to be a historically specific thought. Due (2007) in his book *Deleuze*, describes how our thought/ workings of the mind as a historical process, can give rise to difference or similarity:

> The genetic system of thought deduces the possibility of differences between forces from an ontological process that is prior to our knowledge and description of the world that we experience. This ontological process engenders difference out of itself without implying any structure that we could represent (Due, 2007:33).

On Due's account, the fold is not only central to our thoughts but is in 'process' prior to our knowledge of the world we experience. We can only maintain consciousness of particular entanglements of discourse given their force, or the differences between forces of thought. As Due goes on to describe:

> At the highest level there is the human soul in which individuality is folded as self-consciousness. There is no separation between distinct entities. There are just centres of activity folded within larger centres of activity (Due, 2007: 156).

The folding in this sense becomes a 'central feature of reality and not the metaphysical unity and identity of the monadic soul or self[21]. *The self is necessary only as the point where the fold is organised*' (p.156). To summarise, foldings (or unfoldings) are continual forces of thought that contribute to a self at a given point in time. Deleuze states: 'we are discovering new ways of folding, akin to new envelopments, but… what always matters is folding, unfolding, folding again' (Deleuze, 2011: 158).

The fold, as I have applied it, extends upon technologies of the self, to describe individuals' truth seeking for desire and pleasure as dependent on the patterns of thinking that recur, or are at odds with the historically inflected fabric of the mind.

21 These ideas Deleuze draws from Lebiniz, who he considered to be a 'quintessential baroque philosopher', and extends upon his notion of the fold to construct his own meaning. 'The word "fold" appears in Lebiniz's texts as a means of referring to the perceptions that are not self-conscious. The monad (ultimately the individual defined as spirits/ centers of energy) is thus said to be like a cloth that is infinitely folded. In the monad (individual) only a very small part of this folded cloth is present to self-conscious thought at any given time' (Due, 2007: 156).

'Thought' itself, has the capacity to form relations to truth that as Deleuze (2011) contends are embodied in nature. For example, a way of thinking, such as one aligned with healthism, provides a context in which new knowledge is likely to be taken up or not depending on its relationship to existing thoughts, values and beliefs. This provides an additional window of opportunity to understand how the folds of health and body knowledge are manifest in PPGTs thoughts and consciousness because some thoughts are already established or more familiar than others. Thought in itself, according to Deleuze, has the capacity to form relations, which are embodied in language, art, science and social practice. Linking the PPGTs' thoughts (ideas about health) to their everyday experiences, such as relationships with family and friends, presents an opportunity for insight into the similarity and differences in forces that constitute their subjectivities.

One way to map PPGTs' foldings of discourse is to trace the stories they tell. In looking into the complexities of PPGTs interview transcripts, I draw on the notion of biographical narratives. This process entails revealing meaning rather than defining it (Tamboukou, 2010:57). Stories create meaning by recalling events and thus parallels can be drawn between the stories PPGTs tell for their historical relationship to discourse.

6.3 Sketching biographical narratives

Narrative

'Narrative' and 'stories' as a research method, have more recently gained currency as a form of knowledge dissemination (Abma, 2002; Court, 2004; Daly, 2002; Frank, 2006; Frost, 2009; Garrett, 2006; Perez-Samaniego, Devis-Devis, Smith, & Sparkes, 2011; Sparkes, 1999; Tamboukou, 2008). While the term and application of 'narrative' takes form in many ways, here, specifically a Foucauldian approach is brought to bear on the representation of empirical material. Tamboukou's (2008) book chapter, *A Foucauldian approach to narratives* was particularly influential in considering the self as a discursive formation. In particular Tamboukou's work offers an explanation of the ways narratives, or sub stories in relation to health can be constituted as 'technologies of the self' or active processes of self formation. The fold and social practices, or technologies of the self, were the prime tools that guided the process of formulating the narratives as part of this chapter. Furthermore individual participant narratives are revealed for their relationship to social truths.

A Foucauldian approach to narrative has been used by others to identify disqualified forms of knowledge (see for example Harwood, 2001). In her methodological paper on young people who were told they had a mental disorder, Harwood (2001), demonstrates how narrative methods can be used to reveal subjugated (inadequate or esoteric) knowledges by bringing them to the foreground. Narratives, then, are situated in grids of meaning or intelligibility, with some more dominant than others. Tamboukou depicts how narratives with a Foucauldian grounding, are treated as multiplicities of meanings on the surface, and the intention is to map how 'different stories connect with other stories', as well as the 'discourses and practices in shaping meanings and perceptions and in constituting… the subject' (Tamboukou, 2008: 111).

In order to apply multiplicities methodologically, in the analysis of interview texts, a guiding method was to consider the analytics of power so that it was not the PPGTs' who were themselves analysed for what they really 'think', but rather the processes and the content produced in the interview interaction. Drawing on Öhman (2010: 398), '[t]his means that analytic interest [was] directed towards both process and content, where the focus is on how things are done and what needs to be done in that specific context'.

Biographical work

Biographical narrative helps to shed light on the foldings of thought (subjectification) and the processes through which individuals become subjects. By deploying biographical narrative as a methodological approach, there is no identification of the 'author' of the text. Rather, the subjectivities and subject positions in discourse that PPGTs' inhabit (or are in the folds of their thoughts) are the focus of analysis. In chapter three, the *dispositif* of health imperatives aimed to map a grid of intelligibility in relation to health and the body, 'wherein power relations, knowledges, discourses, and practices cross each other and make connections' (Tamboukou, 2008: 110). The ways individuals 'narrate themselves as subjects of this world' and 'the emergence and development of narrative practices of self formation' (ibid) is central to describing the participants' values and beliefs. Central to the biographical narratives deployed in this chapter are the lived experiences the PPGTs' constituted in interview. The order or accuracy of described events is not considered useful in this type of analysis but rather the ways participants' demonstrate narrative agency in the stories they recall is the central focus.

Three of the 23 interviews conducted for the study were utilised to assemble the biographical narratives described in this chapter. The process of inclusion is described below in section 6.4. There are four organising themes of description for each of these participants' biographical narratives: i) subject positions in relation to health and the body; ii) sources of knowledge to make meaning about health and the body; iii) teacher education experiences; and iv) ideas about the 'healthy' child and teaching about health. As part of these biographical narratives, poetic vignettes are included to represent the data.

Poetic vignettes

Part of the expanding methods of qualitative research dissemination in recent years, has seen 'poetic representations' along with 'ethnographic poems', 'poetic transcriptions' and 'found poetry' growing steadily as a method of educational and medical research (Burdick, 2011; Glesne, 1997; Huddleston, 2012; Madill, 2008; Strong, 2002; Thomas-Maclean, 2010; Tohar, Asaf, Kainan, & Shahar, 2006). More recently, these have been adopted in the field of physical education (see for example, Perez-Samaniego, et al., 2011; Rapport & Sparkes, 2009; Sparkes, Nilges, Swan, & Dowling, 2003). Poetic representations have also been used in novel ways to connect place to individuals' biographies and embodied literacies (Lyn, 2011). As a methodological tool, poetic methods allow for a different form of meaning to be generated that extends beyond the capabilities of discourse analysis. Sparkes and Templin (1992: 124) initially forged a space for 'poetic representations' in sport and physical activity research, stating that poetic representations 'have the potential to generate understanding in a way that is different from the more traditional forms of representation'. This is because different ways of writing can offer different connections between written form and meaning and elicits different insights (Burdick, 2011). Sparkes and others (2003) later highlighted the ways poetic representation offers an opening for the translatability of research to wide audiences, is so far as it 'provides a powerful means of understanding phenomena in new and exciting ways' (Sparkes, et al., 2003: 175). Poetic methods, some argue, inherently move away from more traditional forms 'academic filters' toward illustrating participants 'voices' (Bhattacharya, 2008). At the same time, in the field of research, poetic forms need to have an analytical purpose.

'Poetic transcriptions' while not as readily used as 'poetic representations' are similar in form and draw on a similar qualitative analytical approach. The difference between

poetic 'representations' and 'transcriptions', is that the latter is made up of only interview text (Burdick, 2011; Glesne, 1997; Thomas-Maclean, 2010). Glesne (1997:202) defines poetic transcriptions as the 'creation of poem-like compositions from the words of the interviewees'. She points out that this form of method 'create(s) a third voice that is neither the interviewee's nor the researcher's but is a combination of both… (which) disintegrates any notion of separation of observer and observed. These categories are conflated in an interpretive space' (p.215).

By arranging poetic transcriptions in this chapter, each of the 60-90 minutes worth of participants' interview transcripts could be condensed into one-two pages of 'accessible' text. In the process of condensing the transcripts, decisions were made about what to include and how to craft the lines of verse. Notably, poetic transcripts are different from 'poetic methods'[22], as the latter (in the opinion of some), requires particular training in poetry as an art form (Cahnmann, 2003). Cahnmann (2003: 30) contends that, 'poetry is a risky business. If poetry is to have a greater impact on research, those engaged in poetic practices need to share our processes and products with the entire research community, and the terms of its use must be clearly defined'. Thus, there were three boundaries I formulated to construct what I have called poetic vignettes, drawing closely on Glesne's (1997) notion of poetic transcripts. The first crafting boundary was that the words of each of the vignettes had to be those of the participants and not my own. The second crafting boundary was that the words of the vignettes could be collected from anywhere in the interview transcript, however, in doing so, these needed to maintain the integrity of meaning and phrasing from the original transcript as well as the speaking rhythm. As part of this crafting process, attention was paid to the written logic, technique and aesthetics of each poetic vignette, keeping in mind meaning generated by the participants (for example see Cahnmann, 2003: 31-34). Three of the vignettes in this chapter are also accompanied with a biographical narrative (informed by discourse analysis), which, by repetition, makes clear the resemblance between the poetic vignettes and the original text. Sparkes (1993) also recommends that in order to develop crafting techniques, as a researcher, one should practice writing poetic representations. Indeed, the use of poetic representations initially served me as a draft analytical measure to theme the different participants' subject positions and thinking through the core statements in each interview

22 The term 'poetic methods' is used in this instance specifically in relation to the poetry art form. Earlier in this section 'poetic methods' was used as a collective term to encompass 'representations', 'transcripts', 'ethnographic' and 'found poetry'.

for the biographical narratives. However, these individual pieces then were thought to be worthy of inclusion in this analysis chapter. The third and last crafting boundary was that the poetic vignettes needed to be organised in stanzas that followed the following themes consecutively to tell a story: participants' meanings of health and the body; biopedagogical sites informing the participants beliefs and values (e.g. media or family); and lastly their imaginings about the project of teaching children about health. Fortunately, these themes generally mirrored the interview structure, and thus, in turn, flowed easily into the form of the poetic vignettes. In this chapter and as part of the appendices, I include six poetic vignettes of different PPGT participants to augment the three biographical narratives.

6.4 Findings: the biographical narratives

6.4.1 Working with the interview texts

Central to the interview process (and analysis) were the participant – researcher relations and how this influenced the possibilities for speaking about the topic and questions at hand. To understand this further, I drew on Kristeva (1985: 217) who contends that 'every text is from the outset is under the jurisdiction of other discourses which impose a universe on it'. Tamboukou (2011), citing Kristeva's work on 'intertextual analytics' argues that a text is constituted in relation to the receiver, that is, myself, affiliated as a tutor/ researcher at one of the universities, more generally as a young white 'middle class' woman. In this case, as the interviewer I become what Tamboukou refers to as the 'receiver' of responses. The participants' subjectivities, then, were constituted or assembled in the interview space in relation to me, a young female researcher. Given the interviews were about health, with some reference to weight, it is important to point out the embodied intersubjectivity of the participants and myself. Because I am not 'overweight' by discursive or scientific definition, this may have contributed to how I was constituted as 'healthy' by participants. There were no instances of my body or 'average' weight explicitly drawn into attention, rather, if anything, it is more likely that my position as a young 'researcher' and staff member in H-PE influenced the interview context. I was sometimes positioned as knowing about the topic of 'health'. This was evident through comments where the participants directly sought my confirmation of their responses. For example: 'do you know what the statistic is on that'; or 'do you know what I'm talking about, or am I just talking crazy stuff?'. One participant, Marnie, arrived to the interview eating a packet of plain chips and commented that she 'shouldn't

be eating them' (in the context of coming to an interview in relation to 'health'). In this sense each of the participant's subjectivities were constituted within the multiple relations that make up the interview space, including foremost, myself as the 'receiver'.

The interview question outline was structured in a deliberate attempt to leave questions about overweight and obesity towards the end. While the participant information sheet (see appendix 6) did state that part of the purpose of the research was 'to investigate the cultural and institutional messages associated with health, the body and obesity discourse that are available to pre-service primary school teachers' it is not clear whether this was read by participants, and with what effects on their choice of language. During the interview there was not much that I 'gave away', other than the basic notion that the interview was about PPGTs' 'meanings of health'. This was in an attempt to ask more general questions about health and elicit responses that were not preconditioned to mention weight, overweight and obesity. Of course, for a number of the participants this topic arose without prompting, and this is an important part of the analysis.

As gestured toward earlier, three texts were purposively sampled from the larger set of interviews for the ways they touched upon the discursive truths of other texts across the data set (and the grid of intelligibility) – the 'intra-relations' (Barad, 2007). Thus each participant described in the three biographical narratives represents one of three clusters of discourse positions in relation to health and the body; agreement, disagreement and negotiation. An effort was also made to choose a range of participants from different universities as well as genders. The three narratives chosen include: (i) Caitlin (B.Ed, Cavendish), coded at an 'agreement' position; (ii) Kai (GDE Moore), who was coded at 'disagreement'; and (iii) Jacob (B.Ed Cavendish), coded at 'negotiation'. In addition to these three biographical narratives, three other participants' poetic vignettes are incorporated (either in the analysis or appendix where stated) to augment the descriptions of Caitlin, Kai and Jacob's subjectivities. These additional participants include: Savannah (B.Ed Moore University), coded at 'agreement'; Veronica (B.Ed Cavendish University), coded at 'negotiation'; and Drew (MT, Cavendish), coded at 'disagreement'.

The ways that each of the participants came to know and inhabit a particular position of the relationship between health and weight (agreement, disagreement or negotiation) will

be discussed in this analysis in relation to their lived histories. While nearly all of the 23 interview participants' texts can be traced to one of the three subject positions, not one interview narrative, as a whole, fits precisely to one discourse position, although some came close. This lack of 'objectivity' is considered to be a strength of the analysis because it indicates a deeper layer of understanding to the self. Following Butler (1993), a lack of coherence in subject positions is expected, given there is no singular matrix of power relations and that discourse makes available multiple, shifting and competing forms of subjectivity. These complex relationships will now be explored through the narrative texts of Caitlin, Kai and Jacob. Each comprised of their poetic vignette, a biographical narrative and an additional vignette of another participant to exemplify the interrelations of self-formation and varied manifestations of discourse positions.

6.4.2 A discourse position of 'agreement'

Caitlin

At the time of the interview, Caitlin was a 33-year old 'mature age' student who had just completed her third year of a four-year Bachelor of Education degree at Cavendish University. Her background prior to studying Education was in the 'corporate world' as a telecommunications project coordinator; a position she described as 'pretty lucrative', yet she commented that she 'hated it' and instead 'wanted to make the world a better place'. She saw teaching as more suitable than her previous occupations. Teaching was also something that many of her friends and family were doing. She commented, 'I've had many years of the corporate life and I didn't enjoy it, it was a lot of stress and I don't think that was suitable for me'.

At the time of Caitlin's interview she had completed all of the compulsory HPE coursework subjects at Cavendish University. She was in the middle of a four week Professional Experience teaching placement and was assigned to a Year 3/4 class. This was a busy and demanding time; she referred to her supervising teacher as 'full on' with her expectations of what Caitlin should achieve whilst on PEx. This was not a dissimilar story to many of the other PPGTs' descriptions of PEx; juggling their new role as a student teacher, and often, their own work and study commitments outside of school.

Caitlin's interview was different from the others in the data set (other than Drew) because it took place over the phone. The interview was prearranged via email after Caitlin contacted me once she had heard about the study via the online survey. Caitlin

was not willing to travel to campus during PEx, but was willing to participate in a phone interview. Despite taking place over the phone, the interview went for an hour and forty minutes and followed the same semi-structured format as the other interviews. It was recorded with an ipod via the telephone on speakerphone which Caitlin consented to. Neither Caitlin nor I could see each other's facial expressions or body language in response to the conversation at play. What perhaps was different in the case of her interview was that the conversational nature of the interview was established through tone of voice and audible expressions. As part of this, our physical identities remained anonymous. Caitlin was also in the comfort of her own home which may have contributed to what she said and how she spoke about her experiences.

Caitlin: poetic vignette one

The corporate world is pretty lucrative.
I was a telecommunications officer
I hated it - it was a lot of stress.
I wanted to make the world a better place -
Thought teaching is for me.
We'll see.

When I feel healthy it means I'm exercising,
I don't have excess weight.
I'm fitting into my skinny jeans,
being careful with the input and the output basically.

There are people that are healthier than I am,
Like they have a personal trainer,
But those who binge drink and have unhealthy behaviours…
Oh my god, they'll have the whole pizza!
I can see I'm far better off than them in health -
I'll just have one or two slices.

The Biggest Loser;
I like the tips for eating healthier.
There was also a man on TV.
He needed to lose 20 K.Gs
It was really simple just gentle treadmill;
I was like, I could do that!

My Dad's 114KGs. It just scares me the way he's going.
Even though he exercises everyday, he doesn't eat properly.
If only he just incorporated a few healthier options.
I listen to my mum quite a bit -
She's fit and knows lots of things about health.
If she knows something that I don't, I'll take it on.
My grandma, she's a Pilates fan,
So she tells me exercises to do as well.

I've got a friend. She's been on Weight Watchers,
just hit her target rate of 60kg.

She told me they suggest having a food diary.
I do trust that to be correct.

Geeze you're spoilt for choice when you drive down those roads
- in that area
Massive amounts of KFC and Maccas!
Whatever else is feral?
I wouldn't know.

I'm interested in childhood obesity -
There were kids heavier than I am at that school.
Not at the other school though
- that's in a better area.
It scared me to think that's how they roll.
I think a lot of it is ignorance,
maybe mum or dad aren't educated.
I don't think it is because of the money;
McDonald's isn't cheap…
If you were having sushi it would be cheaper.

So I made healthy pizzas with them.
We talked about healthy toppings.
What's a healthy pizza,
What's not a healthy pizza.

I would like to see children reading more, rather than playing Wii.
Parents should enforce a little extra sleep:
If you were in bed at a decent hour last night
- you probably wouldn't be falling asleep.

Like most of the other participants, in her initial response to the first formal interview question: 'what does health mean to you?' Caitlin emphasised the physical aspects of health. She provided a lengthy description without hesitation of her own beliefs about the body including weight 'management' and maximising 'energy in and energy out'. Despite her listing of the 'social', 'mental' and 'spiritual' elements of health that followed in her response, these hardly featured any further throughout the interview and were in much less detail than the 'physical' element of health:

> Well when I feel healthy it means I'm exercising, I don't have excess weight, so *I'm fitting into my skinny jeans*. I'm eating lots of fruit and veggies, just being careful with the *input* and the *output* basically um, what I'm *putting in* and what *I'm doing like what exercise* I'm doing and how I'm feeling emotionally, spiritually, mentally. And, if any one of those things is failing, the whole lot fails and then *I start eating too much and I don't go to yoga* and the whole lot collapses down. So yeah, *I think it's a balance* and um being active and fit and healthy on the inside.
>
> *(Caitlin| B.Ed | Cavendish | Main interview, 2009)*

The majority of Caitlin's dialogue in response to the question about her meanings of health centered around her practices of the self to try and stay 'healthy'; which could be

read as not putting on weight. For example, not only did Caitlin mention the importance of exercise as part of the physical aspects of health, but she also emphasised the importance of not having 'excess weight'. This was constituted through talk such as: '[I watch] what I'm putting in and what I'm doing like exercise' and other comments throughout the interview such as 'I'm exercising but not as much as I would like so, probably those things, stress, diet and exercise - *the things I preach to other people*'; 'I walk along the beach maybe 4 or 5 times a week'; or 'the only reason *I would put on extra weight is if I'm drinking too much*, and sometimes I cut drinking out just for that… the *easiest way to lose weight would be just to not have drinks*'; or 'a lot of my friends do lots of regular exercise but that's only because most of them love having drinks and if they want *to have drinks they've got to exercise for it*… beer's fattening'. Each of these described practices are consistent with the dominant cultural and social beliefs about ways to shape the ideal 'aesthetic' body via maintaining a balance of energy in/ energy out, or imagining practices to address an imbalance (usually of energy in) by increasing exercise. Caitlin spoke at length about what she saw as the 'physical' aspect of health throughout the interview, particularly ways to manage energy in and energy out. She was able to draw on a large network of knowledge when reading her own and other's health practices and bodies as to the ways individuals' managed their exercise and nutrition.

If we are to consider Caitlin's interview in light of the discourse positions in relation to health and the body mapped in the previous chapter, she would be situated at 'agreement'. This is because throughout the interview Caitlin talked about the importance of the relationship between health and weight in an individualistic way. She did this through both references to her own and others' practices in relation to energy in and out. For example: '*They're* (an 'unhealthy' person) eating the wrong foods or if you weigh 100kg and you puff every time you walk up a set of stairs'; or 'I'll have one or two slices of pizza *they'll* have the whole pizza and it's just like oh my god… these are the same girlfriends that *are overweight cause they eat the whole pizza* rather than just one slice'. In these instances, a direct relationship between the perceived 'excess' consumption of particular 'unhealthy' food and overweight is made. Caitlin spoke with considerable certainty around the relationship between weight and health, in recounts of both underweight and overweight. At one point in the interview Caitlin described a time when she was 'really skinny' and that this was 'unhealthy' because 'when I was about 18… that was just purely from moving out of home and living off 2-minute noodles and not really eating for

weeks'. This was the only instance where Caitlin describes underweight by referring to the lack of 'energy in'. For the majority of the interview, however, her descriptions of 'unhealthy' practices and bodies were in relation to excess weight and unhealthy eating or a lack of exercise. Because of this, a healthy person for Caitlin was largely characterized throughout the interview as one who exercises and eats foods that are high in vitamins and low in calories, especially food low in 'fat'. Health was a matter of hyper individualism; squarely a result of the individual's responsibility.

Caitlin was willing to share her knowledge and interest in learning about 'health' and the body. She was not reluctant to talk about different ways to 'achieve' 'health'. This demonstrates her taken for granted assumptions about the normalcy with which one can speak about notions of weight and health centered on energy in and energy out. The consistency of this unquestioning 'disposition' throughout the interview was apparent in the way she was eager to project herself as a 'healthy' person and make connections between her knowledge and those around her. She explains earlier on in the interview that she mostly feels healthy and rarely 'unhealthy'. In doing so, she positions herself as a 'healthy' person, particularly in relation to those who are not healthy. In contrast, Caitlin described those in the community such as 'smokers' and those who 'weigh 114kg' (or at least weigh more than she does), as 'unhealthy'. At one point she describes, 'I see different behavior from different people in the community and *I know that I'm not that*, so I'm always feeling relatively healthy I think'. Caitlin positions those 'unhealthy' people as the 'other' to her self, and goes to great lengths to emphasise abject examples of these extremes:

> Int: and so do you think other people think about health in the same way, you just mentioned other people in the community, how do you think people think about it in the same way you do?
>
> well I live in [named suburb] and I see a lot of binge drinking every weekend so I would think there are definitely people who are in my area who are more healthy than I am, like have a personal trainer couple of times of the week etc. But I also see a bit of a cesspool (sic) of people congregating and just binge drinking and having unhealthy behavior… My boss, he works too much and he's quite a negative person and his skin has gone all toxic and I look at him and he is really unhealthy. So there is definitely people around me that I can see that I'm far better than them in health (laughs).
>
> *(Main interview, 2009)*

In this excerpt, Caitlin's discourse position is sympathetic to people who have a 'personal trainer a couple of times a week' in contrast to those who 'binge drink'. She manages a

dualistic way of speaking about the ideal: the personal trainer, and the abject: the binge drinker, or 'negative boss'. Abjection, as Young writes, is a feeling and a process of the subject 'loathing as the means of restoring the boarder separating self and other' (Young, 1990: 145). At multiple points throughout the interview narrative, Caitlin expresses abhorrence for those who are at extremes of being unhealthy. Behaviours such as eating 'the whole pizza', or drinking are deemed to be immoral. Because of the ways Caitlin positions certain practices, a binary way of thinking about un/healthy is maintained. The descriptions of the other; those who are 'unhealthy', point towards the consistency with which Caitlin strives to maintain a 'healthy' personhood or identity. There is little in the contemporary healthscape of which she is enmeshed to unfold (challenge or displace) these beliefs.

Another example of how Caitlin maintains her desired 'healthy' identity is through her stated disgust for fast food places. She does this at one point by stating that she is someone who does not 'even' know about fast food. This occurs when she is describing the abundance of food outlets in a particular suburb with 'more overweight kids' compared to another suburb where there are no 'overweight' kids. What I would like to draw attention to in the following quote is again how Caitlin positions herself as 'in control' of her health by implying she is not one to eat 'unhealthy' fast food. She mobilises this healthy subjectivity by stating she is not familiar with what 'fast food' is available. The sites of fast food she describes, themselves, provide an object to separate herself from:

> you'd drive down some roads and there's KFC and Maccas and Pizza Hut and like Eagle Boys Pizza all in one little shopping complex and you're like geez got spoilt for choice now and my best option would be like Subway subs. They're everywhere there is just massive amounts of KFC and Maccas and what else is feral, what else is there, I'm so ignorant to those types of places that I don't even know
>
> *(Main interview, 2009)*

The social examples of health that Caitlin wove into her own stories and experiences of health and the body were also centered on the notion of energy in and energy out. One section of the interview transcript that demonstrates her 'agreement' position quite explicitly was when she stated: weight loss is 'most definitely important' after she recounts a TV program where there was a story of a man who had to lose 20 kilograms. Reflecting on the program, she described the practices involved in the man's achievement of weight loss in relation to her own life situation and practices. In

particular, Caitlin constitutes herself in relation to a narrative that it is possible for anyone, including herself, to lose weight, stating, 'I could do that':

> … there was a man who needed to loose twenty kilograms and they said "over the next 20 weeks you're going to lose a K G (sic) a week" and I thought that sounds gentle, where he can still stay motivated cause you know if you loose four K G in a month you'll go yeah next month I'll loose another four K Gs and I think that that's um, I know they were exercising while they were talking about the plan, the weight loss plan and it was just really gentle treadmill and then it was just simple stretches with like a medicine ball, and I was like I could do that, I've got a rubber band to stretch my back and simple little things like that. I just think weight loss needs to be sensible, that to just loose it is not sensible that's just motivating all about how much you can loose as quickly as possible and that's just not right.
>
> Int: yep, but at the same time it seems like you're saying weight loss is also important if you do it in a slow way not so much in a radical way?
>
> yes most definitely, well it doesn't have to be that slow (laughs).
>
> *(Main interview, 2009)*

In this reflection, Caitlin implies that all one needs to lose weight is the commitment and motivation. Control over one's life is a principal tenet of her sense of self and being healthy. She describes the self-work of vigilance to exercise and food she is capable of and she assumes this to be accessible to others. This position fits with other investments in her appearance and sense of self. Caitlin's commitment to surveillance of her energy in and energy out can be understood through technologies of the self, that is her practices resemble fragments of self formation in the name of 'happiness'. For instance 'it was just simple stretches with like a medicine ball… I've got a rubber band to stretch my back'. For Caitlin, her beliefs are aligned with an 'agreement' position, which includes making 'wise' choices in moderation. All of this seems common in relation to discourses of healthism because her body practices of exercise and food consumption support her ongoing project of body shaping and balancing energy. This is strengthened through her emphasis on weight management for health coupled with an aesthetic agenda of 'fitting into my skinny jeans'. The desire for the ideal aesthetic is deeply felt. Both the aesthetic and the management of health risks or longevity are powerful cultural assumptions that fuel her thoughts about what it means to be healthy. Here 'the fold' of health imperatives envelope Caitlin's thoughts as she reconstitutes and re-folds herself through activating a singular conscience of 'health' which appears to hinge upon a social regime of self-discipline of the body and hyper individualism. One's lifestyle becomes the main means of judgement or indicator of health and wellbeing.

Caitlin's pre-existing set of ideals also carry through into her talk about her dad's body and his health practices. However in the case of her father, she draws largely on risk discourses and the notion of 'health as longevity' to negotiate the importance of his need to lose weight, rather than on aesthetic aspects as she did with her own self-practices. In the following quote, via describing her Dad's current exercise and eating practices, which she is able to recount at length, Caitlin dwells on the need for him to lose weight:

> … my dad's 114 Kg's and it just scares me because I know, even though he exercises everyday, I know that's not healthy I mean to think of your old man at 114KG … he walks and he would stretch and he does sit-ups and push-ups. That sounds like a lot, and it's not, like I do it with him as well. Like it's only a … 5K walk. Like he goes for a walk for an hour… I think it's most days, like he says it's everyday, but it's all the other things that he does … he doesn't eat properly and he doesn't eat enough fish and things like that, you can't just say listen… stop drinking and maybe cut out eating white bread and only just incorporate a few healthier options rather than the way he's going.
>
> *(Main interview, 2009)*

Caitlin's investment in knowing and influencing her dad's practices are consistent with her methods of understanding health and weight management in her own life. Although Caitlin is concerned about her father's weight, she is less interested or concerned about the social phenomenon of obesity. Rather, it seemed that Caitlin's interests were personal to her own body and health practices of the self in relation to her family and friends:

> Well I talk about my dad's weight to him all the time and I talk about my dad's weight to my partner and my grandma all the time, so um I'm interested in obesity but not so much, well yeah I'm interested in childhood obesity, but yeah I would probably say it's not a topic of conversation that I have with my friends mostly about childhood obesity and I just probably listen to things that I hear on the news or read in the newspaper um about active lifestyle
>
> *(Main interview, 2009)*

In this quote, there was less interest on Caitlin's behalf in relation to others, particularly children, or 'childhood obesity', in comparison to her own interests in health and the body.

Sources of knowledge to make meaning about health and the body

Caitlin was particularly receptive to 'health speak' from just about what seemed to be any available source. In particular, however, she was responsive to that in accord with her own position; ways to maximise the efficiency of energy in and out in everyday life practices. At one point she describes *The Biggest Loser* as a place where she gets 'tips and tricks':

> what I definitely like is the tips and tricks for eating healthier (from The Biggest Loser) that I don't think about or that I think I am too busy for… I've got a friend from uni and she's just been on Weight Watchers and she's just hit her target rate of 60kg and she told me that they suggest having a food diary, little things like that, like you can see that she's successful with that. I do trust that to be correct…
>
> *(Main interview, 2009)*

Surprisingly, Caitlin talked quite comfortably about the technologies of weight loss that those around her are involved in. She 'trusts' the routine of having a food diary and different tips and tricks the individual can take into their own hands.

Caitlin's recount of the sources of where she gets most of her health information provides an in-depth explanation of the ways she comes to know about health and how she negotiates her different lived experiences. Particularly apparent was how practices for working on her own body were largely implicated with an aesthetic imperative. She draws on her partner, her mum (whom she describes as 'quite fit'), her grandma (who has 'years of experience raising kids'), and friends that work in health related industries such as personal training or for the health brand company *Blackmores* as legitimate sources of knowledge in her project of health:

> Um well my mum's quite fit and she knows lots of things and I listen to my mum quite a bit. She also has more time and energy on her hands so if shes wants to find out about something or she hears something that I don't, I take that on. My grandma has a hundred different wives tales and I think that she's raised 7 children so she's got to know a few things even though there's probably a few old fashioned ideas, I definitely take more things like that. She has, I probably go to my grandma mostly with regards to diet and she tells me, she's a massive Pilates fan so she tells me exercises as well and I have an amazing set of friends who have all sorts of different elements of their life and their careers. I have a friend that works at Blackmore's and she's got different degrees in health and science and she's really interesting, like my boyfriend's tattoo's not healing properly so she told me to get zink. That's something I wouldn't know, I actually don't care too much about and I don't want him to be scarred forever so that's why I'm like right Zink, Zink. And just different people talking about their, what's in their diet, or what's not in their diet and how they've, like my girlfriend recently lost 5kg in a month and even though she knows that kind of thing is really bad, she looks unreal (laughs) So, I was a bit interested in how she did that. I personally wouldn't. That's bad, I like carbs. There's nothing wrong with carbs
>
> Int: yep so that's how she did it, taking the carbs out, is that what you mean or?
>
> yeah or processed, she just makes salad from and she (pause), I think that's unhealthy and she thinks that's unhealthy as well um (pause) and that's not appropriate for me in any stretch of the imagination when I'm studying for teaching, I don't think, I think that's just dead set crazy, just to eat salads. And I can't really function properly if I don't have a decent breakfast. And with saying decent, I mean either Weet-bix or porridge every day, like one day this week I had

> toast and I was like I can't do this, I was falling over with two slices of toast. Like it should be enough for other people but I had to get yogurt into me at like 9 o'clock and that's not right and if I don't have a piece of fruit every day I can tell like, but then I was talking to a colleague and she was saying I shouldn't be eating too much fruit because the sugar in fruit can rot your teeth so It's just all about balance and I suppose and just listening to other peoples good advice especially if they know something. I've got a friend who's training to be a personal trainer, and he's got lots of ideas about different, he was telling me about 3 different types of push-ups. I never even think about 3 different types of push-ups, but he was all over it.
>
> *(Main interview, 2009)*

Caitlin draws on all of these sub-stories to negotiate what is considered 'trustworthy' health knowledge. These individuals are valued for the role they play in resourcing her aspirations and thoughts to both become and maintain her 'healthy' and 'aesthetic' identity. Her mum, friends, colleagues and *The Biggest Loser* provide her with truths about maintaining a healthy weight, not rotting your teeth, exercise programs, and not losing weight too fast. She regards those who exercise and take care of their health as worthwhile sources of knowledge. They speak from 'trialed and tested' experience. The stories she tells of her friends and family's experiences align with her project of health as the people she trusts share her desires. There is no space in this context for folds of alternative thoughts about 'health'.

However, Caitlin does not take on board everything that points in the direction of an 'ideal' aesthetic body, she is most skeptical of her friend who lost '5KGs' quickly. While she says that her friend 'looks unreal', Caitlin is quick to judge the way she has achieved this new weight, as 'immature', i.e. 'by not eating carbs'. When I asked Caitlin more about this, she went on to state that just eating salads, (implying a lack of 'carbs'), is unhealthy, and then paused before saying 'that's not appropriate for me in any stretch of the imagination when I'm studying for teaching'. The pause and hesitation in her speech, to me, was understood as a moment where Caitlin shifted in her narration of the self. It seemed to be a moment amongst the fairly open and flowing dialogue about weight management practices, acutely in relation to herself and others, where Caitlin stepped back from the conversation and considered her role as a 'teacher' and that she was talking to me, 'the researcher receiver'. Amongst all of her personal stated ideas about the self-project of health and weight, she may have considered it inappropriate to publicise the idea of 'cutting out carbs', given her role as a childhood educator. This was perhaps part of protecting her subjectivity as a 'mature' teacher, especially in the context of a research interview. However, I would argue that there is more going on here. Her pause

and then critique of her friend's fast weight loss could also be interpreted as part of her self-constitution as a sensible, informed citizen who makes rationale and informed choices. In this sense, Caitlin shifts her narration to constitute a self who is not preoccupied with the project of the aesthetic to the point she would engage in 'unsafe' practices. Nevertheless her weight ideals remain.

On teacher education

Caitlin, unlike the other participants, was able to recount with enthusiasm her teacher education coursework in PDHPE. She described it as useful and enjoyable. 'I've really enjoyed it how it's been set out…' When Caitlin was asked 'where do you think you get most of your health knowledge from', a question that was not directed to her teacher education experiences, she replied: 'I've been doing PE at uni, so I get a lot of information from my key lecture groups and my tute groups'. When I asked, 'what are some of the key things you've learnt from the course around health?' Caitlin listed a lengthy set of topics, beginning with the Health Promoting School (HPS) and concluding with skills listed in the syllabus:

> well we spent a lot of time talking about healthy promoting schools and my course I think is absolutely brilliant in how they set out each week they would look at a different topic and we mostly bring the syllabus every week so we use the syllabus in the class work so the things that's I've learned like just this last semester, we did drinking, drugs, grief and loss. We talked about um… sexual education, oh, um, um, I was looking at doing an assignment on diversity so a little bit of multiculturalism. Yeah there's been, tonnes, heaps. Each week has been a different thing and I've really enjoyed it how it's been set out. It's been looking at active lifestyle, hold on I will get there…the interpersonal relationships with the sex ed. with safe living, we did a bit of, we did half a semester on dance and we did another half a semester on gymnastics. Because that's a big area for development, we had active lifestyle, personal choices, we'd have problem solving, communicating all of those ones. We looked at the syllabus
>
> *(Main interview, 2009)*

Caitlin's description of her teacher education coursework related to health, was quite lengthy in comparison to the other participants. Caitlin spoke with enthusiasm about learning 'new' things, whereas Kai for instance said, 'I don't think I learnt anything more than I already know from that course'. There were other participants, like Pip who also expressed a similar sentiment to Kai. In Pip's case, however she already had an undergraduate degree in HPE. Other participants spoke about coursework experiences, but did so with minimal detail. This was most common for the Moore University B.Ed participants because they found it difficult to remember 'the content' of a subject they

had completed a year before the interview. Caitlin, however, who had completed the H-PE subject in the semester before the interview, coupled with her already expressed interest in the topic of health and the body was able to talk easily about H-PE coursework, and with interest. Following this interest I asked Caitlin in the interview, 'in terms of personal messages… is there anything that stood out that you hadn't thought of before (the course)':

> The long term and short term effects of smoking and drinking and we broke up into four groups, like one was long term, one was short term and one sort of like, and two were for smoking and two were for drinking…and we looked at, you know how there's seven diseases on the National Health Plan like one's, asthma, one's accidents, strokes, heart attacks, we did all of those and we worked out different mental health issues and we worked out how those different things can effect, or how they can lead to breathing or how they can effect different parts of your body. And I think that would probably be the scariest, cause I was thinking straight away, well is my blood pumping properly, is my veins going to clot. It was, I looked at my self-thinking, oh I wonder if I went and did all those tests how my brain would work out. Yeah I found my tutors really knowledgeable and I think that I retained so much information, because I really enjoyed that course… just an active lifestyle is important to me and that enthusiasm is going to go onto them (students) and they're going to go yeah, yeah I love that game that we played with the cricket stumps today.
>
> *(Main interview, 2009)*

Caitlin's experiences of health knowledge in teacher education folded into her own preoccupations and desires associated with maintaining a 'healthy' body. The content that she draws on from her experiences, suggests that she was provided with lots of health information from a health promotion and prevention perspective (risk discourses). It is no surprise, then, that she was able to grasp the content with interest, as it seems to have easily melded with her own existing ideas, folds, and investments about health.

Ideas about the 'healthy' child and teaching about health

Almost all of Caitlin's talk in relation to health was connected with herself and her personal experiences with family and friends. When she was asked: 'what do you think are the major issues facing young people in schools at the moment', Caitlin found ways to bring up obesity, but then went on to isolate this issue to specific geographical groups of children which is further explained in terms of unhealthy eating habits (fast food) promoted by family practices:

> the first thing I want to say is probably obesity, but I also don't want to say that because it's not, it's just a certain section of, it just sounds bad but when I was working in a school out [in the area of suburb X] at a school where a lot of the kids are incredibly overweight. They also come from a lot of disadvantaged

> families so they're, the health is not at home and McDonald's for breakfast seems to be fine and McDonald's for lunch on the same day is also fine.

Disadvantaged areas are then described in opposition to 'healthier' geographical areas 'by the beach'. Explicit contrasts are made between these two areas and each of the schools she has taught at. These are made in terms of individual practices and geography, rather than factors such as income or opportunity:

> Whereas the school I'm at now it's by the beach, I don't know if that's got anything to do with it but I've just been talking to kids and a lot of them are at the beach every weekend and a lot of them are riding skate boards and riding scooters and riding bikes all the time and I find that there's again a big difference in [area around suburb X] versus the [area where she lives] and I can see it both and I think that I am fair to comment on it because I've worked in both areas and I'm not just in one area the whole time and think the worst about the other one. At the school that I'm at now I haven't come across one child that is obese.
>
> *(Main interview, 2009)*

Caitlin's explanation for the assumed lack of physical activity and consequent visible 'obesity' of children was the unhealthy practices of the school, canteen and parents in 'that area':

> When I was at [Suburb X] there was kids heavier than I am and that scared me to think that that's how they roll and there was a canteen like there was a breakfast program at that school and a lunch program and I think a lot of it has to do with funding like they get the cheapest, cheapest sausage rolls for the kids and I don't even, I hate to think about what goes into those saving style sausage rolls and I think it's kind of important to maybe instead of having that type of thing, start, like one time I was there I made my own pizzas, like we spent the whole time talking about pizzas. What's a healthy pizza, what's not a healthy pizza. How much meat can you put in pizza. We were talking Homer Simpson and relating it to them, and then we had an art project and we made mushrooms and we put mushrooms on the pizza and we talked about healthy toppings for pizzas and then we made our own pizza's and I was like good, I enjoyed lunch (laughs).
>
> *(Main interview, 2009)*

Caitlin's response to the children's unhealthy environment was to situate herself as someone who could 'save' these children by educating them about healthy foods and encouraging healthy food practices. Caitlin sees it as her responsibility to teach about nutrition, in this case 'healthy pizzas', particularly in an area where she assumes students do not have access or 'education' to healthy eating. She sees this as a more moral project to her role as a teacher in the school, in contrast to the canteen selling sausage rolls, or foods she believes are degrading to their health, and linked with 'obesity'.

Caitlin's sub-story of her PEx experiences in different suburbs and the types of children and their un/healthy practices is entangled in the types of 'categorical suspicions' that Rich (2010, 2011b) also writes about in her work on surveillant assemblages and public pedagogies of obesity. In the context of emotionally loaded language of the obesity discourse, Rich (2010: 811) contends (with the theory of others), that "'affective circulation" (Walkerdine, 2009) of concerns about parental influence on childhood obesity passes through working class parents in ways which reproduce the sort of "categorical suspicions" (Marx, 1988, quoted in Lyon 2002, 3) which middle-class parents may not experience'. Rich also goes on to assert that the 'assemblage functions through an ephemeral interdependence in which governmental policies connect with (and rely upon) the social anxieties about particular target groups, e.g., the broader concerns about working class failure to care for one's child, who may consequently be at risk of ill health'. Caitlin talks about particular 'target groups' of children and the 'ignorance' or 'lack of education' on the parents' behalf with their food choices. Caitlin is buying into what Rich (2010) refers to as social anxieties about particular 'low SES' target groups and their lack of health. Caitlin then uses her own framework and personal narratives of food to describe their ignorance. While she acknowledges a lack of time and money of parents as a factor, she negates this for their lack of 'common sense', choices of cheaper alternatives, such as those she herself subscribes to, that is, eating vegetables, or sushi:

> I don't think that having McDonald's is incredibly cheap. I think if you were to have sushi that would be cheaper… I think a lot of the factor would be ignorance and not just the kids, they're a product of their own environment so maybe mum and dad just aren't that educated or just don't have that knowledge or they might be time poor, but I definitely don't think it's because of the fact of money. In actual fact I think it's more expensive to eat poorly. But I think maybe ignorance because when I was growing up we always had vegetables and we always had fruit and you know if we had muesli bars it probably cause it was the last week of school you know cordial, that was at a birthday party. Also I just think the food has changed dramatically like, um there's a lot more things that are purchased for convenience like I don't know noodles in a cup for example and that's full of flavorings and MSG and all sorts of horrible things. Which are really tasty, don't get me wrong, they're super fun (laughs).
>
> *(Main interview, 2009)*

Caitlin attributes eating poorly to the individual and their lack of educational or moral 'disadvantage' and not to their social and economic resources. This points to some of the problems when personal beliefs are the main resource drawn on to make sense of others.

Caitlin's imagination of children and young people is not an uncommon one; tied to the notion that children are 'at risk' of eating 'convenience' foods or not being able to do physical activity and having too much homework: 'I think kids are restricted to come home and start their homework rather than going out and doing things with their friends'. There are contradictions in the multiple truths she draws on about children as she recites commonly proclaimed 'problems' of childhood 'today'. Caitlin constitutes a particular notion of childhood; that they are victims of the risks of 'modern life' such as having parents who might be 'time poor' and the accessibility of 'convenience' foods full of 'horrible things' - general over-consumption. From the following sub-story, this list can be extended to include playing *Wii*, and a lack of sleep.

> Um yeah, I would probably say that from my own experience that I would like children reading a bit more rather than playing Wii and I would like to see parents kind of enforce a little bit more extra sleep. I see kids that, you know are still yawning at 10 o'clock in the morning and I'm like come on wake up. If you were in bed at a decent hour last night you probably wouldn't be like this. I've been in a classroom where a child has fallen asleep at their desk and that worries me you know that's really bad
>
> *(Main interview, 2009)*

Caitlin also talks about the 'social issues' and how children do not 'relate to each other like they should'. She expresses concern for how much control teachers have over this, suggesting that they should be able to step in: 'I wonder how much we have to control, how much teachers need to step in and say, you have to be fair to each other and you have to be nice to each other'. Caitlin's response is entangled in the belief that 'kids these days' are vastly different and on a downhill slide to bygone decades. In this context, the contemporary child is positioned as living a lifestyle that is increasingly uncertain and at risk and thus in need of saving (Burrows & Wright, 2004). In another sub-story Caitlin talks about children in terms of needing to perform at school and emphasises the importance of sleep and reading as part of this. We can read Caitlin's sub stories of children in relation to her expectations of their performance in school. There is a sense that children need to be managed more so that they perform better (not fall asleep, exercise regularly, and read, rather than play Wii) and ultimately, make the 'right' decisions in relation to exercise, food and lifestyle.

Caitlin in summary

For Caitlin, what is particularly noticeable is the importance of establishing a rhythm or consistency in one's life and ensuring it is followed despite and against the odds; namely,

being 'healthy' and slender. Her desire for managing her health and weight is tied to her sense of self-worth. Attending to her exercise and nutrition are central to her project of the self and consistent with the cultural inscriptions of the aesthetic imperative, which for Caitlin is a deeply felt project. Caitlin's discourse position on the relationship between health and weight, as well as what constitutes a 'normal' body, is very much connected to that described as 'agreement'. She appears to have deep-seated beliefs about the overweight body as an abject body; a body that 'should', 'can' and 'must' be avoided. She draws on a powerful set of medical and aesthetic discourses which intersect to form a congruent boundary to her sense of self and others. It is hard to imagine Caitlin moving from this discourse position as a teacher. This idea is strengthened the ways her beliefs were applied to her PEx reflections from teaching in schools, as well as her ideas about constituting the healthy child.

As a point of departure to what has been described in Caitlin's biographical account, another poetic vignette from another PPGT, Savannah, coded at agreement can be found at appendix 11. Savannah was a B.ED PPGT studying at Moore University. Her vignette offers a point of connection to the interrelations between discourses and foldings, or thoughts that occupy the subject position of 'agreement'. One of the outcomes of using poetic vignettes is that it decentralises the focus from the individual and presents the 'essence of the story' (Sparkes, et al., 2003). Savanah's poetic vignette offers insight into the ways statements touch other sub-stories, or in this case are particles of entanglement in an 'agreement' subject position similar to Caitlin. Overall, their subject positions and thoughts around health and the body (along with many of the other participants coded at agreement), draw on interrelated meanings - entangled in the *dispositif* of new health imperatives. This is most apparent when we contrast their language to the poetic vignettes and biographical narratives of others coded elsewhere, such as Kai.

6.4.3 A discourse position of 'disagreement'

Kai

Kai's in-depth interview was chosen as the source of the second participant description because her sense of self and lived experiences were considerably different to Caitlin's as well as most of the other participants. Kai was a student in the Graduate Diploma of Education (Primary) program at Moore University and at the time of the interview a temporary resident in Australia, visiting from Canada. She had completed an

undergraduate Arts degree majoring in women's studies and psychology, and described herself as having done, 'different types of work with kids (camps, voluntary 'readathons' and giving out presentations)'. Kai espoused a strong commitment to social justice and also had a history of competing in swimming and athletics throughout her schooling years. She was one of a large number of Canadian students who come to Moore University to complete a teaching degree (some of whom stay on to teach in Australia, others then return to Canada).

Kai: poetic vignette three

Yeah, well health is really complicated,
like, really complicated.
I take a really holistic view;
it's an overall state of wellness.

Yeah, well again socially constructed.
It depends on the measurements we use.
I was classified 'overweight',
so I knew since I was twelve BMI was a waste of time.
I know it's not quite what it's cracked up to be.

I mean obesity is a tricky issue.
sometimes I think it's probably unhealthy,
I don't think I would ever label a person as unhealthy.
They could be perfectly 'fit'
and then, they can have a mental illness.
You never know.
A lot of things are hidden that way;
certain habits are easy to label.

I have friends that are super sensitive
about their body weight.
I am really careful
in how I approach it.
I know kids can take it on board
Just from their friends.

I'm not terribly pleased with my health at the moment!
I am not eating properly,
I am not exercising enough,
I start gaining weight.
That really sux.

If I could just break the cycle.
Get in a groove,
on one healthy track.

I avoid pharmaceutical companies like a plague.
Sure every now and then an Advil or whatever
- if I have a wicked headache.
But neutraceuticals,

stuff in the natural environment,
i'll do that first before anything else.
I consider what I put in my body
That's for sure!

We just finished the PDHPE course -
I don't think I learnt anything
More than I already know.
I think it is important to give students opportunities
To learn about their bodies.
Be active,
Know what's healthy,
Not necessarily the values and attitudes:
More so the information.

Situating Kai in relation to health and body discourse positions

Unlike, Caitlin, who emphasized the importance of exercise, food and weight in relation to health, Kai was forthright in presenting her self as being 'socially aware' and 'critical' of messages about self-control, weight and its relationship to 'body image'. She constituted herself as someone who mediates popular notions of health through her knowledgeable self. In her initial response to the interview question, 'what does health mean to you?' she was quick to emphasise the complexity of health and define her beliefs as taking a 'really holistic view'. She also talked about health as an overall state of wellness, which includes 'everything'.

> Yeah well health is really complicated, I think it is really complicated, you can talk about mental, emotional, physical, spiritual there is so much there, I think that one question you could probably have a whole two hour interview on (laughs) um so yeah I guess my understanding of health is just to get a state of overall wellness so I take a really holistic view, at that which would come by through nutrition and physical wellbeing, like everything, like I said the emotional as well, yeah
>
> *(Kai| GDE | Moore University | Main interview, 2009)*

In this passage, we can see how Kai positions herself in quite different ways to Caitlin in her description of health. Kai's immediate dismissal of the concept of 'health' as straightforward is achieved by reiterating that it is 'really complicated' and that you could 'have a whole two hour interview on' it. Despite some overlap with Caitlin's meanings of health in relation to nutrition and the physical, Kai's meanings of health were tied to wellness. Kai also seemed quick to respond and confident in her responses. There was little space or pause in her speech, something that continued throughout the interview. This suggests that she had considerable resources to make often 'alternative' meanings about health and appeared to speak from an established (and possibly much rehearsed) opinion.

Rather than situating her position in accord with the dominant discourse of health like those coded at 'agreement', Kai questioned popular conceptions of the relationship between weight and health and distanced the uptake of them from her own position. For example, she talked about the 'mainstream' and 'general' views of health:

> I guess the mainstream definition of health is probably you know whether or not you are free from illness or disease… if you are physically and mentally well… but I mean I don't personally think that's the best definition, but I think that's the general view.
>
> *(Main interview, 2009)*

From early on in the interview Caitlin was keen to assert herself as a mature and aware individual; who drew on rational and theoretical knowledge to 'know' about health. Kai frequently made comments such as: 'the media I take with a grain of salt'; 'look, a lot at constructions of gender and the body'; 'BMI is just a waste of time'; 'yeah well again (obesity is) socially constructed'; and 'who's funding the research and where is it coming from'. She seemed to take pleasure in her 'critical' way of knowing and thinking; this was particularly apparent when she laughed in a rhetorical way after stating: 'I'm not sure if it [politics of health] comes into everyone else's mind ' and in so doing affirmed her interest of engaging in the 'politics of health'. Kai, however, acknowledged that she hasn't always thought about health in a 'critical' way like she does now. In response to the question 'do you think other people think about health in the same way as you?', Kai describes this change and differentiates her current beliefs from those of others:

> I would say, I used to say stuff like yeah sure, but now I'd say no, I've come from a very critical perspective in terms of just the critical theory and analysis and that kind of thing so I think that usually my understanding of the way of looking at things is so much more I don't in know in depth, a lot of the theory I take into consideration, so when I think of health I think of this really big complex picture where as some people might and others I think would probably look at is though health is just, oh you know, whether or not you are healthy in terms of your physical state and maybe mental but without probably looking at perhaps all the other factors and what does it mean to be healthy, and look at that definition and who gets to decide who is healthy and who doesn't, you know the politics of health and all of that stuff I'm not sure if it comes into everyone else's mind (laughs) when they think of health.
>
> *(Main interview, 2009)*

Another way Kai's narrative of health was different from Caitlin's was through her selection of topics and examples she used to explain her beliefs in relation to health. For example, throughout the interview Kai spoke of multiple sclerosis, mental illness, body image, indigenous and First Nations health, alternative therapies and medicines, Chinese medicines and women healers of historical European cultures. The variety of examples

she drew on to describe health related practices and beliefs left limited 'air play' for the notion of 'energy in and energy out' or the conflation of weight and health. Kai's interest in these other forms of practices was often in relation to the management of wellness, for both 'prevention' and 'cure'. Kai's interest in these methods was linked to her own practices of the self in order to stay healthy. While she drew on less dominant discursive truths and practices of health and the body than Caitlin, she was still consumed by the self-project of health. Perhaps it is not surprising that Kai constitutes herself as one who seeks out 'alternative' wellness knowledges, particularly in her project as a critical consuming self. Following Braidotti, who states, '[b]oth official and alternative medicine enforce the same kind of hyper-individualism' (1998: 428), Kai's project of health, while resistant to some truths, is still tied to 'alternative' health practices as a form of individualisation/healthism. This is apparent through her scepticism at the lucrative nature of health industries and pharmaceutical companies and her belief in 'alternative' medicine, experience and health wisdom. She contends: 'I avoid pharmaceuticals like a plague if I can help it, like yeah sure every now and then I'll have a wicked headache' and goes on to say that she would take 'neutraceuticals before pharmaceuticals'. Her beliefs extended to the uptake of 'alternative' health stories and their success in achieving wellness from those around her:

> just hearing stories and doing some readings about people who have done some amazing things with their health, turned it right around, having diseases, having diabetes or whatever and just by changing their diet and doing these alternative things like huge differences, so yeah that effects how I look at what I put in my body that's for sure.
>
> *(Main interview, 2009)*

Kai's belief in other forms of health knowledge rather than a 'Western biomedical model' is affirmed by her interest in managing health as a project of wellness and the things she can do to maintain her health. She contrasts a disease model of health to Chinese Medicine and then First Nations[23] knowledge: 'When you look at First Nations people there's *so* [emphasises 'so' very strongly] much knowledge out there about health… I would trust someone who has all this experience and knowledge and family history around how to use certain herbs and essences'. She then goes on to contrast this to the western model of health: 'I think it is really sad that we have lost that ('alternative' wellness remedies) in developed Western cultures, that it is just one, you go to the hospital and they give you a drug, and that's it.'

23 First Nations refers to the indigenous people of Canada.

Kai's discourse position in relation to health and the body was coded at 'disagreement' because she took an active approach throughout the interview to challenge the normative relationship between weight and health, especially when it came to people other than herself. She spoke with considerable certainty from this position, and took opportunities to justify her knowledge throughout the interview. When asked 'do you think you can tell if a person is healthy or not?' Kai was quick to respond with:

> No, no I don't think so.
>
> Int: Are there any measures where you can tell, lets say like friends and family maybe and then say broadly?
>
> Yeah I shouldn't say no so definitively, I mean I'm sure there are ways of telling, I mean you could see someone who is injured or clearly in some sort of distress like emotionally or mentally, like yeah okay you can probably say that person is not doing so well especially with family, people you know, and you know well like you are familiar with the level that they are at and if there is a change you can probably tell okay they are in distress emotionally or they gain twenty pounds and you can't tell that they are not happy with it, like okay you can (tell), or if they are not eating properly at all then you can probably just guess like wow they are eating McDonald's everyday like that's probably not a good thing, so I mean but it's hard to label people with that because some people could seem perfectly fit and they can have a mental illness and you will never know, a lot of things are hidden that way, so especially in terms of the mental health, I say it's really hard to tell sometimes if someone does because people are pretty good at keeping that kind of thing in
>
> *(Main interview, 2009)*

In this interview excerpt there are a number of sub-stories or 'particles of entanglement' (Barad, 2007) that describe health as something one does in contrast to their state of wellness. These included negotiating and attending to discourses around health practices to describe if someone is healthy or not. She identifies those who are 'not eating properly' but is also able to label the state of a person: 'emotionally in distress', 'they gain twenty pounds'. She then contrasts this to 'it's really hard to tell' or 'you will never know'. Kai also draws on the notion of mental health to describe how those who are 'fit' can have a 'mental illness'. Mental health was used by a number of the participants as a way of explaining why a person who is 'fit' and/or of 'normal' weight might not be healthy. Here too, Kai presents an instantiation of this discourse as well as sub-stories of food to constitute someone who is 'unhealthy'. Like so many of the interview participants, consuming McDonalds is depicted as the antithesis of 'healthy' practices of the self (see for instance Caitlin's poetic vignette p.225, and Vala's text p.202). All of

these overlapping and at times conflicting sub-stories are deployed by Kai to negate the simple relationship between health and weight, but at the same time negotiate it.

When I prompted a little further in a later part of the interview to ask whether there is a relationship between health and how one looks, Kai was reluctant to link a person's 'looks' and health, despite her first example was to exaggerate that in some instances you can tell if 'they' are 'morbidly obese'. This was a tentative statement as she used the modal language, 'probably', and speaks about the habits of a person rather than what they 'are'. In particular, this example demonstrates how Kai's beliefs and attitudes toward health are about what one does, their habits, rather than how they look or what they are 'labeled'. Kai seemed uncomfortable, in this following excerpt, to make relationships between health and bodies, and spoke at length, but with less certainty than the 'critically' driven front she presented for the rest of the interview. This excerpt is particularly long, but draws together some of the significant sub-stories Kai negotiates as she positions and then repositions herself. The dialogue also demonstrates how the folds of embodied knowledge remain prominent in Kai's sense of self:

> Int: … could you describe an unhealthy person at all, like have you ever seen someone and thought wow they are not healthy, they don't look healthy?
>
> Yeah in terms of looks it is kind of tricky, but in terms of someone that is morbidly obese I would say yeah, I mean obesity is a tricky issue with overweight, but if someone is like really big, sometimes I will look at that person and say you know what that's probably unhealthy, or when I see people at work… eating really poorly every single day I was kind of thinking to myself yeah that's unhealthy, I don't know if I'd label that person as an 'unhealthy' person, but certain habits they are easy to label as unhealthy
>
> Int: So that is interesting when you say obesity is a tricky thing, what do you mean by that, can you elaborate on that a bit?
>
> Yeah, yeah well again socially constructed, you go to some countries and if you are large that is a great thing, because that means you can afford to feed yourself… that can be looked at as a good quality. Here it is looked at as, no way you can't be obese you can't be overweight, and I think also it depends like even the scales that we use I think when I was swimming back in the day and I was super fit, the most fit I have ever been, even then when you use the BMI I was considered overweight, so I knew right away every since I was you know twelve, thirteen years old that the BMI is like just a waste of time, especially when I got into high school and started doing testing and learning about that kind of stuff and I would look at it and I'd figure that I'd be overweight, like close to obese and I'm thinking… I'm very healthy, I'm very active but when you look at not considering the muscles… all this sort of stuff, I mean I've known that its not quite what its cracked up to be - someone's created those definitions or those scales and its not always accurate and I mean you can see even athletes, big people there are some people who are quite large, but someone might look at them and

> say 'oh yeah they are overweight, they are obese' but they could be very, yeah they could be living a healthy lifestyle.
>
> *(Main interview, 2009)*

Kai negotiates her own and others' experiences of health and weight by recounting her childhood experiences; in some instances, being 'overweight' is 'probably not healthy' however in other expressions weight is not an indicator of health. I would like to draw attention to the second passage above where Kai's experience of having her BMI measured at a time in her life when she was 'super fit' and a high school student seems to have had a lasting effect on her subjectivity. Her personal classification of being 'overweight… close to obese' coupled with her sense of being 'very healthy and active' have led her to believe 'BMI is a waste of time' and that 'someone's created those definitions'. Rather, what one does – what they eat and the exercise they do is a better indicator of health. These threads of experience, and intra-connections between the stories point to the ways Kai challenges a deterministic relationship between weight, health, and fitness. Following on from this exchange, later in the interview Kai discussed the 'socially constructed' nature of obesity, which again affirmed her overarching 'disagreement' position and resistance to biopedagogies of the *dispositif* of new health imperatives.

Not everything was straightforward about Kai's 'disagreement' position. Kai's 'critical' stance when it came to her own personal practices of the self only went so far. In response to the interview question of 'rating your health on a scale of zero to ten', Kai situated herself at a five and then went on to explain her rating in terms of the need for fitness improvement and the guilt associated with not exercising. At the same time she talks about the enjoyment and pleasure she derives from being active:

> Int: Yep so would you want to improve it at the moment?
>
> ah yeah! I'm on a five on a ten scale! Yeah I definitely want to improve it! (Laughs)
>
> Int: Do you ever think like about those things and think I should not necessarily do this, or do you take action on your thoughts around that,
>
> Yeah, Yeah I do I go guilt myself into going back and running and you know once I get into it again especially the physical activity like I love it, but yeah sometimes my priorities get a little bit it skewed and I try to start prioritising academics and marks and all that stuff and then everything slides so yeah every now and then sometimes I'll give myself a kind of pep talk and say ok it's time to go for a run, it's time to go back to the gym, there is a volleyball tournament tomorrow and I just got convinced to go to that I wasn't going to go I was going to work on

> school stuff so I'm going to go I'm going to do volleyball because that makes me happy I really enjoy when I actually do get out and into something
>
> *(Main interview, 2009)*

While Kai's subject position was initially coded at 'disagreement', this does not mean that there are not aspects of her own subjectivity that coalesce with managing weight through diet and exercise in her own practices of the self. As Bordo (2003) has emphasised, people may know and understand in complex ways the discourses of the body, yet still feel powerless to resist their messages. It can be said, then, that what one 'knows' is not always what one 'desires'. In other words, aspects of ones subjectivity may be more dominant or dormant than another in a given situation or experience of the self.

If we consider Kai's 'confession' about maintaining a healthy body in contrast to Caitlin's biographical narrative, Kai is much more cautious in her speech to link exercise with weight, where as Caitlin talked openly and at length. Perhaps this is because weight is a sensitive topic for Kai more so than Caitlin. Or perhaps this is because Kai is unwilling to 'confess' her practices to another, of the relationship between health and weight and ideals of feminine beauty as part of maintaining her 'critical' sense of self. Either way, it points to the fractures in Kai's subject position of 'disagreement' and the apparent impossibility for her to be disconnected from the social conflation of health and weight, despite her critical readings and involvement with it. This becomes even more obvious in the following text where Kai describes her desire to be contingent to a lifestyle of healthy eating and exercise in order to not gain weight:

> I'm not terribly pleased at the moment with my health because I know I am not eating properly, I know I'm not exercising enough, I've done that in the past too, and especially with, I'm sure we'll get to it eventually, but body image issues and stuff like that, like that starts becoming an issue when my health starts going down or I start gaining weight then you start thinking things, and that really sux, yeah.
>
> *(Main interview, 2009)*

Like so many others who espouse a critical perspective, Kai is not immune to the very discourses of health and the body she seeks to critique. Health, in Kai's personal reality is a juggling act of academic priorities and finding time and motivation for exercising. She places importance on the need to stay motivated and not let oneself 'get to that point'. In an ideal world, Kai would like to be able to stay on a 'healthy track' and maintain a 'balanced' healthy lifestyle, rather than being in a fluctuating state of health as she describes:

> … If I could break the cycle I would (laughs) I'm sure I can, I shouldn't say if I could, um but yeah I know it's not a good cycle in terms of you know lifelong, lifestyles and changing your lifestyle I mean I don't think that when people talk about lifestyle changes they mean like temporary, and then they go back to the old one and the new one, so I mean ideally I'm working towards trying to get into a groove where kind of you know stay on one healthy track (laughs).
>
> *(Main interview, 2009)*

She feels the pressure of life events, such as her uni coursework, impacting on her capacity to engage in the desired practices of the self to stay 'healthy'. Kai's links to physical activity and exercise are for the most part couched in physiological capacities of the body and the ability to perform. Kai subscribes to the moral imperative of being responsible in maintaining her self, and this includes her own health and body. One does not need to look far to see this project of bettering herself in a socially responsible way is also the project of the virtuous neo-liberal biocitizen.

Sources of knowledge to make meaning about health and the body

Already apparent in the section above, are the ways Kai's beliefs about health and body have been contoured by her high school and swimming squad experiences and the associated comments of others about her eating practices and body as well as having her BMI measured. She rarely mentioned her family as influential, if anything, she described their influence as 'putting me in sport' when she was younger, however she positioned them as 'not too knowledgeable' when it came to 'health'. Other clues as to the ways her lived experiences constituted the resources Kai has to speak about health and the body, came from her sub-stories in relation to who and what sources of knowledge are trustworthy or have authority.

A significant shaping force in Kai's folds of health knowledge was her undergraduate Arts degree, majoring in women's studies and psychology. Kai also identified particular undergraduate coursework she had done in 'Phys. Ed and weight training' and an 'intro to disability course' as informing her perspectives about health. Together these subjects, and particularly the 'theory', as she named it, from her Women's studies degree, contributed to her desire to cultivate a 'critical' identity; or at least construct herself as a more 'socially aware self'. As she reflects, 'I have done a one eighty (180) in terms of my thinking, you learn all this different critical, yeah critical theory'. Kai during her childhood and early 'teen' years, was also heavily involved in swimming and competitive athletics. This was another thread to her lived experiences and with it, came a raft of

associated practices and truths about managing her own body. It is likely that these two elements, her undergraduate degree and competitive swimming background, contributed significantly to the consistency of her sensitivity to body image throughout the interview. In the text that follows, Kai articulates quite explicitly how these lived experiences contributed to her 'critical perspective':

> Int: it seems you have this critical perspective on not trying to fit kids into certain types of bodies, where do you think that perspective comes from… is there anything you can think of, your own experiences, or friends, or…?
>
> yeah I think it probably started in high school, and then I guess I kind of … fine tuned it in a undergraduate degree with Women's studies because that is a very critical program, but yeah I think it started in High School when I was swimming very competitively and we trained for about twenty four hours a week, so it was pretty intense when I was thirteen and fourteen, I was really super fit, and I remember people I know, adults, telling me "oh you eat so much", but we were training for twenty-four hours a week and I'm thirteen, fourteen, give me a break! I remember certain people saying "oh wow when you get older you wont be able to eat like that" and I guess they are just trying to nicely warn me that you know, I don't know if they were jealous or what because I could just eat plates and plates of food no problem… even my coach, I'll never forget was saying one day, "oh you better lay off the brownies, because you're", she said something about she noticed I was gaining a bit of weight or something, or that I was going to gain weight later, and I thought "oh, wow", so that kind of had an impact. And when I quit swimming, I remember a lot of people saying "oh be careful, you won't be able to eat so much" and all this kind of thing about getting fat, so I think that might have had an impression on me as well. Or when I did start gaining weight people commenting on "oh wow, or what ever you are eating", and I think that definitely had a negative impact on my self-esteem and image so I think I'm really sensitive to that with kids that what you say can really be taken to heart by a kid if you are not careful, so I am really careful about you know my approach and how I discuss body weight and image with kids because I know that they can take it on board just from friends, I have friends that are super sensitive about their body image and weight, so knowing that I am really careful. And then again, just from the university (undergraduate) course I have taken about you know what it means to have a certain body and all this kind of stuff, and being critical…
>
> *(Main interview, 2009)*

In the above text, there is an intersection of discourses around food practices and bodies with Kai's own experiences of swimming, eating, and self-esteem. Especially apparent is the emphasis she places on the need to be sensitive to self-esteem and body image with young people in educational settings; a position she returned to constantly, given her own experiences. This was a theme that was not uncommon across other participants' responses in the data set. However, for Kai, it was a deeply felt topic. She discredited those who were not sensitive to language that may be harmful to a person's self-image. This was a durable stance, as she was particularly sensitive to the ways discourses of food

and health feed into expectations about normal bodies. Tied to this, there is solicitude for her friends who are 'sensitive about their body image'. Yet in order for her to support this position, at the same time, she instantiated the dominant discourse of the relationship between 'energy in and out'. The key lived experiences of competitive swimming and the comments of adult figures around her when she was younger appear to shape her lines of thought in a reoccurring fold. There is little sign of these thoughts 'unfolding' from her memory and thus they flow into her position about being sensitive to children and their 'body image' and her own thoughts about her body and the desire to exercise and weight.

Kai did not talk much about her schooling experiences other than that PE was a positive experience for her: 'as a kid I loved Phys. Ed. I couldn't get enough of it, I liked playing the games I liked doing the sports I liked to win'. She also went to say that they didn't do a whole lot on health back then other than nutrition and goal setting: 'I have very positive and fond memories of PE because I really liked that kind of stuff… learning about nutrition and health and goal setting and all that wellness… I really liked that kind of stuff'. Kai's affinity for nutrition was traced throughout her interview as something she took interest in and as the last quote shows, this has been the case since her schooling. Given the Canadian schooling context, where health and PE are not unified as a subject, at least where Kai studied, (as they are in Australia), it is understandable that school featured as a relatively insignificant force to her 'health' knowledge.

Another thread through Kai's narrative is her aversion to pharmaceutical companies in contrast to her praise of 'alternative' health practices or First Nations health 'wisdom'. Her women's studies degree has given her the language of a 'critical perspective', and insight into theories such as those of gender and class in health. At the same time, health is something Kai has a vested interest in and has had much exposure to. Her disposition is one of experience and knowledge in cultural structures 'know how'.

On teacher education

Kai reflected on the H-PE coursework she had just finished as having little significance to her own knowledge and thoughts about health. In terms of the PE content, she mentioned that the 'game sense' approach was interesting to see in contrast to what she had experienced 'back home in Canada'. However in relation to health, it seems her pre-existing knowledge was not challenged or extended and other experiences and narratives

outside of the H-PETE fueled the folds of her 'disagreement' position. When asked about her coursework experiences, Kai responded:

> We just finished a PDHPE course but I don't think I learnt anything more than I already know from that course and there was only what four, three months of a course so I mean we talked, we shared a lot of ideas, I mean I might have changed slightly in how I looked at some thing, and went okay that's neat to think but it hasn't formed too much… yeah about my own understandings of health have stayed pretty much the same. I may have learnt a couple of new facts and tips of information and maybe the Australian perspective was kind of interesting to learn but I think my ideas have stayed pretty much.
>
> *(Main interview, 2009)*

Kai saw her 'critical' position as different from those of others, particularly her peers in the Primary GDE course. Towards the end of the interview she announced: 'I'm probably abnormal, so you've already heard a lot from me, but yeah I'm definitely not representative of primary teachers, that's for sure, because I am so critical of the profession and what we teach and how we teach it'. Other than these references to coursework, there was nothing Kai had to add or elaborate on in relation to teacher education and her development of knowledge in relation to health – both for her personal understanding and content knowledge for teaching.

Ideas about the' healthy' child and teaching about health

Kai's response to the question: 'does the school have a role in addressing childhood obesity?' sums up her ideas about teaching health education. Her response was initially to hesitate, and then state 'I think it is… I think it is really important for schools to clarify what the problem is and why they think it is a problem. If it is just because they think kids look too big (laughs), well that shouldn't be the issue, it should be the healthy lifestyles'. Her response to the question was that schools should 'tailor' a response to 'obesity' based on the needs of the children, and that healthy lifestyles should be the focus. Kai negotiated different considerations as part of this, for instance she went on to state 'it is so culturally dependent to the context, yeah it is one of those issues, because I mean whose to say that you need to run or you know do X amount of physical activity, like I know there is a lot of research out there, but it really depends on what you value like and what type of health you value'.

Kai's undergraduate knowledge of the 'complexity of health' informed her position school practices. She was also able to acknowledge that health is socially and culturally defined, however she talked about how, 'there is a lot of research' on obesity, and that at

present children are not as active or eating as well as they could. Kai reiterates that it is 'so tricky' because of the morality she accounts with the topic. In conclusion, she affirmed the need to make initiatives tailored to the school community:

> When you are sending messages and values to kids I think that it is really tough and it's got to be done with the community with the parents and with cultural sensitivities in mind, I think again it's about informing students and giving them options so that they can make informed decisions so that it may not necessarily be saying "this is the way you need to be" or "this is the kind of life you have to have" or you know "the kind of physical activity that you need to do every day", but it should be seen as okay well this is an option, this is you know, these are some of the consequences and benefits of you know what you do and if you exercise and do this leads to certain types of you know abilities and lifestyles and helps to prevent these kinds of problems, so making them informed, so not saying that you need to do it but this is an option and this is why, I guess is what I think schools need to be teaching kids. Sorry that is a really convoluted answer (laughs), but you know what I mean, I don't think it is just teaching them routines, for the sake of the routines, I think they have to understand then why they are doing it and why it is an option so that they can opt in to it kind of thing, because if it is just treated like English and Math's, and like you have to learn this, then like you know they have to really appreciate it and take it on board,
>
> *(Main interview, 2009)*

Kai's response in relation to 'if schools should address overweight and obesity', is one of giving young people options and knowledge, without values, 'routines' or imperatives. She does not completely 'brush off' the responsibility of schools or teachers, but she acknowledges that this is a value-laden area of teachers' work. In response to the follow up interview question: 'would you say the same for physical activity?', her response was 'yeah exactly, same thing with physical activity'. However, she also goes on to talk about teachers' work as a means to provide students with tools, and this includes knowledge of the risks of not doing physical activity:

> I might get whatever medical concern, or if I am not eating properly that could put me at risk for being you know eating sugar related diabetes or whatever it is, or I could get, my body could change I could start gaining weight, getting overweight if I don't you know exercise properly, or I wont be as flexible or as strong' I think they need to understand the consequences and that it's you know whatever body you have or however much physical activity that you do, there is no necessarily right or wrongs, but just that they can understand what happens when you do exercise and what happens when you don't.
>
> *(Main interview, 2009)*

Kai's position turns to one of needing to educate children about the risks associated with nutritional, and physical activity practices. Both of these two areas become 'value free' educational agendas, deeply imbued with knowledge of the risks and consequences for non conformance. This is not what I would call a 'health promotion' agenda. Kai for

example, went on to state: 'I think that's important for schools to try and teach, not necessarily the values or the attitudes, but more so this is the information'. Kai's approach, however, does draw on a discourse that assumes risk within a medicalised/ 'healthy' lifestyle orientation to health, indeed one that she in other ways, challenged earlier. Later in the interview, Kai was caught between this position and one of health promotion when I asked her a follow up question after she spoke about the importance of healthy eating, 'do you think young people in primary schools are aware of healthy eating, so you think there is enough… or do you think there needs to be more, or less?'

> I think there can always be more. I'm sure there are some schools who are doing a brilliant job, I don't know because I haven't had enough experience, but I think there can always be more room for more there, health and nutrition is so important and especially when you look at all adults, the diseases, and you know the cancers and the oh my gosh the flus, there is so much out there that I don't think there is any way that we could over do it in terms of nutrition and kids learning at an early age healthy habits so that when they are adults they are already into healthy lifestyles and they understand the risks and benefits of eating properly and stuff
>
> *(Main interview, 2009)*

In the text above Kai struggles to bring her critical perspective to bear on the health related knowledge she identifies as important for students. The omnipresent term 'healthy lifestyles' associated with the powerful health imperatives discourse. She takes the approach that students should understand 'the benefits' of physical activity and being 'physically fit' so they know 'I can keep doing this throughout my life, this is something that I can take on board', or 'if I am not eating properly, that could put me at risk of … sugar related diabetes… my body could change and I could start gaining weight, getting overweight if I don't exercise properly'; 'if I don't stay active I might get a medical concern'; or 'they need to understand the consequences'. In many of these instances, Kai draws on the language of risk and individual responsibility to describe what students should be aware of in relation to health. She buys into the normalising power of the health imperative discourse (so difficult to think otherwise of) despite her resources to analyse it.

Kai in summary

Kai's 'critical' sense of self to health imperatives only goes so far. It is apparent that a 'critical' approach, while acknowledged as useful in educational approaches, cannot be thought of as a 'blanket' position or term, as other subjectivities emerge and are spoken from. All discourses have effects, and part of a 'critical' position might assume that one

can acknowledge these, but this a difficult line to follow. Deleuze (1995: 111) in an interview in 1989, titled *A portrait of Foucault*, said,

> [w]e need to cross the line, and make it endurable, workable, thinkable. To find in it as far as possible, and as long as possible, an art of living. How can we protect ourselves, survive, while still confront this line? Here a frequent theme of Foucault's comes in: we have to manage the fold line and establish an endurable zone in which to install ourselves, confront things, take hold, breathe - in short, think.

Reflection and thinking is a process, and a constant struggle, particularly when teacher education programs, like the one Kai experienced, failed to engage with her position. Kai has to look elsewhere for resources to do the thinking. One last quote, perhaps sums up the durable 'critical' approach Kai returned to throughout the interview and perhaps the need for such a 'voice' to be drawn out in H-PETE.

> I'm sure some of the pharmaceutical companies are super happy when you know they are creating vaccines and what not, so when it comes down to health, like my perception is totally different to other peoples, I wouldn't be telling kids "oh yes you should go out and get the flu vaccine you need to do this and this and medications and whatever", that's just not me, that's not my background, what I've now learnt and what I promote, so when it comes to obesity, again, it's like well how do we define it and why is it a problem and is it you know, you need to be careful that's all. For me the reasons are because the person needs to be healthy, how we define health and wellbeing, and not because they need to be a certain weight or look a certain way.
>
> *(Main interview, 2009)*

Kai directly positions herself as someone who would not 'preach' or unquestionably take up public health messages such as getting vaccines. Rather, she sees herself as a participant and advocate for the discussion and questioning of health authorities and corporate companies who are involved in disseminating health truths.

As a parallel and conclusion to my interpretation of Kai's position, I refer to Drew's poetic vignette to reinforce Kai's in the context of theorising the 'disagreement' subject position. Drew's poetic vignette can be found at appendix 11. Drew was a PPGT from Cavendish University in the MT program, and one of the few PPGT participants who spoke from a 'disagreement' subject position; discrediting a relationship between health and weight. In contrast to Kai, he expressed a general lack of interest for the topic of 'health' however he was particularly resistant to popular notions of the slender ideal and dieting in the aim of achieving a 'health' aesthetic as defined by 'others'. Drew, like Kai was a graduate PPGT, and as a male, he offers a different set of stories in relation to health within a disagreement position.

6.4.4 A discourse position of 'negotiation'

Jacob

Jacob's interview narrative constitutes the third of three biographical narratives described in this chapter. His biographical narrative was chosen for his position of negotiation in contrast to others in the data set coded at agreement and disagreement. Jacob's narrative was also selected to have a male participant as part of the detailed analysis of subject positions described in this chapter. The interview took place in a group meeting room at Cavendish University just before he went on PEx. Like Caitlin, Jacob had just completed the third year of the B.Ed (Primary) degree, thus had completed all three H-PE subjects of coursework. Jacob, like Caitlin was a little older than the majority of other students in the bachelor (he was in his mid twenties) and described how he had 'tried out' a Bachelor of Science and Bachelor of Primary Education before, this, his 'third crack at Primary'. He said, 'I wasn't too sure that (a primary classroom) was where I wanted to go'. However throughout the interview Jacob made it clear that he was now in the degree because 'teaching is what I want to do'. Jacob had a lot of enthusiasm for primary teaching, as he commented, he 'loves to be around… younger primary (students)' because of their 'innocence' and 'wonder at the world'. He saw this as something that gives him 'a lot of energy' and interest in becoming a primary school teacher.

Throughout the interview, Jacob took time quite a lot of time after each question to think through the questions and to confirm what the nature of the questions was before responding. For instance, he often said 'sorry can I have the question again', or ' (do you mean) in terms of their health?'. This seemed to be tied in with his sense of self as he described himself in the interview as a 'reflective' and 'introspective' person. However, it may also suggest that Jacob hadn't had the opportunity to rehearse or think through (as did Kai and Caitlin) the questions in relation to health that were being asked. At one point he stated, 'I find it hard to form an opinion on something I'm not well read in'. He frequently made reference to himself as a 'thoughtful' and helpful person. His responses were accompanied by lots of pauses and modal language such as 'I guess', 'I think', 'probably', 'I don't really know', 'maybe', 'I don't know how true that is'.

Jacob: poetic vignette five

> Health?
> I guess the absence of sickness,

illness.
If I think deeply about it…
You're not physically sick,
mentally you're in a good place,
being fit enough for life:
Yeah

In undergrad units,
mental and spiritual health
have come up.
I wouldn't have thought of those before.

Working in the pharmacy,
seeing a different circle of people,
opened up my eyes to different perspectives
on weight.
I've never been overweight.
I struggle
to put weight on.
If anything,
in high school,
feeling like I was un-muscular.

I was getting sick all the time,
not sleeping, cramming assignments:
The annoyance of that
was far less than having to shop and cook and eat well.
Since then, I've been trying to get enough sleep.
I haven't been sick since I've been married;
Having to cook for someone who cares about their food,
Eating enough vegetables and stuff.

Naturally I'm not a very
critically, reflective person
(but I'd like to be).
Mixing with people,
presenting a different viewpoint:
Has sort of made me more like that.

The National obesity crisis:
I have to be concerned,
that age group of kids.
I'm going into teaching…
but is it really a problem?

I dwell on things:
I think of schools as
Educating them to have awareness,
knowledge.
So they can make informed decisions.
The only thing I have done to change that,
is PDH this semester.
Maybe schools should be doing stuff I never thought they should.
Programs that, you know model healthy eating.

Situating Jacob in relation to health and body discourse positions

Throughout Jacob's interview, there was an absence of talk that linked health to weight with any certainty. He rarely talked about weight and never in the context of 'energy in and out', as was so prominent in Caitlin's and other participants' talk coded at agreement. At times Jacob's espoused a 'disagreement' position, in that health or body size and shape were not a matter individual control. The absence of deliberate comments challenging the relationship between weight and health (as Kai had), his modal language and uncertainty at times and Jacob's overall focus on health as the absence of illness led me to situate his narrative at a 'negotiation' subject position. While other participants more actively negotiated the truths of the relationship between health and the body, like Veronica in the final poetic vignette, Jacob's narrative offers a different complex of subjectivities. Jacob's definition of health was quite unique compared to others in the data set, aside from Drew, for the way he described health primarily as the absence of illness. He also talked about how he has now come to think of the 'mental and spiritual' aspects of health, and as discussed later he attributed these thoughts to his teacher education HPE coursework. When I asked him 'what does health mean to you?', he replied:

> [pause 11 seconds?] Yeah, health [pause 10 seconds], well when I think about health I guess I think more about physical health I guess the absence of sickness or illness but doing like I've done two undergrad units in H-PE and so we've sort of been looking at you know mental health and spiritual health as well sort of all tied up.
>
> *(Jacob| B.Ed | Cavendish University | Main interview, 2009)*

It is worth mentioning the 11-second pause at the beginning of Jacob's text here. This space in his talk was a pattern that carried throughout the interview as he seemed to mull over questions at great length. He apologised for this at one point, saying that he wanted to provide 'accurate' and 'well-considered' responses to the interview questions. Unlike Caitlin, for Jacob, his ways of speaking about health did not encompass 'fitness' or 'weight'. It was as if there was a complete absence or engagement with truths about 'energy in and energy out' as a means to lose weight and/or achieve 'health'; a significant contrast to both Kai and Caitlin. Jacob's non-engagement with the notion of physical health as 'energy in and energy out' or 'fitness' is exemplified in the following quote after I asked him what he means by 'physical' health. Here he rejected my suggestion that the physical might mean fitness and confirmed his stance that health was about the 'absence of illness':

> Int: so would you say your idea of health has changed (from the H-PE course), well not like changed but you've got a different idea on what health is, or?
>
> yeah definitely, yeah I don't think I would have, I think before doing those (course subjects) I would have said health is just, I would have focused on the physical side of it
>
> Int: in terms of absence of illness or body fitness or just mainly absence of illness, or?
>
> ah, no just absence of illness I don't think I would have focused on fitness at all really… I might have like considered mental health, but… I don't think I would have considered that. Um, if I don't think too deeply about it, mental health, physical health, but it's still mainly concentrated on absence of illness so you're not physically sick, you don't have, um, mentally you're in a good place but I don't think of it in terms of being fit or you know not match fitness sort of thing. Being fit enough to do life I guess, yeah.
>
> *(Main interview, 2009)*

Jacob's instantiation of health in this quote returns to the absence of illness and being well enough 'to do life'. Further on in the interview he also negotiates this meaning and returns to it: 'I know it shouldn't be about merely the absence of illness but still, I can't quite, you know… I still tend to go back to that'. As the interview went on, Jacob then reshaped his definition of health and illness by saying 'I could adapt it to maybe the absence of non-manageable illnesses or illness, because they (for example 'someone with well managed juvenile diabetes') can be healthy, yeah it's hard to say'. Overall there is a sense that for Jacob health is about quality of life; the present state of the body as it is, rather than about a deficit of exercise or careful food 'choices' that was the case for so many of the other participants. Jacob focused, particularly on health in relation to illness and cure.

Compared to Kai and Caitlin, for Jacob, in descriptions of his personal life, exercise or food practices just didn't come up as an important part of his lifestyle. Rather ideas and practices, other than those associated with personal health responsibility, lifestylism and new health imperatives were more pronounced. At one point he described: 'I could cope with being sick, the annoyance of getting sick was far less of a hassle than actually having to shop and cook and eat well… so that would be the first thing I would cull to save time'. There was however, shifts in his health priorities and practices described throughout the interview, and these tended to parallel with other influences and commitments in his life. For instance, he described how he had 'changed' his 'health' practices since being married, as opposed to when he was previously living with his

brother. 'Since I've been married that's helped a lot with that (eating well and shopping/ taking care of himself) because you know I still have to cook, but I have to cook proper food… for someone (his wife) who cares about their health and food, and about eating enough vegetables and stuff'. Jacob's lack of 'bio-citizenry' or interest in practices of the self-related to a managerial approach to health, so pronounced in many of the other participants, presented a difficult interview to place, given the other participants slotted relatively easily into the coding categories formed. There was apprehension to Jacob's talk about health, which I read as a lack of interest or priority given to the topic of helath in constituting his sense of self. He did not subscribe to narratives of illness prevention. While Jacob talked about how physical activity played an important role in his personal health, this was not a central priority for him or part of his sense of self as it was for Caitlin. He seemed comparatively detached from a compulsion to exercise: 'I'm not really exercising apart from walking to the bus and walking around campus… If I really wanted to play sport I would have gone and had you know an MRI (Magnetic Resonance Imaging, of a knee injury) and checked it out and fixed it'. Jacob compared his level of physical activity at the time of the interview to when he was younger and an enthusiastic participant in school sport and PE and his success with long distance running. However, these experiences had not carried through as a priority or a dominant aspect of his subjectivity, in relation to health or his leisure interests. This was a direct contrast to Savannah and Kai and most of the other interview participants of the study whose former experiences in sport continued to shape their ideas about health and the importance of and participation in exercise.

While for the most part there was a lack of talk about the body and health throughout Jacob's interview, when asked 'do you think you can tell if a person is healthy or not?' he refused to draw a relationship between the appearance of someone and their health, directly challenging the discourse. His initial response was, 'no, I don't think so'. Then after being prompted further, he went on to negotiate his thoughts about the body and health 'at some points if I see someone really overweight on the train or at work or whatever, I might think oh you know they're really unhealthy or something like that'. Jacob's sub stories in response to this question could be coded at a 'disagreement' subject position because he resisted the relationship between the physical body and health. In the following quote, in particular, he challenges the dominance of health imperatives and normalised body shapes and drew on the notion of mental health as 'invisible'.

> like they could have a legitimate… something that's stopping them from losing weight, but also for a lot of people like even if they appear to be healthy, so… what society tells us is healthy, you know the right body weight, the right body shape, you can't see… whether mentally they're healthy
>
> *(Main interview, 2009)*

Initially Jacob's response to the question 'do you think you can tell is someone is healthy or not', was coded at 'disagreement' because his response suggests a problematisation (read resistance) of 'what society tells us is healthy'. Like Kai, Jacob drew on the lack of visibility of mental health in contrast to the physical to resist falling into the dominant agreement position. Unlike other participants coded at negotiation, Jacob's subject position was on the cusp of negotiation and disagreement because for the remainder of Jacob's interview, there was *no* other talk about weight or its relationship to health. Rather he only spoke about this relationship when he was prompted. Jacob's subjectivity in relation to health and the body presents a rare instance across the data set where weight and health were not conflated at any point in 'the fold' of his thoughts. Perhaps this is because, in contrast to Kai and Caitlin, Jacob has never had a concern with wanting to lose weight. Rather, other aspects of his life are a bigger priority to him.

Sources of knowledge to make meaning about health and the body

There were a number of sub-stories that emerged in Jacob's narrative that seemed to shed light on some of the influences on his negotiation position and descriptions of health as the 'absence if illness'. One of the contributing influences to Jacob's discourse position of 'negotiation' is likely to have been his feelings of being un-muscular. Because his experience with his body has been one of trouble gaining weight (or muscle), particularly when he was in high school, he has never had the desire to lose weight, or consider weight for its relationship to health. Jacob's experience of masculinity and body size and shape, is not an unfamiliar one. Frost (2003: 67) suggests that both boys and girls are under similar pressures to have a 'good body', however this can be for different reasons. Males are also subject to evaluative standards of their bodies defined as being 'big, "hard", sporty and fit' and consumerism and lifestyle media often determine these normalised modes of being. Jacob assumed that a lot of other guys had the same experience as his, and thus inferred trying to lose weight is more of a 'female' problem:

> I think high school, just feeling like I was un-muscular… I'm sure for a lot of guys weight is an issue where they feel underweight. I tend to generalise it in my mind and think that feeling conscious about being overweight is um a female sort of problem for want of a better word and feeling self conscious because you're

> underweight or not muscular is sort of the male equivalent, I don't know how true that is but that was sort of the case for me I think… so that being an area of insecurity for me ('feeling like I was un-muscular') when I was younger, not so much now, but still, I think even still a little bit
>
> *(Main interview, 2009)*

Jacob's folds of health knowledge were also shaped by his part time job at a pharmacy weight loss centre. When I prompted the question where his perspective had come from, following his response to the question 'do you think you can tell if someone is healthy or not', he replied:

> I think that (working in the pharmacy) maybe changed my perspective on it (weight) because before that I didn't have a perspective on it… I was working in the weight loss department, like the Tony Ferguson weight loss whatever, and so I'd sort of talk to people, and I was doing it full time, and so that would sort of be talking to people about their weight and tied up in that was you know, they night have something like polycystic ovaries… it was really good for me I think… it also… opened my eyes to different perspectives because… I've never been overweight or if anything I would struggle to put weight on… seeing you know into the lives of… a different circle of people, or not to say people who are overweight are a different race or something
>
> *(Main interview, 2009)*

The way Jacob described his encounters with people's stories from 'different circles' when working at the pharmacy, suggests that he is open to listening to different people's experiences. This seemed to be in reference to any number of different people's lives and experiences of health other than his own. In contrast to Caitlin who sought information from those around her, from what I could tell, other peoples' perspectives helped Jacob to be more reflexive about any one version of 'healthy' living.

After asking Jacob where he gets health information from, he talked firstly about online medical journals and the *Virtual Medical Centre* website as well as his undergrad Psych subjects in his first degree. He spoke about the importance of identifying 'reliable' sources in the types of readings he seeks out: 'the information has to be coming from a source that has… had some sort of study in the area, and possibly accredited; so like peer reviewed journals'. Jacob clustered the knowledge that he gained from working at the pharmacy with that of 'peer reviewed journals' and contrasted this to stories about his parents as 'not really a reliable source' of health knowledge. There is a distinct contrast to Caitlin's lived experience, as Jacob appears more interested in who is reporting on the information, rather than what people say about health more generally. At the same time, he felt some loyalty to honour his parent's knowledge:

> You know my mum wouldn't have had a clue with vitamins she would have got it from somewhere … maybe she went into a shop and someone told her and so she has taken it on board and she's told me but because you know its my mum or you know my dad if he was the one telling me that carries weight. Even though I know in the back of my mind that it's not really a reliable source…
>
> *(Main interview, 2009).*

Jacob's perspective on health as the absence of illness was inflected by the folds of health knowledge he gained from working at the pharmacy. This coupled with his experiences at school as being unmuscular was central to his overarching narrative of health as the absence of illness.

On teacher education

Another identified source of knowledge has been his 'university studies', which he described as contributing to his 'critical' thinking skills. Unlike Kai and many of the other PPGT participants, Jacob mentioned the influence of his teacher education degree, as well as other university study, on his perspectives of health. His meanings of health described earlier in this narrative, where he incorporated the mental and spiritual aspects, are illustrative of this. He commented that he had only recently come to know these aspects as part of the 'health' component of H-PE coursework: 'you know the mental, physical, spiritual and I think they had a definition on a PowerPoint slide and I think that resonated with me because of my faith (Christianity)'. Jacob didn't talk much more about what 'faith' meant. However, in contrast to Caitlin, for Jacob, the spiritual and mental aspects of health brought about through H-PETE seemed to fold with his pre-existing sense of self.

Jacob also commented on the influence of his peers and particular lecturers in helping him develop a more critical approach to knowledge:

> There are people that I think only through uni that I've come in contact with… I don't think that I'm naturally a very critically reflective, but a couple of people, like one of the guys in Primary that I have class with really helped bring that out in me. Someone in class will be talking presenting a viewpoint and he'll say, 'oh but you know but what's that really saying'. That could be saying this, and that could be saying that and I'm like, oh wow, that's cool, I didn't see that you know. So I think… mixing with people like that has sort of made me more like that. I'm trying to think if my PE tutor, she's like that, you know being critical, as I think most, not all sadly, but most lectures and tutors at uni that I've come across would be. But she's like sort of like you know, 'this is how this health problem is being presented in the media but is this really an issue' you know, and she might have… I can't remember her actually talking (critically) about the obesity crisis but I think that she would have. I think she has and I can almost hear her voice

> talking about it… we probably covered it in class and looking at it which has probably made me think more about it.
>
> *(Main interview, 2009)*

Jacob's esteem for 'critical' thinkers offered him a way to reposition himself as a critically reflective person. It is relevant to draw a link here between teacher educator, Olivia, who was described in chapter 4 as espousing a critical H-PETE position, and her role in the health class Jacob refers to in this quote. Both Kai and Jacob seemed to be committed, in varying degrees to 'critically' positioning themselves. While to Kai, this came somewhat naturally, Jacob described that 'being critical' was an ongoing challenge for him and that often he was in need of help from others to initiate his thinking. For Jacob, being critical was tied up in 'reflection' and being open to new perspectives, while for Kai it was about using her theoretical background of 'socially constructed truths' to assert her knowledge and directly challenge obesity discourse and new health imperatives. It seemed for Jacob, a critical position was something that he desired to embrace, and this was fostered, perhaps even initiated by his involvement in the teacher education program.

Jacob had little sckepticism for the teacher education coursework, as he did for other anecdotal stories of health from his mother and customers he described at the pharmacy. It is interesting that while academic sources tend to hold authority in the folds of Jacob's thoughts, at the same time he is sensitive to peoples' lived experiences that are not brought about through merely factual and authoritative sources. In this sense Jacob's subjectivity was inflected with a social justice ethic in addition to academic sources of knowledge.

Ideas about the 'healthy' child and teaching about health

Jacob's negotiation position continued with his discussion about what constitutes the 'healthy' child and schooling. Jacob did not have an established or coherent position on the issue of food, exercise or obesity discourse in the current climate of health imperatives in primary schools. What follows are further examples of his negotiation position.

In talk about school canteens, rather than ban foods (as did many of his PPGT peers: 'most people said you know you shouldn't be serving junk food'), Jacob's response was that there should be a range of options, including 'healthy foods': 'I don't think you should ban canteens, but I think it should have that continuum like, strongly agree, agree,

disagree, strongly disagree'. Jacob's approach was similar to what has been implemented in some schools as a Traffic Light category system, or 'occasional to fill the menu'? (e.g. Fresh Tastes @Sschool initiative, NSW DET, 2004) however in contrast, Jacob suggests a reluctance to regulate and govern children's eating practices.

When Jacob was on PEx, the school he was teaching at was running a school wide survey on nutrition and eating fruit. The initiative entailed in Jacob's words, that 'you tick off each day… how many kids had fruit for lunch or for recess, for one or both I think, and then… at the end of the week… the class who had the most got a prize'. When I asked Jacob if this was in relation to 'obesity', he repudiated my suggestion that there was any relationship between this initiative and a so called childhood obesity problem. Instead he linked its purpose to cutting out junk food: 'I don't think it was you know (a concern for obesity)… I think the focus seems to be on kids are having too much junk food, they're not eating healthily, canteens serving too much junk food'.

Jacob tended to acknowledge the complexity of children's involvement with food and refrained from blaming individuals for their 'risky' behaviours, as did many other participants. He described the lack of command children have over the food they eat and how some parents 'can't afford to buy fresh fruit and veg'. For Jacob the problem is partly about a lack of education about healthy food choices, partly about what parents can afford but also about desire, the attraction of lollies 'I would have gone for the lollies, cause that's what you do (as a child)'. In the end, he acknowledges it as a difficult issue, and comes to the position, 'I don't know':

> I think the kids, I think the problem doesn't lie with the canteens having available, junk food… I think the problem lays with the kids, not, you know, and not even not being educated to make good healthy food choices but that the… example set by their parents at home isn't great, or you know maybe they can't afford to buy fresh fruit and veg and so that dictates what they eat at home… I don't know, but then we ate healthily at home, and if I had money to buy stuff at the tuck shop, like I don't think they had healthy options but even if they did, I think I would have gone for the lollies cause that's what you do, so I don't know
>
> *(Main interview, 2009)*

In contrast to Kai (who said 'schools can always do more') and Caitlin (who wanted children to eat better, sleep more and be more active), Jacob was not particularly invested in promoting health rhetoric in schools. He lacked the enthusiasm Kai and Caitlin had for governing healthy children as a teacher. Jacob's resistance to governmental

techniques via the health imperatives was also apparent when he critiqued the idea of lunch box inspections in schools and likened them to the food survey he had seen on PEx. For Jacob, his main concern as a teacher was whether students had enough food as a necessity for concentration:

> … as a teacher… you know, I don't really see how it's (see what food they are bringing to school) going to effect my teaching other than if the kids are not eating… or not eating enough, or doesn't have enough you know, then that's why they're tired in the afternoon or that's why they're not concentrating
>
> *(Main interview, 2009)*

Jacob's position on 'healthy schooling' was not without tensions. While he seemed to be reluctant to be involved in health initiatives in schools, new folds of thinking also emerged from his teacher education experiences. This came out later in the interview as he described the uncertainty and shift in his thoughts about the role of the school and the teacher's involvement in (what I interpreted as) health promotion. There was a shift from a more knowledge based approach to health education involving talking and learning to a notion that schools might have a role in changing children's behavior by modeling good behavior. He specifically attributed this shift in his thinking to the H-PE coursework as part of his teacher training: 'this semester and so looking more at, well starting to think more like, maybe schools should be doing that stuff that I never though they should be doing':

> Int: do you think it's the schools, do schools have a role in childhood obesity… do you think it's their role to be taking on programs?
>
> I don't know, I sort of, I guess I think of schools as sort of more educating them to have an awareness, have a knowledge of that they can use that to make informed decisions, and um and that would be in terms of what they eat and how they eat and exercise and stuff, but exercise is mandatory as is you know teaching nutrition and stuff, I think my traditional view of what should be happening in the classroom would be more towards the talking about it, learning about it, less about practicing it. But I think that that might be changing, and it would have only been this year 'cause I didn't think that in the schools last year but this year probably through, well the only thing I've done to change that is PDH subject this semester and so looking more at, well starting to think more like maybe schools should be doing that stuff that I never though they should be doing, like you know programs to you know model that eating healthy, or whatever to give them an example of that, rather than just telling them facts and figures. That would be a much more effective way of teaching them how to eat well.
>
> *(Main interview, 2009)*

Jacob constantly negotiated conflicting ideas. Sometimes he recognised obesity, 'as something the government is pushing' and that teachers' involvement with the topic

resides with 'their attitude I guess or how much value they place upon it'. Jacob maintains this negotiation stance for his role as a teacher in agendas like 'crunch and sip' as one he'd rather not have to do. At the same time, he felt compelled to be involved, depending on parents' lack of responsibility and thus the need for him to intervene. Again, his position is far less rehearsed and confident than either Caitlin or Kai:

> I think ideally schools wouldn't do that, I think that schools, you know and maybe that's me as a teacher thinking you know surely that's not my responsibility as well, but also you know, when I become a parent I'm not going to, you know, I'm going to be making sure my kids are fed before they go to school because I know its important and I think yeah that would be the parents role but if they're not then it's a good thing that schools are doing it, so that's the flip side
>
> *(Main interview, 2009)*

In contrast to food related practices, Jacob spoke more confidently about his role in PE and the need to address bullying and self-esteem. 'I don't find PE scary or confronting or anything, maybe more stuff like sex ed., I find that confronting'. But in particular he considered bulling and self esteem as 'issues… that stand out' for children in schools.

> I think bullying, self-esteem, issues around self-esteem stand out. I'm not sure though if they stand out because they're universal and they're a growing problem… which is what I tend to think, but I'm also aware that I was bullied in high school and I'm aware that because of that I'm much more aware of bullying and place a huge, like probably disproportionate amount of focus on it. So we had to do a unit that I handed in just last week and I did mine on bullying because it's important to me… it may be that because I was bullied I blowed the problem out of proportion in my head… but I think bullying in schools is a real issue and I think self image, a lot of things come down to self image in terms of you know if a student now, young person is secure and happy in themselves then they're in a really good… state. Like I think that drives a lot of my educational, my teaching philosophy. That's what I want to impact, I'm terms of physical health wise I've got no idea like.
>
> *(Main interview, 2009)*

In the above quote, Jacob spoke at length about bullying and self esteem when I asked if there were any health education topics that stood out as important for children. Jacob's interest in these topics highlights the ways his own experiences have shaped his concerns for teaching children and thinking about health and wellbeing.

Jacob in summary

Jacob spoke of the limits to his teaching experience and envisaged a narrative that future experience in teaching would help him develop his position; 'I'll see when I get out there'. All of this tentativeness and uncertainty leads Jacob's position to be one of constant (re)negotiation of the healthy child and health education. Jacob as a PPGT is

likely to think through issues before foreclosing an opinion. He is still in the process of forming his ideas and open to experiences, formal knowledge and students' needs. As a point of difference within the materializations of the negotiation position, the following vignette from Veronica's interview has been included to provide a point of contrast to Jacob's expression of discourse. In difference to Jacob, this poetic vignette offers the textual representation of a female participant who is a mature age student in her 30s with three children. It also helps to demonstrate the slipperiness of the 'negotiation' position, particularly in relation to the body, in comparison to the more rigid agreement and disagreement positions.

Veronica: poetic vignette six

Veronica's varied experiences, have contributed to her subjectivity and thus the inclusion of text here as a point of contrast to Jacob's negotiation position. Veronica directly negotiates the relationship between health and the physical body, where as for Jacob, there was an absence of talk about the body and health. Like Jacob, Veronica's interview was particularly long and she spoke at length in her responses to questions; a feature characteristic of the other participants of a negotiation position. This length is reflected in the following poetic vignette:

> I kind of do like that I approached teaching from a later age.
> I reflect on things more.
>
> Health is a huge thing:
> It's not so cut and dried you know.
> I wouldn't even know where to begin.
> I grew up in the 80s with Norm,
> during the era of 'Life be in it'.
> 'Get off the couch' type thing.
> Now we are seeing a huge trend with mental health -
> building resilience with children.
>
> Health, for me personally,
> it's about the mental and physical.
> I have three children.
> They got a trampoline for Christmas.
> I like to get them out in the backyard.
> If they've been sitting at the Nintendo DS for too long,
> I force them out.
> I get them to talk about their feelings.
> Rather than getting angry;
> make sure they have time with their friends.
>
> People think about health in terms of what affects them.
> As I said, with me, it's mental health issues in my family.

If you're struggling with weight issues
It's eating and exercising or whatever;
A smoker with emphysema,
Maybe an issue with substance use - smoking.
We all have 'fat days' (but that's nothing).

Looking at someone you couldn't tell.
I'd like to say no, but in all honesty you can a little bit,
like I mean you can't say that all
obese people are unhealthy -
Could be an underlying medical condition.
A lot of people would assume automatically
seeing overweight or obese persons in the street;
they are 'unhealthy'.

You can't judge;
You don't know anything about that person!
It would be assuming,
Unless you really knew someone,
If someone is down and
not their usual self.

I've seen my husband in healthier times.
He's often lethargic.
He's overweight -
I should say obese, not overweight.
It is not an easy thing
with him: he doesn't eat well, he doesn't exercise.
It really is what most people would assume,
but I don't think that is the case for everyone.

I don't think there is enough time allocated to PDHPE
in the primary course.
I think that about the arts and other things too,
but you can't be stuck at uni for eight years.
You know, it's part of the profession
to keep your self informed,
Seek things out later on.

There is nothing wrong with the syllabus;
it is just that there is a lot to cover.
At one school I did not see PDH or PE the whole four weeks.
I was quite saddened.
They really needed it!
It was a lower socio-economic area.
Most children had lollies and chips in their lunchboxes,
No sandwiches.
Nothing else.
I was shocked!

They weren't overweight or anything -
Maybe one out of 40 students.
I started off rewards to whoever brought a piece of fruit to school.
One girl, very eager to please -
she came with a banana.
She had one bite and was gagging,

It was so foreign to her.
Banana is a weird flavour and texture if you're not used to it.
I didn't want her to have a negative experience.

You do notice with children, if they haven't eaten,
they burn out quicker,
they don't function as well.
Young people don't have control over their nutritional health.
You want to promote a healthy lifestyle -
regardless if they are obese or not.

I'm just a thinker in general.
Even after we leave here,
I'll be thinking about this.

Explicit in Veronica's poetic vignette is her 'thinking'; the fluidity of folds from her interpersonal relationships that create the conditions of possibility for the constitution of her subject (Deleuze, 2004). Through her text she traverses the different personal experiences that have passively come together in the overall materialisation of her negotiation position. She does not apply one truth to different situations, as those participants coded at agreement or disagreement tended to. The participants coded at negotiation tended to be 'thinkers', reflective about knowledge and the world around them, this is reflected acutely in Veronica's poetic vignette. There was movement and variation in the folds of knowledge she and others took up and were exposed to; this was apparent through a common openness to unease, or a lack of certainty in the language mobilised.

6.5 Discussion: Discourse positions and *becoming* teaching dispositions

In this chapter I have traced the ways 'truths' of health and the body manifest in PPGTs' subject positions through a method of biographical narratives, and as part of this representation, poetic vignettes. By incorporating particularly 'the fold' and to a lesser extent practices of the self, it was made visible, the ways PPGTs bring with them to their teacher education programs, multiple and complex stories of health and the body that are often contradictory and varied not only across the collective group but also within individual selves. In navigating the terrain of PPGTs' subjectivities in relation to health and the body, it is clear that the ways different PPGTs come to know about health and the body through 'foldings' and 'unfoldings' is not straightforward processes. Caitlin, Kai and Jacobs' lived experiences played a significant role in their health knowledge and practices. In particular, their biographical narratives demonstrate the varying degrees of

certainty with which particular discourse positions were espoused or eschewed in their constructions of the self and others. Foucault's (1997) theoretical groundwork of subjectivity proved a useful analytical approach to understand how there are 'many ways of being' and was pertient to identifying the emergent shifting, contradictory and varied subjectivities across the interview texts. The notion of subjectivity, assumes a level of complexity of the individual, as they understand themselves within a range of possible options for knowing. By capitalising on biographical narratives as a methodological approach, the ways each participant's subjectivities are located within a polyvalence of discourses and power relations could be demonstrated beyond the veneer of a singular subject position.

The sub-stories in the biographical narratives constructed by Kai, Caitlin and Jacob, demonstrate the different ways they engage practices of the self and how they deem others as 'healthy'. For Caitlin, health was often spoken about through dichotomies of unhealthy/ healthy or overweight/normal weight. Caitlin's foldings of health imperatives were sustained by her partner, mother and grandma, as well as friends who are working in health related industries such as personal training. The discursive truths reproduced in these contexts strengthened the foldings of healthism and obesity 'truths' and provided few resources for unfolding Caitlin's beliefs and attitudes. For Kai, health was constituted as complex, but for her personally, it was a juggling act of finding time and motivation to exercise. Kai's foldings of thought can be traced to her undergraduate degree in women's studies and Psychology, and bodily experiences of swimming for the ways they buttress her resistance to simplistic relationships between health and weight and the effects of this discourse on 'body image'. For Jacob, his constitution of health was informed by his work at the pharmacy and being 'inspired' by others who were considered 'critical' thinkers. Jacob's foldings may have begun with a disease-based model of health, which he has been immersed in through his job at the pharmacy as well as through some psychology based undergraduate subjects, but overall his experiences are constantly shifting and subject to new foldings and unfoldings. By exploring the connections and interactions in the production of agreement, disagreement and negotiation discourse positions, it was possible to bring to life the ways counter discourses are difficult to speak. In the case of Kai, she was not entirely outside 'the grid' of health imperatives, her disagreement with discursive truths in relation to health and the body was not untroubled by her personal practices and investments in health and

body ideals. Caitlin's more 'straightforward' engagement with truths about the body and health seemed to present fewer challenges to her coherent position. Across all of these PPGTs' narratives, historical truths of the contemporary healthscape depict the conditions of possibility for the constitution of the self in relation to discursive formations.

Returning to the research questions posed at the beginning of this chapter, each of the three narratives have gone some way to illustrate how PPGTs are positioned in relation to discourses of health and the body, as well as to describe the resources, derived from their lived experiences that they draw on to make meanings about health and the body. Particular sets of truths across the empirical material were more durable and pervasive than others. In particular, medico-scientific truths shaped participants' subjectivities and practices associated with the dispositif of new health imperatives. Stories that stem from medico-scientific knowledge include 'energy in + energy out', longevity, disease prevention and good/bad foods were strengthened, or challenged by, the participants' embodied experiences of health, wellness, gaining/losing or maintaining their body size and shape (e.g. the differences between Kai and Jacob).

Biographies of embodiment proved to be an important mediator of PPGTs' knowledge of health and the body. Fox (2002) applies Deleuzian theory to describe how normative narratives of health as they coalesce with individual's own embodiment have the potential to shape their sense of self: '[t]he lived physical body and the self which 'experiences' itself as being 'inside' the body are both consequences of reflexive, normative ways of thinking about embodiment and individuality' (p.352).

The spaces of knowledge construction within and without university were not uniformly contested and unstable for the participants coded at negotiation, whereas they were more stable in the responses of those espousing an agreement position. Rather, meanings of health generated from outside participants' university coursework provided a particular set of technologies in the constitution of the self for each of Caitlin, Kai and Jacob. Without question, this was also the case for the other participants across the data set.

The biographical narratives also demonstrate how the participants' pedagogical work of health education in schools is likely to be influenced by their lived experiences. For

Caitlin and Kai, it is likely that they will seek out opportunities to promote physical activity and healthy eating. However the translation of this belief into pedagogical work is likely to be nuanced differently based on their descriptions of the child and teaching. Caitlin spoke more about the child in terms of risk discourses, whereas Kai spoke about children in terms of giving them tools to make their own choices and the need to 'educate' about the 'benefits' and 'consequences'. Jacob on the other hand, was not sure where to situate himself in the healthscape of new health imperatives of schools and felt somewhat immobilised knowing what to do with 'health education' if it was not in relation to self-esteem, bullying and resilience. He oscillated between narrating health promotion agendas to be the parents' responsibility, or his, as teacher. Promoting health became a 'new' folding in Jacob's thought as he initially saw his role, as a teacher, to be one of 'traditional' forms of KLA based teaching – in contrast to enacting healthy schooling agendas.

Chapter 7

Discussion: How do we encourage pedagogical acts of health 'education' rather than 'promotion'?

The problem of the new health imperatives and health education

Is there always more health promoting to do?

Health education: 'Critical' orientations, alternatives and teacher education

In conclusion

7.1 The problem of the new health imperatives and health education

> Certain kinds of information are like smoke: they work themselves into people's eyes and minds whether sought out or not.
>
> *Haruki Murakami, The Wind-up Bird Chronicle (2010: 197)*

This thesis began as a response to the problem of the new health imperatives and obesity discourses as pervasive to contemporary healthscapes. The project was undertaken in response to longstanding neoliberal curriculum ideals of health education, as well as a rising tide of obesity related policies and practices in schools; both full of risk discourses and biopedagogies about how children should live their lives. In this context, I was interested in understanding how generalist pre-service teachers as a discrete group understand themselves within a grid of material-discursive possibilities for thinking about health and the body. Drawing on Foucauldian analytical tools, I have described the ways the PPGTs constructions of themselves and others were entangled (Barad, 2007) in biographical narratives including the *dispositif* of new health imperatives. In most instances, the PPGTs understood health and the body through discourses that infer health 'can' and 'should' be achieved through vigilant exercise and nutritional practices. Yet what constituted 'exercise' and 'nutrition' in the participants' definitions was often left undefined, or articulated in the reductionist sense of 'energy in and energy out' (i.e. eat less exercise more) and by association, a person's weight. Seldom were other beliefs about health such as social and cultural dimensions addressed. However, this finding was not without a few participants' embracing resistance to, or non-engagement with, dominant discourses. Some of the PPGTs understood themselves within counter discourses to health imperatives and drew on 'other' ways of knowing. Despite the emergence of these discontinuities, overwhelmingly, the empirical material was replete with participants taking up new health imperatives unquestioningly through their practices of the self and foldings of thought. In one sense, then, the new health imperatives can be likened to 'smoke', as it were, working themselves into people's eyes and minds.

One way the analysis of the empirical material in this thesis can be read is that the work of health promotion and public pedagogies of risk in contemporary healthscapes have been successful in generating, at least among the participants in this study, what would be

considered desirable thoughts of the ideal 'bio-citizen' (Halse, 2009). Chapters five and six, traced the ways the PPGTs constructed health and the body via descriptive statistics, discourse analysis, biographical narratives and poetic vignettes. Given the empirical analysis described in this thesis, it appears that the subjectivities (that is, the relations of pre-existing beliefs, values and attitudes) the PPGTs brought to their teacher education experiences are often likely to be derived from medico-scientific and risk based rationales for health that are circulated in both overt and subtle ways, through popular culture, schooling and family environs. The analysis also suggests that teacher education has had little effect in generating new forms of knowledge in relation to health with these PPGTs, especially from a critical orientation. This is not surprising given the little time dedicated to H-PETE coursework in primary teacher education programs and the more technocratic forms of knowledge that were promulgated at the sites of teacher education described in chapter four. Given this outcome of the analysis, it seems that the last thing PPGTs need to be told (in teacher education) is that they (or the children they are teaching) need to exercise more and eat 'healthy' or limit 'junk' foods. Rather, in the context of contemporary healthscapes, as defined in this thesis, it can be assumed that the foldings of health imperatives are already well fashioned in PPGTs' minds and moralities. To rearticulate these truths in teacher education, particularly in reductionist ways, would only serve to limit other ways of understanding health and the body. This is of particular pertinence given (according to Deleuze) our thoughts are in 'process' and we can only maintain consciousness of particular entanglements of discourse given their force, or the differences between forces of thought (Due, 2007). This is an ontological claim, in that health imperatives need to be interrogated or counteracted with new forms of knowledge in teacher education, but one of significance if we are to take seriously 21st century expectations and ideals of schooling, including the direction of new national health and physical education curriculum document.

In the recent draft of the new National H-PE curriculum document, there is a focus on teaching students to deconstruct health information and situate health related truths. It is proposed that students (school years 1-2; 6-8 years old) will:

> further develop their understanding about what being 'healthy' means and explore a range of personal and social factors that can influence their health and wellbeing. Students develop the knowledge, understanding and skills to de-construct and interpret the health information and messages that proliferate in the media and internet, in order to make informed decisions about their own health (ACARA, 2012: 12).

The document also emphasises the need for students to develop 'critical and creative thinking'. As part of this desired outcome, it is proposed that students will 'consider alternatives', 'think broadly and deeply' as well as 'question taken for granted assumptions'. The document states:

> Health and Physical Education will develop students' ability to think logically, critically and creatively in response to a range of health and physical education issues, ideas and challenges. Students will learn how to critically evaluate evidence related to the field and the broad range of associated media messages, and creatively generate and explore alternatives and possibilities (ACARA, 2012: 19).
>
> The Health and Physical Education curriculum will draw on its multi-disciplinary base with students learning to question the social, cultural and political factors that influence health and well-being. In doing so students will explore matters such as inclusiveness, power inequalities, taken-for-granted assumptions, diversity and social justice, and develop strategies to improve their own and others' health and wellbeing (ACARA, 2012: 5).

And, as part of 'inclusive practices in HPE', the paper also states:

> Health and Physical Education also provides a platform for all students to challenge stereotypes based on difference and develop inclusive attitudes, beliefs and behaviours, all of which are consistent with a socially critical perspective (ACARA, 2012: 6).

As we can see, the draft HPE curriculum comes with an emphasis on critical inquiry and a 'strengths based approach' and shies away from health 'promotion', per se. If we consider the literature that suggests that children's learning takes place mostly through means beyond schooling such as social media, familial environments, peers and youth culture (Lindstrom & Seybould, 2004; Luke, 2010; McSharry, 2009) this seems a useful and dynamic curriculum direction. While children and young people are by no means a homogenous group, there are dominant social and cultural influences on the types of emotions, actions and thoughts they are likely to experience in relation to health and their bodies. The 'creative' and 'critically' oriented ideals scattered throughout the draft H-PE curriculum document imply an important curricular intention for helping children to understand themselves in the ways health is socially constructed. In particular, these health education components present a unique chance to think about social change and bring into relief neo-liberal agendas of health, so prominent to the contemporary healthscape. Yet at the same time, the ways the PPGTs of this study engaged primarily with notions of health as an individual enterprise, raise serious issues for the field and future research to consider in relation to how well generalist teachers are pedagogically

placed as responsible for such curriculum ideals of critically oriented work. This is not to 'fault' generalist pre-service teachers themselves, but rather to argue that we need to examine the effects of how curriculum content (or other iterations likely to crystallize in the final document) are translated at the interface of schooling and how well placed teacher education is to cultivate graduates' knowledge in relation to health. There is important work to be done in this space, especially given the ways curricular intentions such as 'creativity' for instance, have struggled to be realised in H-PE schooling pedagogies (Griggs, 2009) or the significance of a supportive primary school culture to deliver 'alternative' forms of curriculum (Stone, 2006). In the context of pressures often brought about in a neo-liberal political climate of high stakes testing (Apple, 2003), more support and mechanisms are needed for pedagogical innovation.

Seemingly perpetual currents of healthism

Debates in education in relation to the critical politics of health have played out in H-PE literature for the past thirty years (Beckett, 1990; Cribb, 1986; Rich, 2011a). However, these debates remain relevant for the future. For instance, here I have explicated how new health imperatives operate through binaries such as healthy/ill or thin/fat, weak/strong, unfit/fit circulating through governmental and educational agendas. These folds of binary thinking have been mapped in the literature for the ways they continue to compel individuals to act as 'healthy' moral agents through risk knowledges embedded in the new public health (Colquhoun, 1990; Crawford, 1980; Fusco, 2006; Lupton, 1995). Like others, I support the notion that health education is little more than a 'partial response to the alleged health problems' it seeks to address (Quennerstedt, Burrows, & Maivorsdotter, 2010: 97). As Leahy (2012) has also concluded, the question needs to be asked: why is it that a health imperatives approach remains the dominant form of health education in schools (and some forms of teacher education)? My intention is not to disregard the importance of health education, but rather to highlight the role teacher education and primary schooling play in children's sense of self and health knowledge. The illumination of the current healthscape described in this thesis, suggests there is a need for health education to reinvent and redescribe itself in order to stay relevant and vital.

In response to this problem, I discuss the importance of philosophically and pedagogically differentiating between health *promotion* and health *education*, (or an educative approach to health). It is imperative to examine tensions surrounding the

existence of, and ideals of, health education, such as those expressed in the draft curriculum document, in that H-PE can't be a 'cure' or 'fix' to all new public health ideals. My descriptions and suggestions that follow are made under the proviso that there is no ultimate answer(s) for best practice, but rather there will be perennial challenges and effects of different materialisations of health education, and these will always need to be brought into question.

7.2 Is there always more health promotion to do?

> I think there can always be more (education).
> Health and nutrition is so important,
> especially when you look at adults.
> The diseases,
> and you know the cancers
> and the oh my gosh the flu's
>
> I don't think there is any way that we could over do it
> in terms of nutrition,
> and kids' learning at an early age.
> Healthy habits
> so that when they are adults
> they are already into healthy lifestyles
> they understand the risks and benefits
> of eating properly and stuff.
>
> *(Kai| GDE | Moore University | Main interview, 2009)*

Teachers in their curricular decisions, like Kai, are bound to a social healthscape where the emergence of health imperatives and obesity discourse has worked to define health, in particular, through individual responsibilisation for exercise and nutrition, and by association, 'looking good'. By way of PPGTs situatedness in this grid of health related truth(s), teachers are likely to reproduce similar truths and expectations of health with children, at the expense of other ideas about health. This is compounded by the many advocates from the health sector, who over the past 30 years have enlisted school health education as a means to safeguard against the threat of modern diseases (Kirk & Gray, 1990; Ryan, Rossi, Macdonald, McCuaig, & lisahunter, 2012). Furthermore the raft of school related physical activity and nutrition promotion programs in response to 'childhood obesity' has emerged along with research accessing their 'success' (see for example, Booth et al., 2006; Cho & Nadow, 2004; Dwyer et al., 2003; Fernandes & Sturm, 2010; Gibson, et al., 2008; Graham & Zidenberg-Cherr, 2005; Johnson et al., 2003; Nahas, Goldfine, & Collins, 2003; Resnicow, Cherry, & Cross, 1993).

At its most basic level, public health, and by association health promotion, has its roots in epidemiology; a discipline of strict quantitative measures with little attention to the social structures and determinants of health (Coveney, 1998; Raphael & Bryant, 2002). Thus, as established through this thesis, health promotion is inherently imbued with deeply political work grounded in risk and 'instructions on how to live', i.e. biopedagogies (Wright, 2009: p.1). Health promotion in its simplest form has traditionally worked on the premise that knowledge (through education) = behaviour change. Because of this residual frame of thinking in the work of health promotion, it is often assumed that if someone does not change their behaviour, or engage in desirable 'healthy behaviour', they are either 'uneducated' or incapable of taking care of themselves and by association immoral or lazy. Health promotion in this case serves the purpose of governmentality in contrast deconstructing the social layers of health. While a couple of recent studies from the field of health promotion seek to explore socio-cultural and contextual determinants of health promotion in schools (see Simovska, 2012) for the most part there is little exploration beyond narrow behavior change models. Risk based approaches are often deployed in promotional approaches and have been critiqued for the ways they function as 'political technologies of pre-emption in response to… threats' (Diprose, 2008: 171). In so doing they 'dampen openness (or 'potentially') to the future, the world and other people through projecting risks' (Diprose, 2008: 171). The assumption that knowledge, promulgated through risk-based biopedagogies can lead to behaviour change, has been heavily critiqued (Lupton, 1995; Raphael & Bryant, 2002; St Leger, 2006).

The work of biopedagogies in shaping risk based pedagogical work designed to bring about change in young people's behaviour has been well established here and in the literature (Burrows & Wright, 2007; Burrows, Wright, & Jungersen-Smith, 2002; Cliff & Wright, 2010; Evans, Evans, Evans, & Evans, 2002; Evans, Rich, et al., 2008; Gard & Wright, 2009; Leahy, 2009; Rich, 2010, 2011b). Broom (2001), for example, refers to the tensions associated with body knowledge in public health as 'ultimately ambiguous … we make different assumptions about embodiment at different times and that some of those assumptions are mutually contradictory'. One such contradiction is the promulgation of truths that encourage children to keep watch of their bodies, while at the same time, encourage them to 'feel good' about themselves and have a positive 'body image'. The emphasis in health promotion on the physical body and forms of control, self-discipline

and will-power tend to limit possibilities for deterritorialising health and body knowledge in other ways (Fox, 2002). Rather fear and risk in relation to health and the body are projected onto individuals; social groups that are defined as dangerous or pose a threat to ideal (bio)citizenry. Overweight and obesity are positioned as radically different from the desirable self and thus in need of control or intervention. Under these circumstances, the very thought of, and manifestation of 'the overweight Other' continues to invoke fear and anxiety at the level of the self.

There are multiple sites where the governance of health imperatives or biopedagogies are enacted 'from a distance' such as hospitals, the media and familial environs (Rose, 1996a) and there has been no shortage of advocates for health promotion in Australian schooling. Health promotion initiatives have been directed at nutrition and physical activity, road safety, and alcohol and drug use. As such, we tend to take for granted an approach to health where 'it's up to you' (Burrows & Wright, 2007: 84) that positions individuals as primarily responsible for crafting the kinds of lives and dispositions that suit them best. This positioning of the individual is given much attention in health texts, resources and curriculum documents that frame the basis of 'healthy' practices as one's ability to avoid 'risks' (Rossi, Tinning, McCuaig, Sirna, & lisahunter, 2009; Wright & Dean, 2007). Health promotion materialises in schools through different means such as explicit curriculum content, school programs and initiatives, and through the hidden curriculum. We know health promotion is a core agenda in schooling because it is considered to be 'inextricably tied' to national interests of the economy, national security even national identity' (Ryan, 2012: 1). The Australian Health Promoting Schools Association (AHPSA, 2012) formed in 1992 and was a key player in spreading the health promoting school (HPS) framework as part of a federal government commission to review health and other services provided by schools. Much of the expectation for health promotion in schools falls on to the learning area of H-PE. These expectations have played over time (Turner, 1966) and are apparent in the ambitions of influential documents such as those produced by the International Union for Health Promotion and Education (IEHPE) and the most recent iteration of the *Melbourne Declaration on Educational Goals for Young People,* which calls schools:

> [t]o enable students to build social and emotional intelligence, and nurture student wellbeing through health and physical education in particular (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008: 13).

Other health promotion advocates outside the field of education have outlined the responsibility of schools, specifically through H-PE, for their role in health promotion in relation to obesity prevention (see for example the National Health and Medical Research Council (NHMRC), 1996; National Preventative Health Taskforce, 2009). The emerging field of childhood paediatrics has also placed pressure on schools to meet physical activity outcomes (Jansen, et al., 2008; Rogers & Motyka, 2009; Sallis, et al., 2012; Spiegel & Foulk, 2006). However, the resources with which to teach, the status of the subject and the capacity of teachers to teach it in a context of high stakes testing, is considerably different from one classroom or school to the next and underdeveloped in relation to the needs of children (Angus, et al., 2007; Ardzejewska, McMaugh, & Coutts, 2010; Petrie & lisahunter, 2011).

Because high stakes testing and the intensification of teachers' work has detracted focus from H-PE as a learning area in recent years (Donald, 2007; George, Suzanne, Jesse, Rob, & et al., 2002), teachers may look to other prepackaged or other resources to do the work of 'health education'. For instance, outside providers such as Life Education Australia, the WHO endorsed Whole School Approach (WSA) or Health Promoting School (HPS) are popular means of primary school 'health education'. As a common method, the HPS framework was also a central topic of the teacher education programs described in chapter four of this thesis. The issues health promotion takes up, often depends on epidemiological research and popular media. Rather than examining the veracity of popular truths as a phenomenon, a health promotion approach works to changing behaviours. This is glaringly evident in an example of 'nutrition' content knowledge produced in a newly published Australian H-PE textbook, targeting pre-service primary generalist teachers. The very first sentence reads:

> The incidence of obesity and overweight in children of school age has doubled or tripled in a number of countries since the 1970s, including Australia, the United States, Canada and the United Kingdom. With these sorts of statistics, as well as a flourish of newspaper articles and campaigns highlighting the issue, there has never been a more important time to address the topic of obesity in schools (Meldrum & Peters, 2012: 220).

While the text goes on to briefly mention we need to be careful about couching messages of nutrition in obesity discourse, arguably the epistemological damage has been already been done. An immediate link between the rationale for school nutrition education with the 'obesity crisis' is explicitly made. Regardless of what side (or positions in between) of

the obesity debate one sits (Rich, et al., 2011), there are a myriad of interesting rationales for nutrition education that could be used, however in this instance these are negated in exchange for obesity discourse.

As a field we need to consider, but more importantly create, pedagogical resources beyond those that re-inscribe health imperatives. Biesta's (2010) call for reconnecting and updating with educational theory and innovative practice could not be timelier. There is a critical demand for a set of tangible alternatives, beyond ones that simply critique what is. The shortage of time primary teachers have to meet expectations in their day to day work (coupled with little teacher training in health) means we need to harness existing alternatives from the literature and work towards new options for teachers, both conceptually in content knowledge, and pedagogically. Given the colonisation of health curriculum by marketing of free pre-packaged health resources from commercial players (such as McDonalds and Coca-Cola) and outside providers (Powell, 2012; Griggs, 2010), the need for an *educational* approach to developing new health resources is a current imperative.

7.3 Health education – 'critical' orientations, alternatives and teacher education

Because the project of health education raises questions about what is good for people, inherently, it is a moral project. One way to unfold the stronghold of health imperatives is to differentiate, at least conceptually, between the work of health 'education' and health 'promotion'. Even though these two concepts are interrelated, it is important to delineate the ways they might materialise in the pedagogical work of generalist teachers. Differentiating between these concepts is not new to the field. For instance, at least since 1981, literature in relation to health education in Australia pointed out that 'health educators rarely question what heath education is, and on what basis it should be done' (Williams and Aspin, 1981 cited in Kirk & Gray, 1990: 70). Others (Rovegno & Kirk, 1995) argue for the importance of an ethic of care and responsibility and not only social justice as part of critical social work in education. Against an ongoing ethical backdrop for the need to deterritorialise[24] the *dispositif* of new health imperatives, I raise the question of what an educative approach to health might look like in practice.

[24] Deterritorialisation is used, as it was earlier in the thesis, borrowing Deleuze and Guattari use of the concept in Anti Oedipus (Deleuze & Guattari, 1985) as a process of directly challenging the dominant discourses or dispositive such as new health imperatives or obesity discourse.

It needs to be emphasised that teachers' work is demanding, and often underplayed in its complexity. This raises questions about the expectations of generalists' role in governmental health promotion initiatives and the ways they cover curriculum content. Health education offers a unique space where the political work of new health imperatives can be acknowledged and questioned in relation to children's lives. As part of an educative approach to health education, the new *Australian HPE Curriculum Shape* document proposes 'educative outcomes' as distinct from a 'cure all' approach to public health concerns. Furthermore, rather than taking a 'risk' approach, the document proposes a 'strengths-based' approach, which assumes that the majority of 'students come to the learning area feeling positive about their health' (p.3) and that health education should provide opportunities for children to practice and apply knowledge, understanding and skills in relation to health. Further to this there is an emphasis on health literacy, and critical inquiry which includes engaging social, cultural and political factors that influence health and well-being.

Throughout this thesis, I have drawn on literature that describes how H-PE has been deeply embedded with discourses of health and the body that favour investments in physical and aesthetic (appearance) forms of health. It would be useful for teachers, such as the PPGTs described in this study, to understand the ways 'the new public health' and the processes that govern the 'healthy citizen' collectively inflect the ways H-PE operates and is understood, and as an extension of this, young people's relationships to their bodies and health (Burrows, et al., 2002; Evans, et al., 2003b; Wright & Burrows, 2004). In an ideal form of health education teacher education, we need to direct attention to the ways discourses operate, coagulate and conflict through the pedagogical spaces of neoliberal economic climates/contemporary healthscapes. What this means is that we need to make explicit what constitutes risk discourses in order to differentiate from them.

As a general point of differentiation from health promotion, an educative approach to health, addresses questions of why and how health happens, rather than relying on a default position of naming or moralising 'un/healthy' practices. An educative approach has the potential to enrich students' experiences and knowledge of health in ways that expand their awareness and tools for thinking about and understanding of health so that they develop their own methods and understandings. In imagining a different type of

health education, I take conceptual inspiration from Hansen (2001) who contends 'good teaching':

> involves enriching, not impoverishing, students' understandings of self, others, and the world. It means expanding, not contracting, students' knowledge, insights, and interests. It means deepening, not rendering more shallow, students' ways of thinking and feeling. And it entails paying intellectual and moral attention as a teacher (Hansen, 2001: ix).

Hansen (2001) in his book, *Exploring the Moral Heart of Teaching*, emphasises teaching as a moral and intellectual practice with a rich tradition. If we entertain this idea of teaching for a moment, with all its Deweyan resonances, it brings into relief the current context of public health agendas in primary school health education. The focus, then, in the context of health education becomes an expansion of health knowledge and awareness, rather than simplistic risk based discourses. As part of this, health education needs new ways to reposition itself, alongside, but not conflated with 'Physical Education' and its associated health based imperatives. While recognising the need for innovation, the practicality of how one might even begin to incorporate alternative practices that define health more broadly presents a difficult task.

A critically oriented health education teacher education

Looking to what has been done before, there are possibilities for H-PETE to be used as a space of generative knowledge change. 'Critical' approaches, for instance have gained traction as a form of resistance to H-PE being used as a space for public health agenda since the late twentieth century. H-PE as a field in teacher education is characterised by a substantial group of scholars and practitioners who collectively are aligned with a 'critical' approach to health imperatives. Similar to what was described of teacher educator Olivia in chapter four, one response to new public health ideals and the recontextualisation of health imperatives, in teacher education has been to encourage 'critical', 'alternative', 'queer' or 'modest' pedagogies (Dinan-Thompson, 2004; Garrett, 2006; Garrett & Wrench, 2008; Kirk, 2004; Pringle & Pringle, 2012; Tinning, 2012). Collectively, these perspectives come from the 'critical social sciences of the body' as Michael Gard has called it. A 'socio-critical' perspective constitutes a specific group of scholars and teacher educators concerned with challenging conventional truths in relation to health imperatives, calling for educational engagement with alternative health knowledge. While the notion of 'critical pedagogy' with its roots in social justice may come to mind as part of this, I want to emphasise that the political and ethical work of critical pedagogy similar to what Ruiz and Fernandez-Balboa (2005) define in the field of PE is not well

understood by many teacher educators. As we know, there have been critiques of critical pedagogies claims to empowerment, for instance: Gore, 2003 calling for democratic approaches exposing critical pedagogy as just another ideological project; Tinning, renaming 'modest' pedagogies and Ellsworth's, 1989 paper, stating 'why doesn't this feel empowering' describing how the utopian ideals of critical pedagogy do not necessarily sustain the daily workings of educational sites. While all of this has relevance, it is not critical pedagogy, per se that I am specifically referring to as a 'socio-critical' approach. Rather I see clear parallels between those few speaking out from within the field of health education toward mainstream or dominant discursive materialisations of health education (for functioning as a mere extension of public health ideals). The agenda of such scholars and work in teacher education has been in response to normative and problematic materialisations of gender, sexuality and body knowledge in H-PE. Collectively I refer to these materialisations of resistance as a form of *parrhesia* - a Greek term deployed by Foucault (2001) and translated as fearless speech or 'truth' telling. In an ideal act of free/fearless speech, the teller expresses their relationship to truth through frankness instead of persuasion, and out of a sense of moral duty rather than self-interest and moral apathy. An act of *parrhesia*, then, is in direct response to an event, in a precise context. While there is little scope to theorise these ideas further here, I position the notion of *parrhesia* as a starting point for further discussion.

While the enactment of a critical social agenda, or 'truth telling' in teacher education may be one important approach to encouraging health education, I wonder how such a position has produced meaningful shifts in thinking for how individuals experiences themselves as 'fat', 'thin', 'healthy' or 'unhealthy'. As others have identified, it is far from successful in shaping many pre-service teachers' values and beliefs and in turn pedagogical choices. Collectively such 'critical' work has helped to write as academics and exert influence over policy processes, but I question how much it has done for 'student teachers who are attempting to grapple with uncertainty in a context in which everything is reducible to a competence or standard' (Allen, 2004: 417). In particular I argue that this approach needs to be augmented with practical examples and yet unrealised strategies in order to work towards building connections with PPGTs' lived experiences, values and beliefs; that is, the biographies they bring to their teacher training. Additionally, it is important to offer alternative forms of knowledge. To make such changes, I argue the field needs to consider new ways it can draw on health knowledge from other schools of

thought beyond western medico-scientific belief, or at least address some of the complexity that medical science can offer, rather than recycling its recontextualisations in public health, or directly resisting truths through critique.

Alternatives for the 21st century

> Future moments don't follow present ones like beads on a string. Effect does not follow cause hand over fist, transferring the momentum of our actions from one individual to the next … Our (intra)actions matter – each one reconfigures the world in its becoming- and yet they never leave us; they are sedimented into our becoming, they become us (Barad, 2007: 394).

Reimagining different forms of health education requires a starting point where learning spaces and pedagogical work is 'recognised as being deeply political and deeply significant' (Youdell, 2011:144). Tinning, in the final book chapter of *Body Knowledge and Control*, refers to educational spaces of 'hope and happening' (Tinning, 2004a). By this he points to the need for new spaces of educational practice beyond knowledge structures that enhance and maintain forms of power that favour a reductionist version of the body. As Barad writes, 'our (intra)actions matter' and thus new forms of health education may work to deterritorialise the existing dominance afforded to the corporeal body in H-PE. Important work takes place between the interactions between teacher, learner and subject matter (Lustead, 1986). Perhaps if we take a bioethical perspective (Miah, 2005, cited in Rich & Evans, 2005) as teacher educators, with concrete differentiations between technical, scientific and ethical expertise, there is the possibility for generative and ethical work in the translation of knowledge from which teachers draw. This work seems particularly important in a contemporary healthscape where commodified forms and new health markets of knowledges emerge and make possible different forms of subjectivity (Rose, 2000).

Post-modern technological developments offer a spread of possible knowledge transactions about health and the body in everyday life. For instance, there is the transmission of cultural and lifestyle messages on t-shirts and Facebook or Twitter newsfeeds and these each permit processes of pedagogical work (Sandford & Rich, 2006). Nadesan (2008: 5) writes that these "[c]irculating networks often involve computerised strategies of surveillance, representation, and control, thereby requiring individuals to succumb to historically novel surveillance modes and disciplines while adopting new kinds of technologies of the self requiring continuous self-modulation".

Kenway & Bullen, (2001) demonstrate how marketing and consumerism have steeped through the field of education. In this context, it is important to recognise the public pedagogies of cultural players other than teacher education - as they have the potential to undermine and conflict with the work done by H-PETE. In schooling, Johns (2005) argues that particularly in the context of consumer youth culture, we need to be critical of the recontextualisation of biomedicine under the guise of healthism, if we are to meet the disparity between the two objectives – youth culture and desired healthy practices of the self. Recently, it has been suggested that there are a range of related but distinctive problems for H-PE maintaining relevance for young people in the face of consumer culture pleasures (Gard, Hickey-Moody, & Enright, 2012). Attention to the forms of media that shape children's sense of self through more sophisticated forms of commercial pedagogies than educational is required.

Through movement and creative expression?

As part of engaging different forms of health and body knowledge, awareness through movement may offer possibilities. This is a worthy line of enquiry given the subjects of health and physical education are likely to remain united as a learning area. Lisahunter (2004) has written that we need to pay more attention to the body, in particular emotions and embodiment. Deleuze (1995: 87) who argues, 'never interpret: experience, experiment', suggests that experimentation as distinct from interpretation might mean the outcome of learning is unknown. There is not a truth to be recited that is 'right' or 'wrong' per se. Deleuze writes that:

> Expression must break forms, encourage ruptures and new sproutings. When a form is broken, one must reconstruct the content that will necessarily be part of a rupture in the order of things (Deleuze & Guattari, 1986: 28).

An approach of this kind requires us to take risks, with no sense of which standards, indicators or outcomes student teachers or policymakers may go towards in their wanderings. Taking up this conceptual offering, may open up new methods for knowing the body and health differently by acknowledging the role of lived experience in the formation of the subject that speaks and the 'foldings' of truths in this embodied process. For instance, Chai, Teo and Beng Lee (2009) emphasise the transformative process of becoming a teacher and the ways beliefs are challenged through cognitive resources, rather than a system of beliefs. His argument is made by drawing on Rosenberg et al. (2006) to suggest 'that different contextual conditions may evoke

different epistemological resources (Chai, Teo & Beng Lee, 2006: 358), therefore it is thought that the pre-service teachers different epistemological outlooks can be activated by different contextual cues in their teaching and study.

One way of encouraging thinking about the body differently, and its associations with health, beyond health based PE closely aligned with bio-medical discourse, is through different forms of movement and body awareness (see for example Markula, 2008; 2004). Other alternatives beyond the physical might not be brought to the table without a shift in the ways we think and imagine health education for its relationship to and distinction from PE. Tinning has pointed to the lack of engagement from H-PE as a field with alternative forms of movement, despite some work being done to forge out new pathways. He writes '[a]lthough we see the increasing presence of Tai Chi and Yoga… what do we do in our training to help students seriously engage such different perspectives from practical, experimental and theoretical perspectives' (p.118). He also makes the point that what would be mapped on the health radar of popular culture and even within the field, are 'often left unopened on reading lists'. For instance, he cites Wright's (2000a) work on Feldenkrais method as an alternative approach to movement with the potential to challenge the 'cult of the body'. Other forms include Alexander technique or Yoga where the body and mind become inseparable and the body can be re-introduced to levels of physical, reflective and intellectual awareness through movement (Mensinga, 2011). Other 'alternative' forms of health education that need not be linked with health imperatives include forms of eastern philosophies such as Ayurvedic medicine, mindfulness, confucianism and spirituality (see for example, Leopold, & Juniu, 2008; Rogers, 2011; Stewart et al., 2008).

In Art as Experience, Dewey (2005: 153) wrote of the unique ability of the arts to 'break through the crust of conventionalised and routine consciousness'. Artists, he felt, 'have always been the real purveyors of news, for it is not the outward happening in itself which is new, but the kindling by it of emotion, perception and appreciation'. In a recent discussion document titled *Creativity and the Arts in the Primary School* (Irish National Teachers Organisation, 2009), connections are made between dance, music and creativity in relation to health, stating: 'when we begin to create and respond to the arts ourselves, we kindle the fires of emotion, perception and appreciation. We look underneath the surface realities of the world. We release our imagination'. If we accept this idea for a

moment, one needs to be physically and mentally 'present' in the experience of discourse and non-discursive relations in order for them to shape the continuity and discontinuity of language, experience and memory, or move new foldings of knowledge like smoke into peoples eyes and minds. Such a notion parallels Barad's coinage of (intra-)acting, which has been drawn on at other points throughout this thesis:

> Particular possibilities for (intra-)acting exist at every moment, and these changing possibilities entail an ethical obligation to intra-act responsibly in the world's becoming, to contest and rework what matters and what is excluded from mattering (Barad, 2007: 178).

Perhaps we need to experience the 'games of truth', in the Foucauldian sense, to then embody and 'know' the discursive relations they fold or inscribe. What I am considering is that the nature of knowledge is directly connected to particular types of experiences and the relations to others and institutions around us. Using a pedagogical approach based in students' experience or memory (see Ovens, 2009) might encourage awareness of health and the body and may potentially bring into relief the promises of health imperatives based on projections risk and future longevity. Previous memories and experiences offer a point of opening into rethinking and defining health education. Borsay (2009), for instance using an interdisciplinary approach, brings together synergies of health in early 20th century politics with Picasso's bodies in an attempt to enrich understandings of healthcare, literature, philosophy and visual arts.

If the field of health education is perceived as 'nutrition' and 'physical activity' as it was by the majority of participants in this study, other ways of knowing and making connections between new forms of 'health' knowledge and experience are disqualified. One of the reasons knowledge might be disqualified is that it is considered too risky, or beyond the perceived boundaries of 'health education'. Teacher education and professional development, by way of 'joining the dots' with new or existing knowledge may offer a means to help teachers make connections with their own and others embodied experiences. The benefit of the generalist teacher in such a project is that they have other resources to draw on from other curricular areas. Opening up other seemingly, risky or unconnected knowledges in relation to health may help rupture the conceptual boundaries of 'health' and physical education.

Teacher education

> If nothing else, a student must get from his training a feeling of security in change.
> *(Charles Eames, 2007)*

Ideally, there is not one method that can be considered successful to create a sense of security in change, and innovation for becoming teachers in relation to health education. Indeed a range of perspectives, I would argue, provide a platform for PPGTs to develop their own content knowledge, conceptual ideas, embodied understandings and methods in an ongoing and experimental capacity. In this section, I briefly point to some of the different methods that have been utilised or have the potential to be incorporated in teacher education or health education to create new knowledge and reflexive self-understandings of the body and others.

Teacher education, as others have examined (Jourdan, Pommier & Quidu, 2010), is influential to primary teachers representations of health education. Teaching is a form of work that involves responding to new situations and the relationships that classrooms and schools make possible. Connell (2009) contends that,

> [to] do this well requires endless initiative and invention – the constant improvisation revealed in studies of the teaching labour process. It also requires a depth of knowledge about the culture, and a practice of critical analysis, which only an intellectually substantial programme of teacher education will support (Connell, 2009: 224).

Teacher education thus becomes a central resource for supporting PPGTs' learning if they are to graduate with sufficient intellectual engagement of content knowledge to teach successfully. At the same time, the process and exercises through which H-PE teacher education is done is only the means and never the end. Evident from the biographies described in this thesis, PPGTs come to their H-PE coursework with a set of well-established truths about health and the body. These truths serve as filters through which individuals come to know themselves within the foldings and unfoldings of truths that are available to them. As Deleuze said of his own students: 'nobody took in everything, but everyone took in what they needed or wanted, what they could use' (Deleuze, 1995 (1990): 139). To make a difference in some way, teacher education needs to undertake pedagogical work that points to the fissures and ruptures of dominant truths and generate new forms of knowledge. One important resource for this is the

variety of positions, perspectives and lived experiences that any cohort of PPGTs brings to their joint learning.

PPGTs need opportunities to consider the effects of discourses without feeling threatened, or overwhelmed. Loughran (2006) points out, 'for critical conversation to have any chance of happening, participants must feel safe in declaring imperfection'. Therefore, while it is necessary to ask questions about taken-for granted assumptions and purposes of knowledge in education, it must be done constructively rather then destructively. Bloomfield (2010) also charts some of the uncomfortable and emotional aspects of PPGTs' internships and teacher education and points to the influence this has on pre-teachers identity formation. As others in the field have outlined using Foucault's analytics, power is a transactional process that is manifested in a certain context (Öhman, 2010). Given power relations are complex intra-actions that occur in the practices of teachers and students, we should consider the experiences of individuals and their emotions in this process.

If teacher educators have a sensibility to the students' different values and beliefs, there is potential to draw on these in the educational process. One method for making connections between knowledge, beliefs and experience is critical storytelling. This has been used in forms of PETE as a method to engage representations of embodied experiences, privilege and difference and alternative forms of cultural practices (Garrett, 2006). Garrett and Wrench identified the diversity and depth of the subjectivities of the pre-service teachers in their study as a strength which could be drawn on to problematise traditional beliefs and assumptions. They argue that 'emerging histories, personal biographies and stories of teachers themselves all become legitimate sources of knowledge, education and possibilities for growth' (Garrett & Wrench, 2008). Indeed the poetic representations utilised in the analysis description of chapter six provide a form similar of critical storytelling that teacher educators could utilise to draw out different beliefs. In other uses of poetic representations, they have evoked emotional responses and initiated reflection in relation to individuals' professional work (Dowling, 1998 cited in Sparkes, Nilges, Swan and Dowling, 2003). However, referring back to Deleuze, it cannot be assumed that such work necessarily translates into student values and beliefs and in turn pedagogical work. What PPGTs will take from a pedagogical intentionality and deterritorialisation of health imperatives is anyone's guess. What counts, however, is

the opening up of possibilities for reimagining an educative approach to health in primary schools. Given the limited time H-PE teacher educators have to work with PPGTs, this makes what they do (the content, assessments and outcomes), even more important to reflect upon.

7.4 In conclusion

This thesis has outlined the importance of deterritorialising health imperatives in teacher education. Pointing towards the future, it is important to keep watch of the evolving obesity discourse and emerging truths of health and the body that will continue to present new discursive and material formations. Perhaps as times goes by, we will experience a silencing rather than a need to directly resist health imperatives and obesity discourse. It has been suggested that the tide is turning and the 'obesity epidemic' has had its day, however there is plenty of evidence in 2012 to suggest it remains a dominant truth garnering ongoing leverage in policy and schools. Gard (2011) writes, 'by the beginning of 2009 the obesity epidemic had become a second- or third-order problem for news and policy makers', yet at the same time, so many examples of obesity discourse prevail. Just this week two events occurred, an hour-long 'globesity' segment aired on ABC's *Foreign Correspondent* (ABC News, 2012) and a friend who is a teacher gave me a school memo with content including 'currently three out of four adolescents are obese' to justify participation in the school's sports carnival. Either way the discourse(s) metamorphose, the concern is what we do with this type of information in acts of health education. The dominant 'health' preoccupations of the future, may come from places we least expect it, and the field of H-PE and teacher education will need to consider and re-consider the social context from which pre-teachers draw their knowledge about health.

There is potential and space to break forms, encourage ruptures and new sproutings. However, the desire for certainty within education creates closure in practices and PPGTs' thinking. Connell (1993:27) points out 'education systems are busy institutions' where the fabrication of structures and performance require much effort and work. Health (and physical) education operates within this regime of accountability. Professionals are required to concentrate on proving competence and outcomes (Allen, 2004). Forms of health education, required by the Board of Studies as well as health promotional interventions, require teachers to conform and adopt. Such practices work to deny complex thinking, firmly establishing the territories of right and wrong, healthy

and unhealthy or teacher and taught. Helping teachers to understand complex and sensitive issues within health education, then, is not without difficulty. Rather than making explicit the different truths and problematising them, I propose we need to address a more pragmatic approach to deconstruction. Following Deleuze (1995: 87) who argues, 'never interpret: experience, experiment', I raise questions for the field about how we generate more resources, thoughtful pedagogical intentions and most of all encourage students to have experiences of and experimentation with theory, rather than interpretations of it (Allen, 2004).

Longstanding questions about quality in health education are not going to be easily 'solved'. Given the ongoing tensions that have surrounded health education we need alternative tools and ways of thinking in order to understand how health manifests in different geo-political, economic and social contexts and the different perspectives of teachers, schools, and students themselves. As Macdonald et al. argue:

> effective change needs to be problem-based and simultaneously owned and driven by a range of stakeholders across the educational spectrum, including universities, teacher educators, employers, policy-makers, communities, teachers, and students. Without such integration and collaboration, education systems will fail to meet the needs of postmodern learners, whether they be in schools or universities (Macdonald et al., 2002: 273).

In teacher education, biographical narratives provide an important resource for PPGTs to reflect on their values, beliefs and knowledge and how these might affect their pedagogical choices. The field would benefit from future research directed to the interface of pedagogical work, and the ways knowledge, values and beliefs are enacted. Indeed the limitations of this study include a lack of empirical material on the delivery of teacher education curriculum (as distinct from academics positions, assessment tasks and course outcomes), as well as the PPGTs' professional teaching experience in schools. Ethnographic work in these settings (schools and teacher education) would benefit the field particularly well for gaining a better insight into PPGTs' and teacher educators' health pedagogies and delivery of curriculum. Further to this, it would be useful to investigate the ways these PPGTs enact their knowledge in their early careers - employed as primary teachers. Longitudinal research following up with participants and their teaching would provide greater insight here. Of course, expanding the research beyond the two sites, especially to other states and territories, and with a greater number and range of participants would also offer better empirical nuances beyond that offered in

this thesis. As a final limitation and future direction, further attention to criticality as a health education outcome and how it is planned for and practiced is an important area of future investigation.

Teacher education needs to open up new ways for 'counter memories' and subjugated knowledges to meet, rather than to subscribe to, or leave unchallenged, parochial flows of healthism and obesity rhetoric. I have pointed to some examples of how more educative approaches to health might be engaged in order to consider discourse positions in relation to health and the body. These alternatives are not mutually exclusive, or without consequence. Integrated approaches to teacher education programming and professional experience are key spaces where change might be generated for quality health education. I return to my position at the beginning of the thesis in that if we could harness the energy wasted on weight and 'health' talk and direct it into more productive and innovative health education projects, children would ideally have more opportunities to develop critical perspectives of 'health' and the body and find relevance in their learning experiences to their own lives. While I admit this is not a straightforward task, tucked away aspects of health such as spirituality or interdisciplinary projects with the arts and languages, for instance, could open up possibilities for new flows or sproutings of knowledge, destabilising teachers' contingences to narrow perspectives of 'health' and the body.

Appendices

Appendix 1. NSW Institute of teachers Graduate teacher standards: 'Primary PDHPE Key Learning Area' (NSW Institute of Teachers, 2010: 10).

PRIMARY PERSONAL DEVELOPMENT HEALTH AND PHYSICAL EDUCATION (PDHPE) KEY LEARNING AREA

ELEMENT 1: TEACHERS KNOW THEIR SUBJECT CONTENT AND HOW TO TEACH THAT CONTENT TO THEIR STUDENTS

Undergraduate and graduate initial teacher education programs will include study of content described in the Unit content column in rows related to Standards 1.1.1, 1.1.2 & 1.1.3. Depth and breadth of study will vary according to length of program and number of units.

Aspect	Graduate Teacher Standard	Unit content	*Relevant areas of academic study for admission to a graduate entry program*
1.1.1 Knowledge of subject content	Demonstrate knowledge of the central concepts, modes of enquiry and structure of the content/ discipline(s)	broad and critical knowledge and understanding of the study of personal development, health and physical education, including recent theory and practice nature and role of PDHPE as a discipline for supporting the development of health and wellbeing: - movement studies including competence in fundamental movement skills through areas such as dance, gymnastics, games and sports and a range of physical activities - health studies including healthy eating, sexual health, safety, drug education, child protection education, interpersonal relationships and healthy choices.	Units in an undergraduate (and postgraduate) degree/s related to 3 or more Primary Key Learning Areas may be counted towards total units required, as specified on page 4 of this document. Areas of academic study related to the Personal Development, Health and Physical Education Key Learning Area are listed below. physical education studies health studies family studies health promotion human movement studies nutrition education sports science
1.1.2 Knowledge of pedagogy	Demonstrate research-based knowledge of the pedagogies of the content/ discipline(s)	knowledge base underpinning the principles and practices of teaching and learning physical education including methodologies of teaching movement skills through games and sports, dance and gymnastics knowledge base underpinning the principles and practices of teaching and learning personal development and health education models of pedagogy for teaching and assessing primary PDHPE range of strategies for teaching and assessing primary PDHPE ways of differentiating curriculum to meet the diverse needs of learners in the PDHPE classroom	
1.1.3 Knowledge of NSW curriculum requirements	Design and implement lesson sequences using knowledge of the NSW syllabuses or other curriculum requirements of the Education Act	role and value of PDHPE in the broader school curriculum and the relationship between PDHPE, numeracy and literacy place of primary PDHPE in the continuum of learning from K-12, including a particular understanding of the links between Stage 3 and Stage 4 *Personal Development Health and Physical Education K-6 Syllabus*, Support Documents and *NSW Primary Curriculum Foundation Statements*	

Appendix 2. List of responses and frequency to the survey question what words come to mind when you think of health?

diet: 21
sexuality: 1
exercise: 54
nutrition: 19
you are what you eat: 1
fitness: 1
safe: 1
mind: 11
body: 12
balance: 4
prevention: 1
holistic: 5
general wellbeing: 2
disease free:2
wellbeing: 19
physical: 16
emotional: 8
fit: 6
slim: 1
healthy eating: 11
Ottawa Charter: 1
medicine: 1
active: 3
essential: 1
important: 1
PDHPE: 4
spirit: 3
conscious decision: 1
maximise enjoyment in life: 1
taking care of your body: 1
good food: 3
relationships: 2
food: 15
junk: 1
not fat or thin: 1
balanced diet: 4
sport: 7
happiness: 3
satisfaction: 1
sexual education: 1
thin: 1
physical activity: 8
healthy food: 3
happy: 2
eating: 4
social: 5
mental: 13
active lifestyle: 2
challenging discrimination: 1
eat well: 4
good eating: 2
how my body feels: 1
obesity: 6
doctor: 3
smoking: 2
water: 2
fruit and vegetables: 6
good eating habits: 4
regular exercise: 2
sickness: 3
insurance: 1
crisis: 1
vital: 2
eating right:2
avoiding injury: 1
education: 2
schoolchildren: 1
hospital: 1
being happy: 1
what we eat: 1
fat people: 1
energy: 1
body image: 1
state of being: 1
movement: 1
feeling good about yourself: 1
PE: 1
apple: 2
mental health: 5
increase of overweight people: 1
freak: 1
digestion: 1
comfort: 1
vitamins and nutrients: 2
free from sickness: 1
a solid sector for investment: 1
soul: 3
survival: 1
wellness: 2
activities: 2
no medical conditions: 1
help: 1
lack of overweight: 1
whole person: 1
living long: 1
how the body works: 1
positive lifestyle: 1

Appendix 3. Tag cloud enlarged

Appendix 4. Interview questions 'Main' interviews

B.Education & Grad.Dip.Ed (Primary) Semi-structured Interview Schedule. No.1

(Designed to be open-ended and flexible).

Objectives:

At the conclusion of the interviews participants will have described:

i. Their attitudes, values and beliefs about health.
ii. Recollections of their own experiences with health and physical and health education (including family, schooling, cultural).
iii. The sources of information that have contributed to their knowledge of health, obesity and other contemporary health issues.
iv. Attitudes to their own and others bodies in relation to health.
v. The role of their teacher education program thus far in contributing to their knowledge about health and obesity discourse.
vi. Their future intentions of how they see themselves as a teacher, especially in relation to health and physical education.

Questions:

Intro.

1. Can you describe what has brought you to this degree and your interest in becoming a teacher?

Ideas about health

1. How would you describe a healthy person?
2. Where would you rate your health on a scale of 0-10?
3. Would you like to improve your rating?
    a. If so why?
    b. What would you do to improve your rating
4. Do you think people of different ages see health differently?
    a. Can you provide examples of how you think this?
5. Have you ever thought that you need to change what you eat or drink?
6. Have you ever thought that you needed to change your lifestyle for 'health' purposes? (e.g. exercise, health care providers, nutrition)
7. How would you tell if a person was healthy or not, or can you tell?
8. Have you ever consciously tried to lose weight?

Sources of knowledge that have informed understandings of health

1. What things do you think have informed your understanding about health? (e.g. family, friends, coursework based experiences, media, reading)
2. Have there been any key life experiences or individuals who have contributed to your understanding of health?
3. Can you recall any particular experiences that you **liked** in physical and health education at school? (Primary & Secondary).
4. Can you recall and particular experiences that you **disliked** in physical and health education at school? (Primary & Secondary)
5. What TV programs do you watch that have a health component? (e.g. Grey's anatomy, The Biggest loser, Jamie Oliver)
6. What extra curricular activities did you pursue during or after school when you were younger?
7. Do you read any print media with health content? (e.g. women's health, or oxygen, The Daily Telegraph Body and Soul) And to what capacity? i.e doctors surgery, or purchased.

Professional experiences.

1. Can you recall what physical and health education topics you taught during your professional experiences?
2. Have you experienced any reference to childhood obesity in any of your practicum experiences?

How you see yourself as a teacher?

1. As a soon to be teacher what do you see as the major issues facing young people?
2. Have you had any thought as to how you would like to teach physical and health education as part of the school day/ week?
3. What is your opinion about childhood obesity?
4. Have you heard of any alternative viewpoints about the obesity epidemic?

Appendix 5. Teacher educator interview format

Teacher Educator Semi-Structured Interview

(Designed to be open-ended and flexible).

Objectives:

At the conclusion of the interviews participants will have described:

i. Their beliefs, values and attitudes towards obesity and contemporary health issues.
ii. What they believe the biggest issues facing young people today are?
iii. The future directions they see for PDHPE content in Primary teacher education programs, and the key issues for teacher education?

Intro.

1. Can you introduce your teacher education background?
2. What do you like to do with your leisure time?

Ideas about health.

1. Can you define what health means to you?
2. How would you rate your health on a scale of 0-10?
    a. Would you like to improve your rating?
    b. Why is this?
    c. What would you do to improve your rating?
3. Do you think people of different ages see health differently? Can you provide some examples or explain how?
4. Do you think someone's weight or size has anything to do with their health?
5. Have you ever tried to lose or gain weight?

Contemporary health issues and young people.

1. What do you think are the biggest health issues facing young people in the future?
2. Have you heard much about childhood obesity?
3. What are your thoughts on reporting of obesity in the media?
4. Do you think schools have a role in addressing childhood obesity?
5. What other health issues do you think schools could address?

Ideas about teacher education.

1. What subjects do you coordinate or teach in the teacher education programs?
2. What do you think are the biggest influences on your student's knowledge, values and beliefs? (more specifically their health practices, and how they see young peoples health?)
3. What do you think are the most important concepts in the physical and health education teacher education courses you teach?
4. Is there any assignments or lectures that refer to contemporary children's health issues?
5. More specifically are there any assignments or lectures that explore childhood obesity?
6. How would you like to see PDHPE taught in the future, both in schools and teacher education programs?

Appendix 6. Participant information sheet

PARTICIPANT INFORMATION SHEET

RESEARCH TITLE: A sociological inquiry of pre-service Primary school teachers' values, beliefs and attitudes towards health and the body in contemporary local and global health economies.

PURPOSE OF THE RESEARCH

i) To investigate the cultural and institutional messages associated with health, the body and obesity discourse that are available to pre-service primary school teachers (e.g. current policies, programs and interventions, popular media, familial and individual experiences and teacher education coursework).
ii) To explore pre-service primary school teacher's current understandings, values, beliefs and attitudes towards health and body discourses.
iii) To understand how pre-service teachers see themselves as teachers of physical and health education curriculum.

INVESTIGATOR:
Ms. Rosie Welch
Faculty of Education

SUPERVISOR:
Prof. Jan Wright
Faculty of Education

rwelch@uow.edu.au jwright@uow.edu.au

METHOD AND DEMANDS ON PARTICIPANTS

One 45-60 minute semi-structured interview at a mutually convenient time and location (usually the uni campus at which you study). A second interview is optional upon completion of the first. Volunteering your time is the only inconvenience foreseeable.

POSSIBLE RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from your time to complete the survey and take part in two interviews **or** a focus group discussion, I can foresee no risks to you. Your involvement in the study is voluntary and you may withdraw your participation from the study at any time. Interviews will be recorded and transcribed. Focus groups will be videotaped and transcribed. You can withdraw any data that you have provided up until it is published. Refusal or acceptance to participate in the study will not affect your relationship with the University of Wollongong, or any involved individuals.

FUNDING AND BENEFITS OF THE RESEARCH

This research will provide valuable knowledge to inform teacher education programs, health policy and practice and contribute to a greater understanding contemporary health issues as presented in the media and circulating in contemporary local and global societies. Findings from the study will be published in a doctoral thesis, with the possibility of it entering educational journals or conferences papers. Confidentiality for yourself and your training institution is assured, as pseudonyms will be used in preparing and presenting the data. This way, there will be no identifying features on the data that can be traced to you.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the University of Wollongong Human Research Ethics Committee. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UoW Ethics Officer on (02) 4221 4457.For further information please contact Rosie Welch, rwelch@uow.edu.au

Your participation is highly valued and we look forward to hearing from you!

Appendix 7. Participant consent form

PARTICIPANT CONSENT
[INTERVIEW]

A sociological inquiry of pre-service Primary school teachers' values, beliefs and attitudes towards health and the body in contemporary local and global health economies.

RESEARCHER:
Ms. Rosie Welch
Faculty of Education
rwelch@uow.edu.au

SUPERVISOR:
Prof. Jan Wright
Faculty of Education
jwright@uow.edu.au

I have been given information about 'A sociological inquiry of pre-service Primary school teachers' values, beliefs and attitudes towards health and the body'. I have discussed this research project with Rosie Welch, the researcher, who is completing this research as part of her PhD in the Faculty of Education at the University of Wollongong.

I understand that if I consent to participate in this project **I will be involved in one or two 45-minute voice recorded interview/s**. I understand that my contribution will be confidential and that there will be no personal identification. All data will be stripped of personal identifiers and coded by the researcher prior to any analysis. I have had the opportunity to ask Rosie Welch any questions I may have about the research and my participation.

I understand that my involvement in the study is voluntary and I can withdraw my participation or any data that I have provided anytime up until it is published. I also understand that refusal or acceptance to participate in this study will not affect my relationship with my course or program at the University of Wollongong, or any involved individuals. I also understand that I will not be identifiable in anyway as pseudonyms will be used to replace my name.

I understand that if I have any enquiries I can contact Rosie Welch, rkw533@uow.edu.au and/ or Prof. Jan Wright jwright@uow.edu.au. If I have any concerns or complaints regarding the way this research has been conducted, I can contact the UOW Ethics Officer on (02) 4221 4457.

By signing below I am indicating my consent to participate in the research. I understand that the data collected from my participation will be used primarily for a PhD thesis, and will also be used in summary form for journal or conference publication, and I consent for it to be used in that manner.

Signed Date

..../...../.....

Name (please print)

.....

Appendix 8. PPGT Survey – Moore and Cavendish Universities

1. BY COMPLETING THIS SURVEY YOU WILL GO IN THE DRAW TO WIN ONE OF 6 ITUNES MU...

*** 1. I have read the participant information below and consent to participating in this survey.**

- yes
- no

P A R T I C I P A N T
I N F O R M A T I O N
S H E E T

RESEARCH TITLE: A sociological study of pre-service Primary school teacher's values, beliefs and attitudes towards health and the body in contemporary local and global health economies.

PURPOSE OF THE RESEARCH
i) To investigate the cultural and institutional messages associated with health, the body and obesity that are available to pre-service primary school teachers (e.g. current policies, programs and interventions, popular media, familial and individual experiences and teacher education coursework).
ii) To explore pre-service primary school teacher's current understandings, values, beliefs and attitudes towards health and the body.
iii) To understand how pre-service teachers see themselves as teachers of physical and health education curriculum.

INVESTIGATOR:
Ms. Rosie Welch
Faculty of Education
.
rwelch@uow.edu.au

SUPERVISOR:
Prof. Jan Wright
Faculty of Education
.
jwright@uow.edu.au

METHOD AND DEMANDS ON PARTICIPANTS
A 20-30 minute online survey at your convenience would be highly valued. Volunteering your time is the only inconvenience foreseeable. Your involvement in the study is voluntary and you may withdraw your participation from the survey at any time. You can also withdraw any data that you have provided up until it is published. Refusal or acceptance to participate in the study will not affect your relationship with the University of Wollongong, or any involved individuals.

FUNDING AND BENEFITS OF THE RESEARCH
This research will provide valuable knowledge to inform teacher education programs, health policy and practice and contribute to a greater understanding contemporary health issues as presented in the media and circulating in contemporary local and global societies. Findings from the study will be published in a doctoral thesis, with the possibility of it entering educational journals or conferences papers. Confidentiality for yourself and your training institution is assured, as pseudonyms will be used in preparing and presenting the data. This way, there will be no identifying features on the data that can be traced to you.

ETHICS REVIEW AND COMPLAINTS
This study has been reviewed by the University of Wollongong Human Research Ethics Committee. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UoW Ethics Officer on (02) 4221 4457. For further information please contact Rosie Welch, 42213603, rkw533@uow.edu.au

Your participation would be highly valued and we look forward to hearing from you!

THIS SURVEY IS VOLUNTARY, CONFIDENTIAL AND PRIVATE, YOUR RESPONSES WILL NOT BE ACCESSIBLE TO ANY PARTIES OTHER THAN THE RESEARCHERS. PLEASE GIVE SOME THOUGHT TO YOUR RESPONSES, NO ANSWER IS RIGHT OR WRONG.

3. Knowledge about health

The next few questions aim to explore the sources of health information that you access, and the experiences and knowledge that have contributed to your current understanding of health.

12. What are the first words or phrases that come to mind when you think of health?

1
2
3

13. How would you define a healthy person?

14. How important is health to you?

	Not very important				Very important
In the last month?					

15. Do you consciously choose to participate or engage in any activities or lifestyle practices for health purposes?

	Not very often				Very often
In the last month					

16. How likely are you to participate in the following activities?

	1 unlikely	2	3	4	5 Very likely
Organised fitness classes, gym based exercise, or accompanied by personal trainner					
Yoga or pilates					
Outdoor pursuits (e.g. bushwalking, kayaking, bike riding ect.)					
Competitive Team sports (e.g. hockey, soccer, netball ect.)					
Competitive Individual sports (e.g. running, athletics ect.)					

Other (please list)

17. How would you rate your current health?

	1 (unhealthiest)	2	3	4	5 (healthiest)
Health rating:					

18. To what extent would you like to improve your current health rating?

	Not at all				Very much
Please select					

19. How would you improve your health rating?

4. Ideas about health

20. What sources of information, do you think have developed or influenced your understanding of health?

21. Please select the extent to which you have watched the following health related programs in the past 6 months.

	Seldom				Frequently
Cooking programs (Ready Steady Cook, Jamie Oliver)					
Midday programs (Dr. Phil, Oprah)					
News programs (Sunrise or Today, A Current Affair, 60minutes)					
Reality Programs (Biggest Loser, Teen Fit Camp, Bondi Rescue)					
Live Sports (e.g. tennis, olympics, cricket ect)					
SBS or ABC health based documentaries					
Medical dramas (Scrubs, Greys Anatomy, All Saints, House, RPA)					

Please list any other shows that you have seen that refer to health related concepts

5.

22. Please select the extent to which you have read the following print media in the past 6 months.

	Seldom				Frequently
Newspaper based (Good Weekend (SMH), Body & Soul)					
Health magazines (Men's Health, Women's Health, WellBeing)					
Fitness/ physical actvity magazines (Oxygen, Musclemag, Muscle & Fitness, Health&Fitness, Flex, Dance Australia)					
Wellbeing/ lifestyle magazines (Living Wisdom, The Art of Healing, Healthyfood, Nature & Health)					
Weight Watchers					
Practical Parenting					
Sports Magazine's					

Other (please specify)

6.

23. How often have you accessed the following websites for health related information (intentionally or unintentionally).

	Never				Frequently
Government based (e.g. MeasureUp, Healthy Active Lifestyles)					
Pharmaceutical based (Blackmores Health Check, WebMD, NIH, MedicineNet)					
Diet based (Diet.com, eDiets)					
Others (Better Health Channel, Active Healthy Lifestyles, ABC Health & Wellbeing, Food Fitness, RealAge, Wellsphere, Yahoo Health, Everyday Health, Mayo Clinic, HealthCentral)					

Other (please specify)

10. What work (paid or voluntary) do you undertake? (e.g. sports coaching, hospitality, retail ect)

11. How likely are you to teach in Primary schools in the next three years?

	Very likely				Very unlikely
Please select.					

8. Ideas about your body

The following questions will ask you to describe your thoughts and feelings towards food, exercise and how you think about your body.

28. Please consider each statement and place a tick in the box that best reflects your agreement with the statement over the last months.

	Never				Very Often
How dissatisfied have you felt about your weight?					
Have you had a strong desire to lose weight?					
How much would it upset you if you had to weigh yourself once a week for the next four weeks?					
How dissatisfied have you felt about your shape?					
Has thinking about your weight interfered with your ability to concentrate on things you are interested in: for example reading, socialising?					
Has your weight influenced how you think about (judge) yourself as a person?					
Have you ever been afraid that you might gain weight?					
How uncomfortable have you felt seeing your body, for example in the mirror, shop window reflections or while undressing?					
Have you felt fat?					
Have you definitely wanted your stomach to be flat?					

9.

29. Please read each question carefully and indicate which best describes your usual behaviour.

	Never				Very Often
If you have put on weight do you eat less than you usually do?					
Do you try to restrict what you eat at meal times?					
How often do you refuse food or drink offered because you are concerned about your weight?					
Do you deliberately eat foods that are reduced fat?					
When you have eaten too much, do you eat less than usual the following day?					
Do you deliberately eat less in order to not become heavier?					
How often do you try not to eat between meals because you are watching your weight?					
How often do you try to eat in the evenings because you are watching your weight?					
Do you take your weight into account with what you eat?					

10.

30. Please read each statement and tick the box that applies to you.

	Never				Very Often
Do you engage in physical activity on a daily basis					
Do you exercise more than 3 days per week					
When you miss exercise do you feel guilty					
Do you ever not feel like exercise but go ahead and push yourself anyway					
Do your best friend(s) like to exercise					
When you miss exercise at a particular time and something unexpected comes up (like an old friend coming to visit or some work that needs attention) do you skip exercise for that day					
If you miss planned exercise do you attempt to make up for it the next day					
Do you ever miss a day of exercise for no good reason					
Do you feel the need to exercise twice in one day even though you may feel a little tired					
If you feel you have overeaten, do you try to make up for it by increasing the amount that you exercise					
If you miss a scheduled exercise session do you feel tense, irritable or depressed					
Do you find that your mind wanders to thoughts about exercising					
Do you keep a record of your exercise performance, such as how long you exercise for, or how far you run					
Have you experienced a feeling of euphoria or a "high" during or after an exercise session					
Do you frequently "push yourself to the limits"					
Have you exercised even when advised against such activity (ie by a doctor, friend)					
Do you engage in other forms of exercise if you are unable to engage in your usual form of exercise					

11. Professional Experiences

31. What stages have you taught during your professional experiences?

- Pre-school
- Early stage 1
- Stage 1
- Stage 2
- Stage 3

32. What school based experiences have you had other than teaching?

- Volunteer
- Parent
- Canteen
- External provider of services (e.g. coaching)

Other (please specify)

33. To what extent have you heard or observed reference to childhood obesity in any school based circumstance (e.g. playground, canteen, teaching)

	Never			Frequently
Please select.				

34. Have you engaged in conversation or discussion about obesity in the following settings (in the last year)?

	Never			Very Often
School				
Family and Friends				
Teacher training course				

Other (please specify)

35. Have you witnessed any child being bullied about their weight or physical size in any school based circumstance?

	Never			Many times
Frequency:				

12. Previous Schooling Experiences

36. Recalling your physical and health education experiences at school how would you describe them?

	Negative				Positive
Overall:					

37. Thinking back to your school physical education experiences how many instances were there that you disliked?

	None			Many
Please select				

38. Thinking back to your school physical education experiences how many instances were there that you liked?

	None			Many
Please select				

39. Did you experience any bullying or teasing about your physical appearance at school?

	Never			Very Often
Please select				

40. How likely are your own schooling experiences going to influence the way you choose to teach physical and health education?

	Unlikely			Very likely
Please select				

13. How do you see yourself as a teacher?

41. Please mark on the scale below where you would rate the importance of physical and health education in classroom programming.

	High			Low
Please select				

42. If a student asked you for advice on how to lose weight what do you think your response might be?

43. Would you consider measuring BMI as a learning activity in a lesson?

	Absolutely			Never
Please select				

44. What are the advantages and disadvantages of measuring Body Mass Index with students? (BMI is a measurement of height and weight)

Advantages

Disadvantages

45. Would you consider introducing lunch box inspections as a school initiative or as a lesson activity?

	Absolutely			Never
Please select				

46. What are the advantages and disadvantages of lunchbox inspections in schools to measure and comment on the nutritional value of students lunchboxes?

Advantages

Disadvantages

47. Do you think teachers or schools should play a role in addressing childhood obesity?

	Yes			No
Please select				

48. Please explain your selection to the above question.

49. Is there anything else overall that you would like to comment on?

Appendix 9. Graph data from chapter 5

Table 5. PPGT responses to survey question 18 (Likert scale): To what extent would you like to improve your current health rating?

	Moore University		**Cavendish University**		**Total**
Rating	*B.Ed*	*GDE*	*B.Ed*	*MT*	
1 *(not at all)*	0.0% (0)	0.0% (0)	0.0% (0)	5.0% (1)	5% (1)
2	5.2% (3)	10.5% (2)	2.9% (1)	10.0% (2)	6.35% (8)
3	22.4% (13)	26.3% (5)	17.1% (6)	20.0% (4)	22.22% (28)
4	37.9% (22)	31.6% (6)	31.4% (11)	45.0% (9)	33.33% (42)
5 *(very much)*	34.5% (20)	31.6% (6)	48.6% (17)	20.0% (4)	37.3% (47)

Table 6. PPGT responses to survey question 20 (Likert scale): Do you think someone's body size or shape has anything to do with their health?

Rating	**Moore University**		**Cavendish University**		**Total**
	B.Ed	*GDE*	*B.Ed*	*MT*	
1 *(not at all)*	3.4% (2)	0.0% (0)	0.0% (0)	5.0% (1)	2.1 (3)
2	8.6% (5)	10.5% (2)	8.6% (3)	15.0% (3)	9.42 (13)
3	36.2% (21)	26.3% (5)	25.7% (9)	25.0% (5)	28.3 (40)
4	31.0% (18)	52.6% (10)	45.7% (16)	35.0% (7)	41.1 (51)
5 *(very much)*	20.7% (12)	10.5% (2)	20.0% (7)	20.0% (4)	17.8 (26)

Table 7. PPGT responses to survey question 30 (Likert scale): How often has the topic of childhood obesity come up in your undergraduate coursework? (Eg. discussions, assignments, lectures, tutorials)

Rating	**Moore University**		**Cavendish University**		**Total**
	B.Ed	*GDE*	*B.Ed*	*MT*	
1 *(Never)*	1.7% (1)	42.1% (8)	2.9% (1)	35.0% (7)	13% (17)
2	20.7% (12)	31.6% (6)	50.0% (17)	45.0% (9)	33.7% (44)
3	36.2% (21)	0.0% (0)	35.3% (12)	20.0% (4)	28.2% (37)
4 *(Often)*	41.4% (24)	26.3% (5)	11.8% (4)	0.0% (0)	25.2% (33)

131

Appendix 10. Poetic vignette 2 – Savannah (agreement position)

Savannah's poetic representation, along with Caitlin's has a likeness to other participants in the study, and I would suggest many other teachers, given the social stronghold of the obesity discourse. By centralising the intensity of statements in poetic form, it perhaps can be an instrument to help the reader consider their own position.

Like if you see an overweight person,
well they can't…
even if they are mentally healthy…
I don't think they are healthy.

I classify myself as healthy -
that's just because
how I've been educated.
At home.
School has had an impact.
I know what it is to be healthy.

Other people,
teenagers out drinking all night,
smoking,
overweight and stuff.
Clearly they are not thinking
the same way as I am.

(I'm not saying I'm so good -
but it's obvious.)

I work at Coles.
It annoys me when I see
overweight people.
Getting coca cola,
chips,
frozen meals.
They're puffing at the register;
I'm like, 'do you care about your weight,
the diseases that you are going to get?'

I mean I eat fatty foods
Like chocolate.
I love chocolate.
But then, like after,
I'll go boxing,
Running.
I don't see why other people can't think like that too.

Mentally I'm pretty stable.
Probably nutrition is my downfall.
Everyone likes to pig out every now and then
but know your limit!
At least make up for it the next day.

You put on weight in Europe,
just eight kilos when I was first there -
So much oil and fat in Serbia!
This time though, I didn't.
I was eating salads,
not buying chocolate,
trying to keep a routine.

One friend, she is trying to lose weight.
Everyone's got a bit of chub there.
I'm like: we can exercise together.
Just support her really.

I love doing PE
and sport,
dancing.
Stuff like that.

It's always on TV - obesity going up.
You need a professionally qualified PE teacher
In primary schools
But the parents…
It's no point educating
when you're giving them roll-ups,
chocolates,
money for sausage rolls!

It's pretty big:
Healthy eating habits,
physical activity.
Obesity
- that all leads to it.

Teachers play a big role -
It doesn't get enough credit.
There's Math's and English to do.
Teachers need to realise it's affecting people:
Its' a big problem and things need to be done.
More prevention,
Less cure.

The tracings of health and the body in Savanah's poetic transcript, can be mapped to those in Caitlin's for the ways she associates health (and weight) to an individual's practices of 'energy in and out'. There are similarities to the agreement position across both poetic vignettes, however there also differences in the examples they draw on to talk about health (work, family, school).

Appendix 11. Poetic Vignette 4 – Drew (disagreement position)

Just being, quote: 'healthy', unquote
means having a fairly fit body,
being resistant to disease or mental illness
prolonging your life I suppose.

Keeping in mind it doesn't come up in discussion much,
I think a lot of people think of health
as being overly fit,
overly healthy,
the typical skinny sort -
doesn't eat more than a slice of lettuce.

We should think more about mental health
in terms of 'health'.
Keeping your brain active.
The right food, sleep time
- doing all of those, quote: 'healthy things'

I'm not the skinniest person around,
but I still consider myself healthy
except that I can't sleep;
I'm a chronic insomniac.
Spring every year,
I stop sleeping
it screws me right up.
(To manage it) I'm conscious of the foods I eat,
getting to sleep at the right time
those sort of things are really important.

I think everyone has a different outward appearance
I know some really skinny people,
and I don't think they are that healthy
(based on the amount of complaints
they have about their health).

You can't just access someone's health based on their appearance,
you need to know a bit about their history.
Mental health is an important component
You can't really tell the mental health of someone
I'm really a lay person when it comes to this stuff
I talk to doctors of course if there are issues
I don't seek out information about health
it's not exactly a big issue to me

My dad probably passed it (health knowledge) down to me.
When I was a teenager, we used to work out with each other
It wasn't to get muscular, or to get 'fit',
just not have a heart attack and die by the age of 30.
We're not exactly you know, a 'fit', health conscious family
We do try to keep approximately fit -
Maintenance (really).

You walk into the staffroom
there's always a couple of teachers there
eating rabbits food.
The ones who put a lot of pressure on others to eat less,
talking about how much people are eating,
Being thin,
It's always that sort of middle 35-45 year old age range,
And then others join in.
I just don't buy into it.
It actually annoys me whenever it comes up.

We did a subject (at uni) on the PDHPE KLA,
Most of it tended to be practical, PE
Not much on the rationale, why we are doing things
Or what's happening at the university level
Which is unfortunate.
I really feel it was just a tool-box of strategies and activities
I don't think the subject should be exempt from
the quality-teaching framework.
I suppose I'm going to have to make it up,
or research it before I teach.
It's not really satisfactory is it?

I think it's an issue (overweight)
But I wonder in terms of the media,
if this is a positive or a negative
to people's views on what is 'healthy'.
It's not something I engage in, those conversations
it's been something I've noticed.

I believe everyone is slightly different
One kilogram plus or minus is really inconsequential
Unless you are huffing or puffing walking across the playground
It really seems like there is a double message;
there are those overweight media reports, and the next will be a supermodel.

There's probably a combination of things causing childhood obesity
I'm not 100 percent certain.
If I was to teach at a school where obesity is an issue for those kids
I would at least try to understand why.
The programs and policies are a bit ad hoc,
there are all sorts of crazy ideas.
Feeding kids celery;
forcing only greens at lunch.
Talking to one science teacher the other day,
he thinks it is all evolutionary - that we are becoming fatter.
I'm a bit sceptical.
There are some whacky ideas out there.

Life skills, is what I think kids need in schools.
To know why they are doing things,
why you can't just lie down on the couch
and expect to live past a certain age.

References

ABC News. (2012). Fat's New Globesity Frontier. Retrieved 26th July, 2012, from http://www.abc.net.au/news/specials/globesity/

Abma, T. (2002). Emerging narrative forms of knowledge representation in the health sciences: two texts in a postmodern context. *Qualitative Health Research, 12*(1), 5-27.

ACARA, Australian Curriculum, Assessment and Reporting Authority. (2012). Draft Shape of the Australian Curriculum: Health and Physical Education. Retrieved August 2012, from http://www.acara.edu.au/curriculum/hpe.html

Agamben, G. (2009). *"What is an apparatus?" and other essays*. Stanford, California: Stanford University Press.

AHPSA (Australian Health Promoting Schools Aassociation). (2012). Aims of the Association. Retrieved 30th October, 2012, from http://www.ahpsa.org.au/who-are-we/aims-of-the-association/

Althusser, L. (1971). Ideology and state ideological apparatus: Notes towards an investigation. *Lenin and Philosophy and Other Essays*. Retrieved April 2012 from http://www.marxists.org/reference/archive/althusser/1970/ideology.htm

Allen, J. (2004). Deterritorializations: Putting postmodernism to work on teacher education and inclusion. *Educational Philosophy and Theory, 36*(4), 417-432.

Alvesson, M., & Skoldberg, K. (2006). *Reflexive methodology*. London: Sage.

Angus, M., Olney, H., & Ainley, J. (2007). In the Balance: The Future of Australia's Primary Schools. Kaleen, ACT: Australian Primary Principals Association.

Aphramor, L. (2005). Is A Weight - Centred Health Framework Salutogenic? Some Thoughts on Unhinging Certain Dietary Ideologies. *Social Theory & Health, 3*, 315-340.

Appadurai, A. (1996). *Modernity at Large*. Minneapolis: University of Minnesota Press.

Appignanesi, R., & Garratt, C. (2006). *Postmodernism*. Malta: Gutenberg Press.

Apple, M. (2001). Comparing neo-liberal projects and inequality in education. *Comparative education, 37*(4), 409-423.

Apple, M. (2003). Interrupting the right: On doing critical educational work in conservative times. *Symploke, 10*(1-2), 133-152.

Apple, R. (1996). Vitamania: Vitamins in American culture. New Brunswick, NJ: Rutgers University Press.

Ardzejewska, K. (2009). *Managing the delivery of subjects in NSW government primary schools: Using PE 'specialists'*. Doctor of Philosophy, Macquarie University.

Ardzejewska, K., McMaugh, A., & Coutts, P. (2010). Delivering the primary curriculum: The use of subject specialist and generalist teachers in NSW. *Issues in Educational Research, 20*(3), 203-219.

Arendt, H. (1978). *The Life of the Mind. Volume One: Thinking*. London: Secker & Warburg.

Arribas-Ayllon, M., & Walkerdine, V. (2008). Foucauldian discouse analysis. In C. Willig & W. Stainton Rogers (Eds.), *The Sage Handbook of Qualitative Research in Psychology* (pp. 91-108). London: SAGE.

Austin, S. B. (1999). Fat, loathing and public health: The complicity of science in a culture of disordered eating. *Culture, Medicine and Psychiatry, 23*, 245-268.

Australian Education Council. (1994). *Health and Physical Education: A Curriculum Profile for Australian Schools*. Carlton, Victoria: Curriculum Corporation.

Australian Government Department of Health and Ageing. (2004). Australian Government Tackles Obesity Through Ground Breaking Schools Program. Retrieved May 2008, from

http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2004-ta-abb089.htm?OpenDocument&yr=2004&mth=6
Australian Government Department of Health and Ageing. (2011a). Building a Healthy Active Australia: Active School Curriculum. Retrieved 12 September, 2011, from http://www.healthyactive.gov.au/internet/healthyactive/publishing.nsf/Content/active_school_curriculum.pdf/$File/active_school_curriculum.pdf
Australian Government Department of Health and Ageing. (2011b). Time to take some healthy measures? (female) poster. Retrieved 5th April, 2012, from http://www.measureup.gov.au/internet/abhi/publishing.nsf/Content/OrderGP
Australian Institute of Health and Welfare. (2009). A Picture of Australia's Children 2009. Cat. no. PHE 112. Canberra: AIHW.
Avalos, M., & Winslade, J. (2010). Education as a 'line of flight'. *Explorations: An E-Journal of Narrative Practice, 1*, 70-77. Retrieved July 2012 from http://www.dulwichcentre.com.au/explorations-2010-1-mariel-avalos-john-winslade.pdf
Ayers, S., & Housner, L. (2008). A Descriptive Analysis of Undergraduate PETE Programs. *Journal of Teaching in Physical Education, 27*, 51-67.
Azzarito, L. (2007). "Shape up America" Understanding Fatness as a Curriculum Project. *Journal of the American Association for the Advancement of Curriculum Studies, 3*, 1-23.
Azzarito, L., & Solomon, M. (2005). A reconceptualization of physical education: The intersection of gender/race/social class. *Sport Education & Society, 10*(1), 25-47.
Backman, E. (2008). What is valued in friluftsliv within PE teacher education? - Sweedish PE teacher educators' thoughts about friluftsliv analysed through the perspective of Pierre Bourdieu. *Sport Education & Society, 13*(1), 61-76.
Baert, P., & Carreira Da Silva, F. (2010). *Social Theory in the Twentieth Century and Beyond* (2nd ed.). Cambridge: Polity Press.
Bain, L. (1990a). 'A Critical Analysis of the Hidden Curriculum in Physical Education' In D. Kirk & R. Tinning (Eds.), *Physical Education, Curriculum and Culture: Critical Issues in the Contemporary Crisis*. London Falmer Press.
Bain, L. (1990b). Physical education teacher education. In W. Houston, M. Haberman & J. Sikula (Eds.), *Handbook of Research on Teacher Education* (pp. 758-782). New York: Macmillan.
Bain, L. (2009). The hidden curriculum re-examined. In R. Bailey & D. Kirk (Eds.), *The Routledge Physical Education Reader* (pp. 39-50).
Baker, B., & Heyning, K. (2004). Dangerous coagulations? Research, education, and a travelling Foucault. In B. Baker & K. Heyning (Eds.), *Dangerous Coagulations? The Uses of Foucault in the Study of Education* (pp. 1-79). New York: Peter Lang.
Bakhtin, M. (1984). *Problems of Dostoevsky's Poetics*. Bloomington, Indiana: Indiana University Press.
Ball, S. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy, 18*(2), 215-228.
Barad, K. (2007). *Meeting the Universe Halfway: Quantum Physics and the Matter and Meaning*. Durham: Duke University Press.
Bateman, S., Gutwin, C., & Nacenta, M. (2008). *Seeing things in the clouds: the effect of visual features on tag cloud selections*. Paper presented at the Proceedings of the nineteenth ACM conference on Hypertext and hypermedia, Pittsburgh, PA, USA.
Baudrillard, J. (2005). The finest consumer object: The body. In M. Fraser & M. Greco (Eds.), *The Body: A Reader* (pp. 277-282). Routledge: Oxon/ New York.
Beausoleil, N. (2009). An Impossible Task? Preventing Disordered Eating in the Context of the Current Obesity Panic. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'Obesity Epidemic': Governing Bodies* (pp. 93-107). New York: Routledge.

Beck, U. (1992). *Risk Society*. London: Sage.
Beckett, L. (1990). A critical edge to school health education. *Unicorn: Journal of the Australian College of Education, 16*(2), 90-99.
Bellieni, C., & Buonocore, G. (2009). Pleasing desires or pleasing wishes? A new approach to health definition. *Ethics and Medicine, 21*(1), 7-10.
Bernstein, B. (2001). From pedagogies to knowledges. In A. Morais, B. Neves, B. Davies & H. Daniels (Eds.), *Towards a Sociology of Pedagogy. The contribution of Basil Bernstein to research*. New York: Peter Lang.
Besley, T. (2005). Foucault, truth telling and technologies of the self in schools. *Journal of Educational Enquiry, 6*(1), 76-89.
Besley, T., & Peters, M. (2007). *Subjectivity and truth: Foucault Education and the Culture of the Self*. New York: Peter Lang Publishing.
Bhattacharya, K. (2008). Voices lost and found: Using found poetry in qualitative research. In M. Cahnmann-Taylor & R. Siegesmund (Eds.), *Arts-based research in education: Foundations for practice* (pp. 83-88). New York: Routledge.
Biddle, S, Gorely, T., Marshall, S. J., Murdey, I., & Cameron, N. (2004). Physical activity and sedentary behaviours in youth: Issues and controversies. *Journal of the Royal Society for the Promotion of Health, 124*(1), 29-33.
Biesta, G. (2008). Encountering Foucault in lifelong learning. In A. Fejes & K. Nicoll (Eds.), *Foucault and Lifelong Learning: Governing the Subject* (pp. 193-205). Oxon: Routledge.
Biesta, G. (2010). *Good Education in an Age of Measurement: Ethics, Politics, Democracy*. Boulder, Colorado: Paradigm Publishers.
Biressi, A., & Nunn, H. (2008). Bad citizens: the class politics of lifestyle television. In G. Palmer (Ed.), *Exposing Lifestyle Television: The Big Reveal, Ashgate 2008*.
Bloomfield, D. (2010). Emotions and 'getting by': a pre-service teacher navigating professional experience. *Asia-Pacific Journal of Teacher Education, 38*(3), 221-234.
Board of Studies New South Wales. (1992). *Personal Development, Health and Physical Education K-6 Syllabus and Support Document Formal Consultation Draft.* North Sydney: Board of Studies.
Board of Studies New South Wales. (1997). *Physical Activity for Health and Fitness: A support document to the K-6 Personal Development Health and Physical Education Consultation Draft Syllabus.* Sydney: Board of Studies.
Board of Studies New South Wales. (2007). *Personal Development, Health and Physical Education K-6 Syllabus*. Sydney: Board of Studies.
Boero, N. (2007). All the news that's fat to print: The American 'obesity epidemic' and the media. *Qualitative Sociology, 30*, 41-62.
Booth M, Macaskill P, McLellan, Phongsavan P, Okely T, Patterson J, Wright J, Bauman A, Baur L. (1997). *NSW Schools Fitness and Physical Activity Survey (SPANS)*, 1997: Summary. Sydney: NSW Dept of School Education.
Booth, M., Okely, A., Denney-Wilson, E., Hardy, L., Yang, B., & Dobbins, T. (2006). *NSW Schools Physical Activity and Nutirion Survey (SPANS).* Sydney: NSW Department of Health.
Bordo, S. (2003). *Unbearable Weight: Feminism, Western Culture and the Body* (10th ed.). Berkeley: University of California Press.
Borko, H., & Putnam, R. (1996). Learning to Teach. In D. Berliner & R. Calfee (Eds.), *Handbook of Educational Psychology*. New York: Macmillan.
Borsay, A. (2009). Picasso's bodies: representations of modern society? *Medical Humanities, 35*, 89-93.

Bourdieu, P. (1998). Utopia of Endless Exploitation: The Essence of Neoliberalism. from Le Monde Diplomatique. Retrieved August 2011 http://mondediplo.com/1998/12/08bourdieu

Brandl-Bredenbeck, H. P., & Kampfe, A. (2012). Surveys. In K. Armour & D. Macdonald (Eds.), *Research Methods in Physical Education and Youth Sport*. Oxon: Routledge.

Bray, K. (2012). Dr Google is in: searching for medical information online can sometimes do more harm than good. *Choice (Chippendale, Australia)*. 38.

Bray, S. (1991). Health-related physical activity in the Primary school. In A. Armstrong & A. Sparkes (Eds.), *Issues in Physical Education*. London: Cassell Educational Limited.

Britzman, D. (2003). *Practice Makes Practice: A Critical Study of Learning to Teach*. Albany, NY: SUNY Press.

Britzman, D. (2009). *The Very Thought of Education: Psychoanalysis and the Impossible Professions*. Albany, NY: State University of New York Press.

Broom, D. (2001). Public health, private body. *Australian and New Zealand Journal of Public Health, 25*(1), 5-8.

Brown, D. (2005). An Economy of gendered practices? Learning to teach physical education from the perspective of Pierre Bourdieu's embodied sociology. *Sport, Education and Society, 10*(1), 3-23.

Brown, S., & Macdonald, D. (2009). Physical Education as Vocational Education: A Marginalising Curriculum Space? In M. DinanThompson (Ed.), *Health and Physical Education: Issues for Curriculum in Australia and New Zealand*. South Melbourne: Oxford University Press.

Bullough Jr., R., & Gitlin, A. (1991). Educative Communities and the development of the reflective practitioner. In R. Tabachnick & K. Zeichner (Eds.), *Issues and Practice in Inquiry-Oriented Teacher Education*. London: Falmer Press.

Bunton, R., Nettleton, S., & Burrows, R. (1995). *The Sociology of Health Promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London: Routledge.

Burdick, M. (2011). Researcher and teacher-participant found poetry: Collaboration in poetic transcription. *International Journal of Education & the Arts, 12(*Special Issue 1.10), 1-18.

Burkitt, I. (2002). Technologies of the self: Habitus and capacities *Journal for the Theory of Social Behaviour, 32*, 219-237.

Burns, M., & Gavey, N. (2004). 'Healthy weight' at what cost? 'Bulimia' and a discourse of weight control. *Journal of Health Psychology, 9*(4), 549-565.

Burns, R. (1993). Health fitness and female subjectivity: what is happening to school health and physical education. In L. Yates (Ed.), *Feminism and Education*. Melbourne: La Trobe University Press.

Burrows, L. (1999). *Developmental discourses in school physical education*. Doctor of Philosophy, University of Wollongong, Wollongong.

Burrows, L. (2009). Discursive Dilemmas in New Zealand's Health and Physical Education Curriculum. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for Curriculum in Australia and New Zealand*. South Melbourne: Oxford University Press.

Burrows, L. (2010a). 'Building castles in the sand': Community, context and physical culture. In D. Macdonald & J. Wright (Eds.), *Young People, Physical Activity and the Everyday*. Oxon: Routledge.

Burrows, L. (2010b). 'Kiwi kids are weet-bix kids' -body matters in childhood. *Sport, Education and Society, 15*(2), 235-251.

Burrows, L., McLachlan, F., & Spowart, L. (2012). The dissertation. In K. Armour & D. Macdonald (Eds.), *Research Methods in Physical Education and Youth Sport*. Oxon: Routledge.
Burrows, L., & Wright, J. (2001). Developing Children in New Zealand school physical education. *Sport, Education and Society, 6*(2), 165-183.
Burrows, L., & Wright, J. (2004). The discursive production of childhood, 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. 83-95). London Routledge.
Burrows, L., & Wright, J. (2007). Prescribing practices: Shaping healthy children in schools. *International Journal of Children's Rights, 15*, 83-98.
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, 22*(1), 39-48.
Bussolini, J. (2010). What is a Dispositive? *Foucault Studies, 10*, 85-107.
Butler, J. (1993). *Bodies That Matter: On the Discursive Limits of "Sex."* New York: Routledge.
Butler, J. (1997). *The Psychic Life of Power*. Stanford: Stanford University Press.
Cahnmann, M. (2003). The craft, practice, and possibility of poetry in educational research. *Educational Researcher, 32*(3), 29-36.
Calderhead, J. (1996). Teachers: beliefs and knowledge In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology*. New York: Macmillan.
Callea, M. B., Spittle, M., O'Meare, J., & Casey, M. (2008). Primary school teacher perceived self-efficacy to teach fundamental motor skills. *Research in Education,* (79), 67-75.
Campos, P. (2004). *The Obesity Myth: Why America's Obsession with weight is Hazardous to Your Health*. New York: Penguin Group.
Campos, P., Saguy, A., Ernsberger, P., Oliver, E., & Gasser, G. (2006). Response: Lifestyle not weight Should be the Primary Target. *International Journal of Epidemiology, 35*, 81-82.
Capel, S., & Blair, R. (2007). Making physical education relevant: increasing the impact of inital teacher training. *London Review of Education, 5*(1), 15-34.
Carabine, J. (2001). Unmarried Motherhood 1830-1990: A Genealogical Analysis. In M. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse as Data: A Guide for Analysis*. London: Sage Publications.
Carter, K. (1990). Teachers' knowledge and learning to teach. In W. Houston, M. Haberman & J. Sikula (Eds.), *Handbook of Resaerch on Teacher Education* (pp. 291-310). New York: Macmillan.
Carter, M.-A., & Swinburn, B. (2004). Measuring the 'obesogenic' food environment in New Zealand primary schools. *Health Promotion International, 19*(1), 15-20.
Chai, C., Teo, T., & Beng Lee, C. (2009). The change in epistemological beliefs and beliefs about teaching and learning: a study among pre-service teachers. *Asia-Pacific Jounal of Teacher Education, 37*(4), 351-362.
Cheek, J. (2008). Healthism: A new conservatism? *Qualitative Health Research, 18*(7), 974-982.
Cho, H., & Nadow, M. (2004). Understanding barriers to implementing quality lunch and nutrition education. *Journal of Community Health, 29*(5), 421-435.
Clark, J. A. (2001). Sex Education in the New Zealand Primary School: A tangled skein of morality, religion, politics and the law. *Sex Education, 1*(1), 23-30. doi: 10.1080/14681810120041698
Clarke, D. (2000). *'Save Our Souls' from forward rolls : an investigation of Bachelor of Education Primary students' perceptions of and level of efficacy in teaching Personal Development, Health*

and Physical Education (PDHPE) in the K-6 context. Paper presented at the Sydney 2000 papers and abstracts. Retrieved July 2012 from http://www.aare.edu.au/00pap/cla00216.htm

Cliff, K. (2012). A sociocultural perspective as a curriculum change in health and physical education. *Sport, Education and Society, 17*(3), 293-311.

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.

Cochran-Smith, M., & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education, 24*, 249-305.

Cogan, J., & Ernsberger, P. (1999). Dieting, Weight, and Health: Reconceptualizing Research and Policy. *Journal of Social Issues, 55*(2), 187-205.

Cohen, L., Perales, D., & Steadman, C. (2005). The O word: Why the focus on obesity is harmful to community health. *Californian Journal of Health Promotion, 3*(3), 154-161.

Cohen, S. (2002). *Folk devils and moral panics*. New York: Routledge.

Colebrook, C. (2002). *Gilles Deleuze*. London: Routledge.

Collier, C. (2006). Models and curricular of physical education teacher education. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *The Handbook of Physical Education*. London: SAGE Publications.

Collins, S. (2007). 'Moral panic' Over Obesity, *The New Zealand Herald*. Retrieved 2009, from http://www.nzherald.co.nz/topic/story.cfm?c_id=206&objectid=10439312

Colquhoun, D. (1990). Images of healthism in health-based physical education. In D. Kirk & R. Tinning (Eds.), *Physical Education, Curriculum and Culture* (pp. 225-251). Basingstoke, Hampshire: The Falmer Press.

Commonwealth of Australia. (1992). Physical and sport education - A report by the senate standing committee on environment, recreation and the arts. Canberra.

Commonwealth of Australia. (2008). How do you measure up? Retrieved 29 October, 2008, from http://www.measureup.gov.au/internet/abhi/publishing.nsf/Content/Home

Connell, R. (2009). Good teachers on dangerous ground: towards a new view of teacher quality and professionalism. *Critical Studies in Education, 50*(3), 213-229.

Corbin, C. (2002). Physical activity for everyone: what every physical educator should know about promoting lifelong physical activity. *Journal of Teaching in Physical Education, 21*(2), 128-144.

Court, M. (2004). Using narrative and discourse analysis in researching co-principalships. *International Journal of Qualitative Studies in Education, 17*(5), 579-603.

Coveney, J. (1998). The government and ethics of health promotion: the importance of Michel Foucault. *Health Education Research, 13*(3), 459-468.

Coveney, J. (2002). *Food, Morals and Meaning: The Pleasure and Anxiety of Eating*. London: Routledge.

Crawford, R. (1980). Healthism and the Medicalization of Everyday Life. *International Journal of Health Services, 10*(3), 365-388.

Crawford, R. (1986). A cultural account of 'health': Control, release, and the social body. In J. McKinlay (Ed.), *Issues in the Political Economy of Health Care* (pp. 60-103). London: Tavistock.

Crawshaw, P. (2007). Governing the healthy male citizen: Men, masculinity and popular health in *Men's Health* magazine. *Social Science & Medicine, 65*(1606-1618).

Cribb, A. (1986). The politics of health education. In A. Riodmell & S. Watt (Eds.), *The politics of health education: Raising the issues* (pp. 100-120). London: Routledge & Kegan Paul.

Crossley, N. (1993). The politics of the gaze: Between Foucault and Merleau-Ponty. *Human Studies, 16*(4), 399-419.
Crowe, M. (1998). The power of the word: some post-structural considerations of qualitative approaches in nursing research. *Journal of advanced nursing*, 28(2), 339-344.
C.S. Mott Children's Hospital. (2012). School Obesity Programs May Promote Worrisome Eating Behaviors and Physical Activity in Kids. *Pediatrics Week, 14*(2), 341.
Curtis, P. (2008). The experiences of young people with obesity in secondary school: some implications for the healthy school agenda. *Health and Social Care in the Community, 16*(4), 410-418.
Daly, C. (2002). *Tales from the oval office: a narrative exploration into the world of itinerant physical education teachers in Queensland primary schools*. Griffith University, Nathan Qld.
Darling-Hammond, L. (2005). Prepping Our Teachers for Teaching as a Profession. *Education Digest: Essential Readings Condensed for Quick Review, 71*(4), 22-27.
Darling-Hammond, L. (2006a). Constructing 21st-Century Teacher Education. *Journal of Teacher Education, 57*(3), 300-314.
Darling-Hammond, L. (2006b). *Powerful teacher education: lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
Darling-Hammond, L., Wei, R., & Johnson, C. (2009). Teacher preperation and teacher learning: A changing policy landscape. In G. Sykes, B. Schneider & D. Plank (Eds.), *Handbook of Education Policy Research* (pp. 613-636). New York: Routledge.
Davidson, F. (2007). Childhood obesity prevention and physical activity in schools. *Health Education, 107*(4), 377-395.
Davis, B. (1997). The subject of poststructuralism: A reply to Alison Jones. *Gender and Education, 9*(3), 271-283.
Davies, B. (1992). Womens subjectivity and feminist stories. In M. Ellis & M. Flaherty (Eds.), *Investigating Subjectivity: Research on Lived Experience*. Newbury Park: Sage.
Davies, B. (2005). The (Im)Possibility of Intellectual Work in Neoliberal Regimes. *Discourse: Studies in the cultural politics of education, 26*(1), 1-14.
Davies, B., & Harré, R. (1990). Positioning: The discursive production of selves. *Journal for the Theory of Social Behaviour, 20*(1), 43-63.
de Vries, J. (2007). The obesity epidemic: medical and ethical considerations. *Science Engineering Ethics, 13*, 22-67.
Deacon, R. (2003). *Fabricating Foucault. Rationalising the Management of individuals*. Milwaukee: Marquette University Press.
Dean, M. (1994). "A social structure of many souls": moral regulation, government and self-formation. *Canadian Journal of Sociology, 19*(3), 145-168.
Dean, M. (1999). *Governmentality: Power and Rule in Modern Society*. London: SAGE Publications.
Deleuze, G. (1995). *Negotiations: 1972-1990* (M. Joughin, Trans.). New York: Columbia University Press.
Deleuze, G. (2011a). *The Fold: Lebiniz and the Baroque* (T. Conley, Trans.). Minneapolis: University of Minnesota Press.
Deleuze, G. (2011b). *Foucault* (S. Hand, Trans.). London: Continuum.
Deleuze, G. (2004). *Difference and Repetition*. Translated from the French by Paul Patton. London, Continuum. (Original work published in 1968).
Deleuze, G., & Guattari, F. (1985). *Anti-Oedipus*. London: Athlone Press.
Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Athlone Press.

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.
Dewey, J. (2005). *Art as Experience*. New York: The Berkely Publishing Group.
Dinan-Thompson, M. (2004). A teacher educator's attempt to encourage general preservice teachers studying Health and Physical Education curriculum to explore embodied subjectivities. *Redress, 13*(2), 27-31.
Dinan-Thompson, M. (2009). Voices in health and physical education policy and practice in Australian States and Territoties. In M. Dinan-Thompson (Ed.), *Health and Physical Education: Issues for Curriculum in Australia and New Zealand*. Melbourne, Victoria: Oxford University Press.
Diprose, R. (2008). Biopolitical technologies of prevention. *Health Sociology Review, 17*(2), 141-150.
Dodds, P. (2006). Physical education teacher education (PE/TE) policy. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *The Handbook of Physical Education*. London: SAGE Publications Ltd.
Donald, S. (2007). High-Stakes Testing and the Status of Physical Education. *Journal of Physical Education, Recreation & Dance, 78*(8), 10.
Donnelly, J. E., Greene, J. L., Gibson, C. A., Smith, B. K., Washburn, R. A., Sullivan, D. K., . . . Williams, S. L. (2009). Physical Activity Across the Curriculum (PAAC): A randomized controlled trial to promote physical activity and diminish overweight and obesity in elementary school children. *Preventive Medicine, 49*(4), 336-341.
Dottin, E. S. (2009). Professional judgment and dispositions in teacher education. *Teaching and Teacher Education, 25*(1), 83-88.
Dowling, F. (2006). Physical education teacher educators' professional identities, continuing professional development and the issue of gender equality. *Physical Education and Sport Pedagogy, 11*(3), 247-263.
Dowling, F. (2008). Getting in touch with our feelings: the emotional geographies of gender relations in PETE. *Sport, Education and Society, 13*(3), 247-266.
Doyle, W. (1990). Themes in teacher education research. In W. Houston (Ed.), *Handbook of Research on Teacher Education* (pp. 2-24). New York: Macmillan.
Drewery, W. (2005). Why We Should Watch What We Say: Position Calls, Everyday Speech and the Production of Relational Subjectivity. *Theory of Psychology, 15*(3), 305-324.
Driver, M. (2008). Every bite you take... food and the struggles of embodied subjectivity in organisations. *Human Relations, 61*(7), 913-934.
Due, R. (2007). *Deleuze*. Cambridge: Polity Press.
Dworkin, S., & Wachs, F. (2004). "Getting your body back": Postindustrial fit motherhood in shape fit pregnancy magazine. *Gender & Society, 18*(5), 610-624.
Dwyer, J. J. M., Allison, K. R., Barrera, M., Hansen, B., Goldenberg, E., & Boutilier, M. A. (2003). Teachers' Perspective on barriers to implementing physical activity curriculum guidelines for school children in Toronto. *Canadian Journal of Public Health, 94*(6), 448-452.
Eames, C. (2007). *100 Quotes by Charles Eames*. Santa Monica: Eames Office.
Eckerman, L. (1997). Foucault, embodiment and gendered subjectivities: the case of voluntary self-starvation. In A. Petersen & R. Bunton (Eds.), *Foucault, Health and Medicine* (pp. 151-171). London and New York: Routledge.
Eckler, P., Worsowicz, G., & Rayburn, J. W. (2010). Social media and health care: an overview. *PM & R : the journal of injury, function, and rehabilitation, 2*(11), 1046-1050. doi: 10.1016/j.pmrj.2010.09.005
Egger, G., & Swinburn, B. (2011). *Planet Obesity How We're Eating Ourselves and the Planet to Death*. Crows Nest: Allen & Unwin.

Ellsworth, E. (1989). Why doesn't this feel empowering? working though the repressive myths of critical pedagogy. *Harvard Educational Review, 59*(3), 297-325.
Ellsworth, E. (1997). *Teaching positions: Difference, pedagogy, and the power of address*. New York: Teachers College Press.
Epstein, S. (1996). *Impure Science: AIDS*. Berekely, CA: University of California Press.
Esposito, R., & Rose, N. (2010). Cracking biopower. *History of the Human Sciences, 23*(2), 109-128.
Evans, B. (2006). 'Gluttony or sloth': Critical geographies of bodies in (anti)obesity policy. *Area, 38*(3), 259-267.
Evans, J. (2003). Physical education and health: a polemic or let them eat cake. *European Physical Education Review, 9*(1), 87-101.
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*. London: Routledge.
Evans, J., & Davies, B. (2004b). Sociology, the body and health in a risk society. In L. Burrows, J. Wright, J. Evans & B. Davies (Eds.), *Body knowledge and control: Studies in the sociology of physical education and health* (pp. 35-51). London: Routledge.
Evans, J., Davies, B., & Rich, E. (2008). The class and cultural functions of obesity discourse: our latter day child saving movement. *International Studies in Sociology of Education, 18*(2), 117-132.
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.
Evans, J., Evans, B., & Rich, E. (2002). Eating disorders and comprehensive ideals. *Forum for Promoting 3-9 Comprehensive Education, 44*(2), 59-65.
Evans, J., Evans, B., & Rich, E. (2003a). Let them eat chips. *Pedagogy, Cuture and Society, 12*(2), 215-240.
Evans, J., Evans, B., & Rich, E. (2003b). 'The only Problem is, children will like their chips': education and the discursive production of ill-health. *Pedagogy, Culture and Society, 11*(2), 215-240.
Evans, J., Evans, R., Evans, C., & Evans, E. (2002). Fat Free Schooling: the Discursive Production of Ill-Health. *International Journal in Sociology of Education, 12*(2), 191-214.
Evans, J., & Rich, E. (2011). Body policies and body pedagogies: every child matters in totally pedagogised schools? *Journal of Education Policy, 26*(3), 361-379.
Evans, J., Rich, E., & Davies, B. (2004). The Emperor's new clothes: Fat, thin and overweight. The social fabrication of risk and ill-health. *Journal of Teaching in Physical Education, 23*(4), 372-391.
Evans, J., Rich, E., Davies, B., & Allwood, R. (2008). *Education, Disordered Eating and Obesity Discourse: Fat Fabrications*. Oxon: Routledge.
Evans, J., Rich, E., & Holroyd, R. (2004). Disordered eating and disordered schooling: what schools do to middle class girls. *British Journal of Sociology of Education, 25*(2), 123-142.
Evenson, K. R., Ballard, K., Lee, G., & Ammerman, A. (2009). Implementation of a school-based state policy to increase physical activity. *Journal of School Health, 79*(5), 231-238.
Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: interview or self-report questionnaire? *The International journal of eating disorders, 16*(4), 363.
Faire, R. (2002). Even smarter bodies? Increasing the somatic literacy of PDHPE teachers. *ACHPER Healthy Lifestyles Journal, 49*(1), 16-20.

Falkner, N., Reeves, C., & Chedzoy, S. (2004). Nonspecalist, Preservice Primary-School Teachers: Predicting Intentions to Teach Physical Education *Journal of Teaching in Physical Education, 23*(200-215).
Faulkner, G., Dwyer, J., Irving, H., Allison, K., Adlaf, E., & Goodman, J. (2008). Specialist or nonspecialist physical education teachers in ontario elementary schools: Examining differences in opportunities for physical activity. *Alberta Journal of Educational Research, 54*(4), 407-419.
Feiman-Nemser, S. (1990). Teacher preperation: Structural and concemptual alternatives In W. Houston, M. Haberman & J. Sikula (Eds.), *Handbook of Research on Teacher Education* (pp. 212-233). New youk: Macmillan.
Fernandes, M., & Sturm, R. (2010). Facility provision in elementary schools: Correlates with physical education, recess, and obesity. *Preventive Medicine, 50*(SUPPL.).
Fernandez-Balboa, J.-M. (2009). Bio-pedagogical self-reflection in PETE: reawakening the ethical conscience and purpose in pedagogy and research. *Sport, Education and Society, 14*(2), 147-163.
Fernandez-Balboa, J.-M. (Ed.). (1997). *Critical Postmodernism in Human Movement, Physical Education and Sport*.
Fernandez-Balboa, J.-M., & Muros, B. (2006). The hegemonic triumvirate - Ideologies, discourses, and habitus in sport and physical education: Implications and suggestions. *Quest, 58*(2), 197-221.
Fitzgerald, H. (2005). Still feeling like a spare piece of luggage? Embodied experiences of (dis)ability in physical education and school sport *Physical Education and Sport Pedagogy, 10*(1), 41-59.
Fletcher, T. S. (2011). *Learning to Teach Health and Physical Education: The Experiences of Elementary Student Teachers*. PhD, University of Toronto.
Flintoff, A. (2008). Targeting Mr Average: Participation, Gender Equity and School Sport Partnerships. *Sport, Education and Society, 13*(4), 393-411.
Flintoff, A., & Scraton, S. (2001). Stepping into Active Leisure? Young Women's Perceptions of Active Lifestyles and their experiences of School Physical Education. *Sport, Education and Society, 6*(1), 5-21.
Flintoff, A., & Webb, L. (2012). 'Just open your eyes a bit more': the methodological challenges of researching black and minority ethnic students' experiences of physical education teacher education. *Sport, Education and Society 17*(5), 571-589.
Foucault, M. (1970). *The Order of Things: An Archeology of the Human Science* (S. Smith, Trans.). London: Tavistock.
Foucault, M. (1972). *The Archaeology of Knowledge* (A. M. Sheridan Smith, Trans.). New York: Pantheon Books.
Foucault, M. (1974). Prisons et asiles dans le mécanisme du pouvoir. In M. Foucault (Ed.), *Dits et Ecrits: 1954-1988. Vols I-IV*. (pp. 523–524). Paris: Gallimard.
Foucault, M. (1977b). *Discipline and Punish: The Birth of the Prision* (T. A. Sherridan, Trans.). New York: Pantheon.
Foucault, M. (1978). *The History of Sexuality, Volume One: The Will to Knowledge* London: Penguin.
Foucault, M. (1980a). The confesion of the flesh. (1977). In C. Gordon (Ed.), *Power/Knowledge selected interviews and other writings 1972-1977 Michael Foucault*. New York: Pantheon Books.
Foucault, M. (1980b). *Power/knowledge*. New York: Pantheon.
Foucault, M. (1983). *Michel Foucault: Beyond structuralism and hermeneutics*. Chicago: The University of Chicago Press.
Foucault, M. (1984). Nietzche, Genealogy, History. In P. Rabinow (Ed.), *The Foucault Reader* (pp. 76-100). New York: Pantheon.

Foucault, M. (1988). Truth, power, self: an interview with Michel Foucault. In L. Martin, H. Gutman & P. Hutton (Eds.), *In Technologies of the Self: a Seminar with Michel Foucault* (pp. 9-49). Amherst: University of Massachusetts Press.
Foucault, M. (1989). *Madness and Civilization: A History of Insanity in the Age of Reason* (R. Howard, Trans.). London: Routledge.
Foucault, M. (1993). About the beginning of the Hermeneutic self. *Political theory, 21*(3), 198-227.
Foucault, M. (1996). The Return of Morality. In S. Lotringer (Ed.), *Foucault Live: Collected Interviews 1961-984* (pp. 465-473). New York: Semiotext(e).
Foucault, M. (1997). *Subjectivity and Truth*. London: Penguin Group.
Foucault, M. (2000a). Interview with Michel Foucault (R. Hurley & and others, Trans.). In J. D. Faubion (Ed.), *Power* (pp. 239-297). New York: The New Press.
Foucault, M. (2000b). Power (R. Hurley, Trans.). In J. D. Faubion (Ed.). New York: The New Press.
Foucault, M. (2001). *Fearless Speech*. Los Angeles: Semiotext(e).
Foucault, M. (2005). *The Hermeneutics of The Subject: Lectures at the College De France 1981-1982* (G. Burchell, Trans.). New York: Picador.
Foucault, M. (2006). What is an Author? In D. Finkelstein & A. McCleery (Eds.), *The Book History Reader* (pp. 277-280). New York: Routledge.
Fox, N. (1997). Is there life after Foucault? Texts, frames and differends. In A. Petersen (Ed.), *Foucault, Health and Medicine* (pp. 31-51). London: Routledge.
Fox, N. (1999). *Beyond health: Postmodernism and embodiment*. London: Free Association Books.
Fox, N. (2002). Refracting 'health': Deleuze, Guattari and body-self. *Health: An Interdisciplinary Jourbnal for the Social Study of Health, Illness and Medicine, 6*(3), 347-363.
Fox, N., & Ward, K. (2006). Health identities: from expert patient to resisting consumer. *Health, 10*(4), 461-479.
Francis, L., & Birch, L. (2005). Maternal influences on daughters' restricted eating behaviours. *Health Psychology, 24*(6), 548-554.
Frank, A. (2006). Health stories as connectors and subjectifiers. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 10*(4), 421-440.
Fraser, S., Maher, J., & Wright, J. (2010). Between bodies and collectivities: Articulating the action of emotion in obesity epidemic discourse. *Social Theory & Health, 8*(2), 192-209.
Frost, L. (2003). Doing bodies differently? Gender, youth, apperance, and damage. *Journal of Youth Studies, 6*(1), 53-70.
Frost, N. (2009). `Do you know what I mean?': the use of a pluralistic narrative analysis approach in the interpretation of an interview. *Qualitative Research, 9*(1), 9-29.
Fullagar, S. (2002). Governing the healthy body: discourses of leisure and lifestyle within Australian health policy. *Health An Interdisciplinary Journal for the Social Study of Health Illness and Medicine, 6*(1), 69-84.
Fusco, C. (2006). Inscribing healthification: governance, risk, surveillance and the subjects and spaces of fitness and health. *Health and Place, 12*(1), 65-78.
Fusco, C. (2007). 'Healthification' and the promises of urban space: A textual analysis of place, activity youth (PLAY-ing) in the City. *International Review for the Sociology of Sport, 42*(1), 43-63.
Gaesser, G. A. (2002). *Big Fat Lies: The truth about your weight and health*. Carlsbad, CA: Gurze Books.

Gard, M. (2006). HPE and the 'obesity epidemic'. In R. Tinning, L. McCuaig & lisahunter (Eds.), *Teaching Health and Physical Education in Australian Schools* (pp. 78-87). Frenchs Forest: Pearson Education Australia.
Gard, M. (2011). *The End of the Obesity Epidemic*. Oxon: Routledge.
Gard, M., & Fry, J. (1997). *Generalist Student Teachers' Perceptions of Self, Physical Activity and Health and Physical Education Curriculum*. Paper presented at the Paper presented at the Australian Association for Research in Education, Brinsbane, Queensland.
Gard, M., Hickey-Moody, A., & Enright, E. (2012). Youth culture, physical education and the question of relevance: after 20 years, a reply to Tinning and Fitzclarence. *Sport, Education and Society, iFirst Article*, 1-18.
Gard, M., & Kirk, D. (2007). Obesity discourse and the crisis of faith in disciplinary technology. *Utbildning & Demokrati, 16*(2), 17-36.
Gard, M., & Leahy, D. (2009). Dicing with Death: Tensions, Contradictions and Awkward Positions in School Health Education. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for Curriculum in Australia and New Zealand*. South Melbourne: Oxford University Press.
Gard, M., & Wright, J. (2001). Managing uncertainty: Obesity discourse and physical education in a risk society. *Studies in Philosophy and Education, 20*(6), 535-549.
Gard, M., & Wright, J. (2005). *The 'Obesity Epidemic': Science, Ideology and Morality*. London: 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*.
Garrett, R. (2006). Critical storytelling as a teaching strategy in physical education teacher education. *European Physical Education Review, 12*(3), 339-360.
Garrett, R., & Wrench, A. (2007). Physical experiences: primary student teachers' conceptions of sport and physical education. *Physical Education and Sport Pedagogy, 12*(1), 23-42.
Garrett, R., & Wrench, A. (2008). Connections, pedagogy and alternative possibilities in primary physical education. *Sport, Education and Society, 13*(1), 39-60.
Garrett, R., & Wrench, A. (2012). 'Society has taught us to judge': cultures of the body in teacher education. *Asia Pacific Journal of Teacher Education, 40*(2), 111-126.
Garrett, R., Wrench, A., & Piltz, W. (2007). Lab school as a teaching strategy in physical education teacher education. *ACHPER Healthy Lifestyles Journal, 54*(2), 19-24.
Gauntlett, D. (2002). *Media, Gender and Identity*. London: Routledge.
George, G., Suzanne, P., Jesse, L., & Rob, F. (2002). The effects of high-stakes testing on elementary school art, music, and physical education. *Journal of Physical Education, Recreation & Dance, 73*(8), 51.
Germov, J., & Williams, L. (2008a). *A Sociology of Food & Nutrition* (3rd ed.). South Melbourne: Oxford University Press.
Germov, J., & Williams, L. (2008b). *A sociology of food and nutrition: the social appetite*. South Melbourne, Vic: Oxford University Press.
Gibson, C., Smith, B., DuBose, K., Greene, J., Bailey, B., Williams, S., Donnelly, J. (2008). Physical activity across the curriculum: Year one process evaluation results. *International Journal of Behavioral Nutrition and Physical Activity, 5*.
Gilfillan, W. (2003). *Professional development of generalist primary school teachers: a model for life-long physical education.* PhD, Southern Cross University, Lismore NSW.
Gilman, S. (2008). Fat: A cultural History of Obesity. Cambridge: Polity Press.
Giroux, H. (2004). Public pedagogy and the politics of Neo-Liberalism: Making the political more pedagogical. *Policy Futures in Education, 2*(3-4), 494-503.

Giroux, H. (2005). *Boarder Crossings: Cultural workers and the politics of education*. New York: Routledge & Oxon.
Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education: theory, research, and practice*. San Francisco: Jossey-Bass.
Glesne, C. (1997). That rare feeling: Re-presenting research through poetic Transcription. *Qualitative Inquiry, 3*(2), 202-221.
Gore, J. (1993). *The struggle for pedagogies: Critical feminist discourses as regimes of truth*. New York: Routledge.
Gore, J. (1995). Foucault's Poststructuralism and Observational Education Research. In R. Smith & P. Wexler (Eds.), *After Postmodernism: Education, Politics and Identity*. Bristol: The Falmer Press.
Gore, J. (2001). Beyond our differences: A reassembling of what matters in teacher education. *Journal of Teacher Education, 52*(2), 124-135.
Gorely, T., Marshall, S. J., & Biddle, S. J. H. (2004). Couch kids: correlates of television viewing among youth. *International Journal of Behavioral Medicine, 11*, 152-163.
Graber, K., Locke, L., Lambdin, D., & Solmon, M. (2008). The Landscape of Elementary School Physical Education. *The Elementary School Journal, 108*(3), 151-159.
Graham, H., & Zidenberg-Cherr, S. (2005). California teachers perceive school gardens as an effective nutritional tool to promote healthful eating habits. *Journal of the American Dietetic Association, 105*(11), 1797-1800.
Griggs, G. (2009). 'What you risk reveals what you value': Fostering creativity in primary physical education. *Education 3-13, 37*(2), 121-130.
Griggs, G. (2010). For Sale - primary physical education. £20 per hour or nearest offer. *Education 3-13, 38*(1), 39-46.
Grosz, E. (1994). *Volitile Bodies: Toward a Corporeal Feminism*. Bloomington: Indiana University Press.
Hacking, I. (1986). The Archaeology of Foucault. In D. Hoy (Ed.), *Foucault: A Critical Reader* (pp. 27-41). Oxford: Blackwell.
Hacking, I. (2002). *Historical Ontology*. Cambridge, MA: Harvard University Press
Hall, S. (2001). Foucault: Power, knowledge, discourse. In S. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse: Theory and Practice. A Reader* (pp. 72-80). London: Sage.
Halse, C. (2009). Bio-Citizenship: Virtue Discourses and the Birth of the Bio-Citizen. In J. Wright & V. Harwood (Eds.), *Biopolitics and the Obesity Epidemic*. New York: Routledge.
Halse, C., Honey, A., & Broughtwood, D. (2007). The paradox of virtue: (re)thinking deviance, anorexia and schooling. *Gender and Education, 19*(2), 219-235.
Hansen, D. (2001). *Exploring The Moral Heart of Teaching: Toward A Teacher's Creed* (Vol. 73). New York: Teachers College Press.
Hansen, J., & Kayser Nielsen, N. (2000). Body, health and physical education, 1970-1930. In J. Hansen & N. Kayser Nielsen (Eds.), *Sports, Body and Health* (pp. 21-47). Odense: Odense University Press.
Hansen, S. (2004). From 'common observation' to behavioural risk management: Workplace surveillance and employee assistance 1914-2003. *International Sociology, 19*(2), 151-171.
Hanson, C., West, J., Neiger, B., Thackeray, R., Barnes, M., & McIntyre, E. (2011). Use and Acceptance of Social Media among Health Educators. *American Journal of Health Education, 42*(4), 197-204.
Hardus, P., van Vuuren, C., Crawford, D., & Worsley, A. (2003). Public perceptions of the causes and prevention of obesity among primary school children. *International Journal of Obesity, 27*, 1465-1471.

Hargreaves, A. (1984). Teaching Quality: A Sociological Analysis. *Journal of Curriculum Studies, 20*, 211-231.
Harper, E., & Rail, G. (2012). 'Gaining the right amount for my baby': Young pregnant women's discursive constructions of health. *Health Sociology Review, 21*(169-81).
Harrer, S. (2005). The theme of subjectivity in Foucault's lecture series L'Hermeneutique du sujet. *Foucault Studies, 2*(1), 75-96.
Harris, L. (Ed.). (1995). *Health and the New Media: Technologies Transforming Personal and Public Health*. New Jersey: Lawrence Erlbaum Associates, Inc.
Harwood, V. (2001). Foucault, narrative and the subjugated subject: Doing research with a grid of sensibility. *The Australian Educational Researcher, 28*(3), 141-166.
Harwood, V. (2009). Theorizing biopedagogies. In J. Wright & V. Harwood (Eds.), *Biopedagogies and the 'Obesity Epidemic'* (pp. 15-30). New York: Routledge.
Harwood, V. (2012). Neither good nor useful: looking ad vivum in children's assessments of fat and healthy bodies. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 693-711.
Hastings, W., & Letts, W. (2006). *Interrogating the reflexive subject in/of teacher education*. Paper presented at the Australian Association for Educational Research (AARE): International education research conference, Adelaide. Retrieved July, 2012, from www.aare.edu.au/06pap/has06354.pdf
Healthy Kids. (2012). Healthy Kids: About Us. Retrieved 16th May, 2012, from http://www.healthykids.nsw.gov.au/home/about-us.aspx
Heart Foundation. (2007). Submission: Inquiry into Obesity *House of Representatives Standing Committee on Health and Ageing* (pp. 45). Canberra: Parliment of Australia House of Representatives.
Heaton, R., & Mickelson, W. (2002). The learning and teaching of statistical investigation in teaching and teacher education. *Journal of Mathematics Teacher Education, 5*(35-59).
Henderson, J., Ward, P., Coveney, J., & Taylor, A. (2009). "Health is the number one thing we go for": Healthism, citizenship and food choice. Paper presented at the The future of sociology: 2009 The Australian Sociological Association, Canberra. http://www.tasa.org.au/conferences/conferencepapers09/papers/Henderson,%20Julie.pdf
Herold, F., & Waring, M. (2009). Pre-service physical education teachers' perceptions of subject knowledge: Augmenting learning to teach. *European Physical Education Review, 15*(3), 337-364.
Heyes, C. (2006). Foucault goes to weight watchers. *Hypatia, 21*(2), 126-149.
Hickey, C. (1992). Physical Education in Victorian Primary Schools: A Review of Current Provision. *The ACHPER National Journal, Summer*, 18-23.
Hodge, R., & Kress, G. (1993). *Language as ideology*. London: Routledge.
Holmer Nadesan, M. (2008). *Governmentality, Biopower and Everyday Life*. Oxon: Routledge.
Honan, E. (2007). Writing a rhizome: an (im)plausible methodology. *International Journal of Qualitative Studies in Education, 20*(5), 531-546.
Howell, J., & Ingham, A. (2001). From social problem to personal issue: the language of lifestyle. *Cultural Studies, 15*(2), 326-351.
Hsieh, B. (2010). *Exploring the Complexity of Teacher Professional Identity*. Dissertation/Thesis, ProQuest LLC. Retrieved May, 2012, from http://uow.summon.serialssolutions.com/link/0/eLvHCXMwQ7QykcsDI8LlgZGpkYWhrhH4mD3EWD9SYe8myiDj5hri7KELmsqIL4CcxhDv6mJqZA5MZYZ8y1bNiNXq8Do9TSbb5J3NxAMAPXMqNw

Huddleston, A. (2012). Understanding Responses to High School Exit Exams in Literacy: A Bourdieusian Analysis of Poetic Transcriptions. *Journal of Adolescent & Adult Literacy, 55*(8), 734-744.

Irish National Teachers Organisation. (2009). *Creativity and the Arts in the Promary School: Discussion Document and Proceedings of the Consultative Conference on Education 2009*, Dublin.

Jager, S., & Maier, F. (2009). Theoretical and methodological aspects of Foucauldian critical discourse analysis and dispositive analysis. In R. Wodak & M. Meyer (Eds.), *Methods of Critical Discourse Analysis*. London: SAGE Publications Ltd.

James, A., & Hockey, J. (2007). *Embodying Health Identities*. London: Palgrave Macmillan.

Jansen, W., Raat, H., Zwanenburg, E., Reuvers, I., Van Walsem, R., & Brug, J. (2008). A school-based intervention to reduce overweight and inactivity in children aged 6-12 years: Study design of a randomized controlled trial. *BMC Public Health, 8 (257)*. doi:10.1186/1471-2458-8-257

Johns, D. (2005). Recontextualising and delivering the biomedical model as a physical education curriculum. *Sport, Education and Society, 10*(1), 69-84.

Johns, D., & Tinning, R. (2006). Risk reduction: Recontextualising health as a physical education curiculum. *Quest, 58*(4), 395-409.

Johnson, C., Li, D., Galati, T., Pedersen, S., Smyth, M., & Parcel, G. (2003). Maintenance of the classroom health education curricula: results from the CATCH-ON study. *Health education & behavior : the official publication of the Society for Public Health Education, 30*(4), 476-488.

Jourdan, D., Pommier, J., & Quidu, F. (2010). Practices and representations of health education among primary school teachers. *Scandinavian journal of public health, 38*(1), 86-94.

Jutel, A. (2006). The emergence of overweight as a disease entity: Measuring up normality. *Social Science & Medicine, 63*, 2268-2276.

Kang, S. (2003). *Beyond the Challenges of Physical Education Teacher Education (PETE). The Challenges and Possibilities for Physical Educatin in the 21st Century*. Seoul, Korea: Seoul National University

Kendrick, R. (2008). 'We can change the face of this future' - Television transforming the fat child. *Australian Feminist Studies, 23*(57), 389-400.

Kennedy, M., Ahn, S., & Choi, J. (2008). The value added by teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. McIntyre & K. Demers (Eds.), *Handbook of Resarch in Teacher Education: Enduring Questions in Changing Contexts*. New York: Routledge.

Kenway, J., & Bullen, E. (2001). *Consuming Children: Education entertainment-adversiting*. Buckingham: Open University Press.

Kincheloe, J. (2008). *Knowledge and Critical Pedagogy: An Introduction*. Dordrecht, London: Springer Science + Business Media.

Kirk, D. (1998). Schooling Bodies: School Practice and Public Discourse 1880-1950. London: Leicester University Press.

Kirk, D. (2004a). Beyond the academic curriculum: The production and operation of biopower in the less studied sites of schooling In B. Baker & K. Heyning (Eds.), *Dangerous Coagulations? The Uses of Foucault in the Study of Education*. New York: Peter Lang.

Kirk, D. (2004b). New Practices, new subjects and critical inquiry. In J. Wright, D. Macdonald & L. Burrows (Eds.), *Critical Inquiry and Problem-Solving in Physical Education*. London: Routledge.

Kirk, D. (2006). The 'Obesity Crisis' and school Physical Education. *Sport, Education and Society, 11*(2), 121-133.

Kirk, D., & Colquhoun, D. (1989). Healthism and Physical Education. *British Journal of Sociology of Education, 10*(4), 417-434.
Kirk, D., Gore, J., & Colquhoun, D. (1989). Teachers' use of the Daily Physical Education program and the problem of fitness development. *ACHPER National Journal, 124*(Winter), 23-27.
Kirk, D., & Gray, R. (1990). School health education: trends and issues in policy, curriculum and research. *Unicorn: Journal of the Australian College of Education, 16*(2), 68-75.
Kirk, D., & Kinchin, G. (2003). Situated Learning as a Theoretical Framework for Sport Education. *European Physical Education Review, 9*(3), 22-235.
Kirk, D., & Macdonald, D. (2001a). The social construction of PETE in Higher Education: Toward a Research Agenda. *Quest, 53*(440-456).
Kirk, D., & MacDonald, D. (2001b). The social construction of PETE in higher education: toward a research agenda. *Quest, 53*, 440-456.
Kirk, D., Nauright, J., Hanrahan, S., Macdonald, D., & Jobling, I. (1996). *The Social Foundations of Human Movement*. Melbourne: Macmillan.
Kirk, D., & Tinning, R. (1994). Embodied Self-identity, Healthy Lifestyles and School Physical Education. *Sociology of Health and Illness, 16*, 600-625.
Koren, L. (2010). *Which "aesthetics" do you mean? Ten definitions*. Point Reyes, California: Imperfect Publishing.
Kosnik, C., & Beck, C. (2009). *Priorities in Teacher Education: The 7 Key Elements of Pre-Service Preparation*. Oxon: Routledge.
Laker, A. (2000). *Beyond the Boundaries of Physical Education: Educating Young People for Citizenship and Social Responsibility* London: RoutledgeFalmer.
Larsson, H., Fagrell, B., & Redelius, K. (2007). Queering physical education. Between benevolence towards girls and a tribute to masculinity. *Physical Education and Sport Pedagogy*. Retrieved May, 2012, from http://www.informaworld.com/10.1080/17408980701345832
Lather, P. (2004). Foucauldian 'indiscipline' as a sort of application: qu(e)er(y)ing research/policy/practice. In B. Baker & K. Hayning (Eds.), *Dangerous coagulations? The use of Foucault in the study of education* (pp. 279-303). New York: Peter Lang.
Lather, P. (2006). Paradigm proliferation as a good thing to think with: teaching research in education as a wild profusion. *International Journal of Qualitative Studies in Education, 19*(1), 35-57.
Laurian, L. (2006). Planning for active living: Should we support a new moral environmentalism. *Planning Theory and Practice, 7*(2), 117-136.
Lawson, H. (1983). Toward a model of teacher socialization in physical education: the subjective warrant recruitment, and teacher education (part1). *Journal of Teaching in Physical Education, 2*, 3-16.
Leahy, D. (2009). Disgusting pedagogies. In J. Wright & V. Harwood (Eds.), *Biopedagogies and the 'Obesity Epidemic': Governing Bodies*. Abingdon/ New York: Routledge.
Leahy, D. (2010). What's on (or off) the menu in school? *Text, 9*(Special Issue October).
Leahy, D. (2012). *Assembing a Healthy[y] Subject*. PhD, Deakin University, Melbourne.
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.
Leech, N. (2005). The role of sampling in qualitative research. *Academic Exchange Quarterly*. Retrieved March 2009, from http://www.thefreelibrary.com/The+role+of+sampling+in+qualitative+research-a0138703704

Leow, A. (2011). Policy-as-Discourse and Schools in the Role of Health Promotion: The Application of Bernstein's Transmission Context in Policy Analysis. *Discourse: Studies in the cultural politics of education, 32*(3), 309-328.
Leow, A., Macdonald, D., Hay, P., & McCuaig, L. A. (2012). Health-education policy interface: the implementation of the Eat Well Be Active policies in schools. *Sport, Education and Society* (iFirst Article), 1-23.
Light, R., & Georgakis, S. (2005). *'Taking away the scary factor': female pre-service primary school teachers' responses to Game Sense pedagogy in physical education*. Paper presented at the Higher Education Research Development Society of Australasia. Conference. http://conference.herdsa.org.au/2005/pdf/refereed/paper_408.pdf
Lindstrom, M., & Seybould, P. (2004). *BRANDchild: Remarkable insights into the minds of today's global kids and their relationships with brands*. London: Kogan Page.
Lisa, T., & Fran, C. (2008). Dogs, Cats, and Kids: Integrating Yoga into Elementary Physical Education. *Strategies, 21*(4), 15.
lisahunter. (2004). Bringing the body back into Education? *Redress, 13*(2).
Lobstein, T. (2006). Commentary: Obesity - public helath crisis, moral panic or human rights issue? *International Journal of Epidemiology, 35*, 74-76.
Lorraine, T. (1999). *Irigaray and Deleuze: Experiements in Visceral Philosophy*. New York: Cornell University Press.
Lortie, D. (1975). *Schoolteacher: A Sociological Study*. London: University of Chicago Press.
Loughran, J. (2006). *Developing a Pedagogy of Teacher Education*. New York: Routledge.
Luke, A. (2010). Will the Australian curriculum up the intellectual ante in primary classrooms? *Curriculum Perspectives, 30*, 59-65.
Lupton, D. (1995). *The Imperatives of Health, Public Health and the Regulated Body*. London: Sage publications.
Lupton, D. (1997). Foucault and the medicalisation critique. In A. Petersen & R. Bunton (Eds.), *Foucault, Health and Medicine* (pp. 94-110). London and New York: Routledge.
Lupton, D. (1999). 'Developing the "whole me"': citizenship, neo-liberalism and the contemporary health and physical education curiculum. *Critical Public Health 9*(4), 287-300.
Lustead, D. (1986). Introduction: why pedagogy? *Screen, 27*, 2-14.
Luttrell, W. (2011). Where inequality lives in the body: Teenage pregnancy, public pedagogies and individual lives. *Sport, Education and Society, 16*(3), 295-308.
Lyn, K. (2011). Embodied literacies and a poetics of place. *English Teaching: Practice and Critique, 10*(3), 9.
Lynagh, M., Gilligan, C., & Handley, T. (2010). Teaching about, and dealing with, sensitive issues in schools : how confident are pre-service teachers? *Asia-Pacific Journal of Health, Sport and Physical Education, 1*(3), 5-11.
Lyngsnes, K. (2012). Embarking on the teaching journey: pre-service teachers reflecting upon themselves as future teachers. *World Journal of Education, 2*(2), 2.
Lyon, D. 2002. Editorial. Surveillance studies: Understanding visibility, mobility and the phenetic fix. *Surveillance and Society* 1, no. 1: 1–7.
Macdonald, D. (2002). Critical pedagogy: what might it look like and why does it matter? In A. Laker (Ed.), *The Sociology of Sport and Physical Education: An Introductory Reader*. London: Routledge.
Macdonald, D., Hay, P., & Williams, B. (2008). Should you buy? Neo-Liberalism, neo-HPE, and your neo-job. *Journal of Physical Education New Zealand, 41*(3), 6-13.
Macdonald, D., Hunter, L., Carlson, T., & Penney, D. (2002). Teacher knowledge and the disjunction between school curricula and teacher education. *Asia-Pacific Journal of Teacher Education, 30*(3), 259-275.

Macdonald, D., & Kirk, D. (1999). Pedagogy, the body and Christian identity. *Sport, Education and Society, 4*(2), 131-142.
Macdonald, D., Kirk, D., Metzler, M., Nilges, L., Schempp, P., & Wright, J. (2002). Its all Very Well in Theory: Theoretical Perspectives and Their Applications in Contemporary Pedagogical Research. *Quest, 54*(2), 133-156.
Macdonald, D., & lisahunter. (2005). Lessons Learned . . . About Curriculum: Five Years on and Half a World Away. *Journal of Teaching in Physical Education, 24*(2), 111-126.
Macdonald, D., & Penney, D. (2009). Contemporary issues and future agendas for Health and Physical Education. In M. DinanThompson (Ed.), *Health and Physical Education: Issues for Curriculum in Australia and New Zealand*. South Melbourne: Oxford University Press.
Macgregor Wise, J. (2011). Assemblage. In C. Stivale (Ed.), *Gilles Deleuze Key Concepts* (pp. 91-102). Durham: Acumen Publishing Limited.
Madill, L. (2008). Finding My Voice and a Vision: Poetic Representations as Valid/Valuable Knowledge. *Journal of Poetry Therapy, 21*(1), 39-48.
Maguire, J. S. (2008). Leisure and the Obligation of Self-Work: An Examination of the Fitness Field. *Leisure Studies, 27*(1), 59-75.
Malins, P. (2004). Body–Space Assemblages and Folds: Theorizing the Relationship between Injecting Drug User Bodies and Urban Space. *Continuum: Journal of Media & Cultural Studies, 18*(4), 483-495.
Malson, H. (1998). *The Thin Woman: Feminism, Post- Structuralism, and the social Psychology of Anorexia Nervosa*. London: Routledge.
Mansfield, N. (2000). *Subjectivity: theories of the self from Freud to Haraway*. St Leonards, N.S.W: Allen & Unwin.
Marble, S. (2012). Becoming-Teacher: Encounters with the Other in Teacher Education. *Discourse: Studies in the cultural politics of education, 33*(1), 21-31.
Markula, P. (2004). Embodied movement knowledge in fitness and exercise education. In L. Bresler (Ed.), *Knowinf Bodies, Moving Minds* (pp. 62-76). Dordrecht: Kluwer Academic Publishers.
Markula, P. (2008). Affect[ing] bodies: Performative pedagogy of pilates. *International Review of Qualitative Research, 1*(3), 381-408.
Matanin, M., & Collier, C. (2003). Longitudinal analysis of preservice teachers' beliefs about teaching physical education. *Journal of Teaching in Physical Education, 22*, 153-168.
McCuaig, L. (2008). *Teaching the art of healthy living: A genealogical study of H-PE and the Moral Governance of Apprentice Citizens*. PhD, The University of Queensland, Queensland.
McCuaig, L., & Tinning, R. (2010). HPE and the moral governance of p/leisurable bodies. *Sport, Education and Society, 15*(1), 39-61.
McDermott, L. (2011). 'Thrash yourself Thursday': the production of the 'healthy' child through a fitness-based PE practice. *Sport, Education and Society*, 1-25.
McKay, J., Gore, J., & Kirk, D. (1990). Beyond the limits of technocratic physical education. *Quest, 42*(1), 52-75.
McLachlan, F. (2009). Working with 'obesity': Lessons from reality television. *New Zealand Physical Educator, 42*(1), 22-25.
McLeod, J., & Yates, L. (2006). Researching subjectivity and schooling - one method and what it means to work with theory. In J. McLeod & L. Yates (Eds.), *Making Modern Lives: Subjectivity, Schooling and Social Change*. Albany: NY: State Unversity of New York.
McSharry, M. (2009). *Schooled Bodies: Negotiating adolescent validation through press, peers and parents*. Sterling: Trentham Books Limited.

McWilliam, E. (1996). Touchy subjects : A risk inquiry into pedagogical pleasure. *British Educational Research Journal, 22*(3), 305-317.
Meldrum, K., & Peters, J. (2012). *Learning to Teach Health and Physical Education. The Student, The Teacher and the Curriculum*. Frenchs Forest: Pearson Australia.
Men's Fitness. (2008). Obama is Fit to Lead. Retrieved 5 November, 2008, from http://www.mensfitness.com/fitness/415
Mensinga, J. (2011). The Feeling of Being a Social Worker: Including Yoga as an Embodied Practice in Social Work Education. *Social Work Education, 30*(6), 650-662.
Mewborn, D., & Tyminski, A. (2006). Lortie's apprenticeship of observation revisited. *For the Learning of Mathematics, 26*(3), 30-33.
Miah, A. (2005). Genetics, cyberspace and bioethics: why not a public engagement with ethics? *Public Understanding of Science, 14*(4), 409-421.
Miah, A., & Rich, E. (2008). *Medicalization of Cyberspace*. Oxon: Routledge.
Mills, S. (1997). *Discourse*: Routledge.
Milton, J. (2003). Primary School Sex Education Programs: Views and experiences of teachers in four primary schools in Sydney, Australia. *Sex Education, 3*(3), 241-256.
Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA). (2008). Melbourne Declaration on Educational Goals for Young Australians. Retrieved May, 2011, from http://www.mceecdya.edu.au/mceecdya/melbourne_declaration,25979.html
Mitra, S., & Padman, R. (2012). Exploring social media for health and wellness: a health plan case study. *Journal of Cases on Information Technology, 14*(2), 42-64.
Monaghan, L. (2007). Body Mass Index, masculinities and moral worth: men's critical understandings of 'appropriate' weight-for-height. *Sociology of Health and Illness, 29*(4), 584-609.
Montecinos, C. and Nielsen, L. (1997). Gender and cohort differences in university students' decisions to become elementary teacher education majors. *Journal of Teacher Education*, 48(1),47-54.
Morgan, P., & Bourke, S. (2008). Non-specialist Teachers' Confidence to Teach PE: The Nature and Influence of Personal School Experiences in PE. *Physical Education and Sport Pedagogy, 13*(1), 1-29.
Morgan, P., & Hansen, V. (2008a). Physical education in primary schools: Classroom teachers' perceptions of benefits and outcomes. *Health Education Journal, 67*(3), 196-207.
Morgan, P., & Hansen, V. (2008b). The relationship between PE biographies and PE teaching practices of classroom teachers. *Sport, Education and Society, 13*(4), 373-391.
Morgan, P., & Bourke, S. (2005). *'I know it's important but I'd rather teach something else!': An investigation into generalist teachers' perceptions of physical education in the primary school curriculum*. Paper presented at the Australian Association for Research in Education (AARE). Retrieved August, 2010, from http://www.aare.edu.au/04pap/mor04509.pdf
Morin, F. (2003). The physical education specialist: an ally for teacher education [Dr DW Penner School]. *Physical & Health Education Journal, 69*(3).
Nahas, M., Goldfine, B., & Collins, M. (2003). Determinants of physical activity in adolescents and young adults: The basis for high school and college physical education to promote active lifestyles. *Educator, 60*(1), 42-56.

National Health and Medical Research Council (NHMRC). (1996). Effective School Health Promotion: Towards Health Promoting Schools. Canberra, ACT: Commonwealth Department of Health and Family Services.
National Preventative Health Taskforce. (2009). Australia: The Healthiest Country by 2020. National Preventative Health Strategy - A Roadmap for Action. Barton, ACT: Australian Government Department of Health and Ageing.
Naylor, P., Macdonald, H., Zebedee, J., Reed, K., & McKay, H. (2006). Lessons learned from Action Schools! BC-An 'active school' model to promote physical activity in elementary schools. *Journal of Science and Medicine in Sport, 9*(5), 413-423.
Nestle. (2009). Uncle Tobs Bodywise Retrieved May 16th, 2009, from http://www.nestle.com.au/uncletobys/ - /products/snacking/bodywise/
Nettleton, S. (1997). Governing the risky self: How to be healthy, wealthy and wise. In A. Petersen & R. Bunton (Eds.), *Foucault, Health and Medicine*. London: Routledge.
Nietzsche, F. (2003). *The Genealogy of Morals* (H. Samuel, Trans.). Mineola: Dover Publications, Inc.
NSW Department of Education. (1982). *Get moving: fitness is fun: a handbook of the daily fitness programmes K-6* Lismore, N.S.W: Department of Education, North Coast Region.
NSW Department of Education and Communities. (2011). Learning and Teaching. Retrieved 11th March, 2012, from http://www.schools.nsw.edu.au/learning/k_6/index.php
NSW Department of Health. (2003a). *Prevention of Obesity in Children and Young People: NSW Government Action Plan*. North Sydney: NSW Department of Health.
NSW Department of Health. (2003b). *Prevention of Obesity in Children and Young People: NSW Government Action Plan 2003-2007*. Sydney.
NSW Health. (2011). *Healthy School Canteens*. Sydney: Retrieved 10th October, 2011, from http://www.health.nsw.gov.au/publichealth/healthpromotion/obesity/canteens.as
NSW Institute of Teachers. (2010). Document 5: Graduate Teacher Standards 1.1.1 To 1.1.3 - Subject Content Requirements. Retrieved 24th October, 2010, from http://www.nswteachers.nsw.edu.au/Initial-Teacher-Education/
Nutt, G., & Clarke, G. (2002). The Hidden Curriculum and the Changing Nature of Teachers' Work. In A. Laker (Ed.), *The Sociology of Sport and Physical Education*. Cambridge: The University Press.
O'Connor, A., & Macdonald, D. (2002). Up close and personal on physical education teachers' identity: Is conflict an issue? *Sport Education and Society, 7*(1), 27-55.
O'Farrell, C. (2005). *Michael Foucault*. London: SAGE Publications Ltd.
O'Flynn, G., & Bendix Petersen, E. (2007). The 'good life' and the 'rich portfolio;" young women, schooling and neoliberal subjectification. *British Journal of Sociology of Education, 28*(4), 459-472.
O'Sullivan, M. (1996). What we know about the professional preperation of teachers? In S. Silverman & C. Ennis (Eds.), *Student Learning in Physical Education: Applying Research to Enhance Instruction*. Champaign, IL: Human Kinetics.
Obesity Prevention Australia Inc. (2010). Obesity Prevention Australia: Beneficiaries. Retrieved 8th June, 2010, from http://www.obesityprevention.com.au/beneficiaries
Öhman, M. (2010). Analysing the direction of socialisation from a power perspective. *Sport, Education and Society, 15*(4), 393-409.
Oliver, E. (2005). *Fat Politics. The real story behind America's obesity epidemic*. New York: Oxford University Press.

Ovens, A. (2004). *The (im)possibility of critical reflection: The lived experience of reflective practice in teacher education*. University of Queensland, Brisbane.
Ovens, A. (2009). Reflection as situated practice: A memory-work study lived experience in teacher education. *Teaching and Teacher Education, 25*(8), 1125-1131.
Pagnini, D., King, L., Booth, S., Wilkenfeld, R., & Booth, M. (2009). The weight of opinion on childhood obesity: Recognizing complexity and supporting collaborative action. *International Journal of Pediatric Obesity, 4*(4), 233-241.
Pagnini, D., Wilkenfeld, R., King, L., Booth, M., & Booth, S. (2006). The Weight of Opinion: The early childhood sector's perceptions about childhood overweight and obesity. Sydney: NSW Centre for Overweight and Obesity.
Parkes, R., Gore, J., & Elsworth, W. (2010). After Poststructuralism. Rethinking the discourse of social justice and pedagogy. In T. Chapman & N. Hobbel (Eds.), *Social Justice and Pedagogy Across the Curriculum. The Practice of Freedom*. New York: Routledge.
Pasman, L., & Thompson, J. K. (1988). Body image and eating disturbance in obligatory runners, obligatory weightlifters, and sedentary individuals. *International Journal of Eating Disorders, 7*(6), 759-769.
Perez-Samaniego, V. M., Devis-Devis, J., Smith, B. M., & Sparkes, A. C. (2011). Narrative research in physical education and sport: what is it and to what purpose does it serve. *Movimento, 17*(1), 11-38.
Peters, M., & Marshall, J. (1995). Postmodernism and the critique of humanism. In P. McLaren (Ed.), *Postmodernism, Postcolonialism and Pedagogy* (pp. 205-226). Albert Park: James Nicholas Publishers Pty Ltd.
Petersen, A. (1996). Risk and the regulated self: the discourse of health promotion as politics of uncertainty. *Journal of Sociology, 32*(1), 44-57.
Petersen, A. (1997). Risk, governance and the new public health. In A. Petersen & R. Bunton (Eds.), *Foucault, Health and Medicine*. London: Routledge.
Petersen, A. (2007). *The Body in Question: A Socio-Cultural Approach*. Oxon: Routledge.
Petersen, A., & Lupton, D. (1996). *The New Public Health: Health and Self in the Age of Risk*. St Leonards: Allen and Unwin.
Peterson, F., Cooper, R., & Laird, J. (2001). Enhancing Teacher Health Literacy in School Health Promotion A Vision for the New Millennium. *Journal of School Health, 71*(4), 138-144.
Petrie, K., & lisahunter. (2011). Primary teachers, policy and physical education. *European Physical Education Review, 17*(3), 325-339.
Philpot, R., & Smith, W. (2011). Beginning and graduating student-teachers' beliefs about physical education : a case study. *Asia-Pacific Journal of Health, Sport and Physical Education, 2*(1), 33-50.
Pill, S. (2007). Junior primary/primary pre-service teachers' perceptions of their work as effective teachers of physical education. *ACHPER Healthy Lifestyles Journal, 54*(3), 25-31.
Placek, J., Doolittle, S., Ratliffe, T., Dodds, P., Portman, P., Pinkham, K., & (1995). Teaching Recruits' Physical Education Backgrounds and Beliefs About Purposes for Their Subject Matter. *Journal of Teaching in Physical Education, 14*, 246-261.
Powell, D. (2012). *Corporate run obesity programmes in primary schools: Contrived philanthropy and the creeping privatisation of health education*. Paper presented at the Australian Association for Educational Research, University of Sydney. Retrieved January, 2013 from http://eventmobi.com/aare-apera2012/session?id=101847
Pringle, R., & Pringle, D. (2012). Competing obesity discourses and critical challenges for health and physical educators. *Sport, Education and Society, 17*(2), 143-161.
Probyn, E. (1993). *Sexing the Self: Gendered Positions in Cultural Studies*. Routledge.

Pyle, S., Sharkey, J., Yetter, G., Felix, E., Furlong, M., & Poston, C. (2006). Fighting an Epidemic: The Role of Schools in Reducing Childhood Obesity. *Psychology in Schools, 43*(3), 361-376.

Quennerstedt, M., Burrows, L., & Maivorsdotter, N. (2010). From teaching young people to be healthy to learning health. *Utbildning & Demokrati, 19*(2), 97-112.

Rabinow, P. (2003). *Anthropos Today: Reflections on Modern Equipment*. Princeton and Oxford: Princeton University Press.

Rabinow, P., & Rose, N. (2006). Biopower Today. *London School of Economics and Political Sciences, 1*, 195-217.

Rail, G. (2009). Canadian youth's discursive constructions of health in the context of obesity discourse. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'obesity epidemic': governing bodies* (pp. 141). New York: Routledge.

Rail, G., & Lafrance, M. (2009). Confession of the flesh and biopedagogies: discursive constructions of obesity on Nip/Tuck. *Medical Humanities, 53*, 76-79.

Randall, L., & Maeda, J., K. . (2010). Pre-Service Elementary Generalist Teachers' Past Experiences in Elementary Physical Education and Influence of These Experiences on Current Beliefs. *Brock Education : a Journal of Educational Research and Practice, 19*(2).

Raphael, D., & Bryant, T. (2002). The limitations of population health as a model for a new public health. *Health Promotion International, 17*(2), 189-199.

Rapport, F., & Sparkes, A. C. (2009). Narrating the Holocaust: in pursuit of poetic representations of health. *Medical Humanities, 35*(1), 27-34.

Resnicow, K., Cherry, J., & Cross, D. (1993). Ten unanswered questions regarding comprehensive school health promotion. *The Journal of School Health, 63*(4), 171.

Rice, C. (2007). Becoming "the fat girl" Acqusition of an unfit identity. *Womens Studies International Forum, 30*(2), 158-174.

Rich, E. (2010). Obesity assemblages and surveillance in schools. *International Journal of Qualitative Studies in Education, 23*(7), 803-821.

Rich, E. (2011a). Exploring the relationship between pedagogy and physical cultural studies: The case of new health imperatives in schools. *Sociology of Sport Journal, 28*(1), 64-84.

Rich, E. (2011b). 'I see her being obesed!': Public pedagogy, reality media and the obesity crisis. *Health:, 15*(1), 3-21.

Rich, E., & Evans, J. (2005). 'Fat Ethics' - The obesity discourse and body politics. *Social Theory & Health*(3), 341-358.

Rich, E., & Miah, A. (2009). Prosthetic Surveillance: the medical governance of healthy bodies. *Surveillance and Society, 6*(2), 163-177.

Rich, E., Monaghan, L. F., & Aphramor, L. (2011). *Debating obesity: critical perspectives*. New York: Palgrave Macmillan.

Rink, J. (1993). Teacher education: A focus on action. *Quest, 45*, 308-320.

Rodman, G. J. (2010). Facilitating the Teaching-Learning Process through the Reflective Engagement of Pre-Service Teachers. *Australian Journal of Teacher Education, 35*(2), 20-34.

Rogers, D. (2011). *A new approach to holistic physical education: Yoga in the classroom.* Dissertation/Thesis. Retrieved August, 2012 from http://uow.summon.serialssolutions.com/link/0/eLvHCXMwQ4wAwMqDxPR0IyKKA9COK11z8PpfxFA_UlnvJsog5-Ya4uyhCysz41NycuKNQMusLM2AFZEhn2zq5mPrOzwZZvCuO_Nz3mZuAEYgKic

Rogers, V. W., & Motyka, E. (2009). 5-2-1-0 Goes to school: A pilot project testing the feasibility of schools adopting and delivering healthy messages during the school day. *Pediatrics, 123(*SUPPL. 5).
Rose, N. (1996a). Governing "advanced" liberal democracies. In A. Barry, T. Osborne & N. Rose (Eds.), *Foucault and Political Reason* (pp. 37-64). Chicago, IL: The University of Chicago Press.
Rose, N. (1996b). *Inventing Ourselves: Psychology, power and personhood*. Cambridge: Cambridge University Press.
Rose, N. (1999). *Governing the Soul: The shaping of the private self*. London: Free Association Books.
Rose, N. (2007). *Politics of life itself: biomedicine, power, and subjectivity in the twenty-first century*. Princeton: Princeton University Press.
Rose, N., & Miller, P. (1992). Political power beyond the state: problematics of government. *British Journal of Sociology, 43*(2), 173-205.
Rossi, T. (1997). *Making active connections: knowledge growth in pre-service primary physical education specialists*. Paper presented at the In 'Active connections, Melbourne 1996: the 20th Biennial National/International ACHPER Conference, 14- 19 January: proceedings' pages 204-208. Hindmarsh SA: Australian Council for Health, Physical Education and Recreation (ACHPER), 1997.
Rossi, T., Sirna, K., & Tinning, R. (2008). Becoming a Health and Physical Education (HPE) Teacher: Student Teacher 'Performances' in the Physical Education Subject Department Office. *Teacher and Teacher Education, 24*(4), 1029-1040.
Rossi, T., Tinning, R., McCuaig, L., Sirna, K., & lisahunter. (2009). With the best of intentions: A critical discourse analysis of physical education curriculum materials. *Journal of Teaching in Physical Education, 28*, 75-89.
Rovegno, I., & Kirk, D. (1995). Articulations and silences in socially critical work on physical education: Toward a broader agenda. *Quest, 47*(4), 447-474.
Rovegno, I. (2003). Teacher's knowledge construction. In S. Silverman & C. Ennis (Eds.), *Student Learning in Physical Education: Applying Reearch to Enhance Instruction* (2nd ed.). Champaign, IL: Human Kinetics.
Ruiz, B. M., & Fernandez-Balboa, J.-M. (2005). Physical education teacher educators' personal perspectives regarding their practice of critical pedagogy. *Journal of Teaching in Physical Education, 24*(3), 243-264.
Russell-Mayhew, S. (2007). Eating Disorders and Obesity as Social Justice Issues: Implications for Research and Practice. *Journal for the Association in Conselling and Psychology, 1*(1).
Ryan, M. (2011). Spaces of possibility in pre-service teacher education. *British Educational Research Journal, 32*(6), 881-900.
Ryan, M., Rossi, A., Macdonald, D., McCuaig, L., & lisahunter. (2012). Theorising a framework for contemporary health literacies in schools *Curriculum Perspectives, 32(3), 1-10*.
Saguy, A., & Almeling, R. (2008). Fat in the Fire? Science, The News Media, and the "Obesity Epidemic?". *Sociological Forum, 23*(1), 53-83.
Sallis, J., McKenzie, T., Beets, M., Beighle, A., Erwin, H., & Lee, S. (2012). Physical Education's Role in Public Health: Steps Forward and Backward Over 20 Years and HOPE for the Future. *Research Quarterly for Exercise and Sport, 83*(2), 125-135.
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: Sage.
Sandlin, J., O'Malley, M., & Burdick, J. (2011). Mapping the Complexity of Public Pedagogy Scholarship: 1894-2010. *Review of Educational Research, 81*(3), 338-375.

Sartwell, C. (2010). *Political Aesthetics*. New York: Cornell University Press.
Schlesinger, M. (2002). A loss of faith: the sources of reduced political legitimacy for the American medical profession. *The Milbank Quarterly, 80*(2), 185-235.
Scrinis, G. (2008). On the Ideology of Nutritionism. *Gastronomica: The Journal of Food and Culture, 8*(1), 39-48.
Scriven, A. (1995). Future prospects for health education in initial teacher education, *Health Education, 95*(4), 18-21.
Seale, C. (2002). *Media and Health*. London: Sage.
Seear, K., Fraser, S., Wright, J., Maher, J., & Petersen, A. (2010). 'Peeling away the onion': Report on a national consltation on childhood obesity research, policy and practice in Australia. Clayton: Centre for Women's Studies and Gender Research, School of Political and Social Inquiry, Faculty of Arts.
Sherman, C. (2008). Training elementary school classroom teachers to lead developmentally appropriate physical education. *Journal of Physical Education, Recreation and Dance, 79*(9), 33-39.
Shilling, C. (1993). The body, class and social inequities. In J. Evans (Ed.), *Equality, Education, and Physical Education* (pp. 55-73). London: Falmer Press.
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*. Oxon: Routledge.
Shilling, C. (2007). Sociology and the body: classical traditions and new agendas. In C. Shilling (Ed.), *Embodying Sociology: Retrospect, Progress, Prospects*. Oxford: Blackwell Publishing Ltd.
Shilling, C. (2008). *Changing bodies. Habit, Crisis and Creativity*. London: Sage.
Sicilia-Camacho, A., & Fernandez-Balboa, J.-M. (2009). Reflecting on the moral bases of critical pedagogy in PETE: toward a Foucaultian perspective on ethics and the care of the self. *Sport, Education and Society, 14*(4), 443-463.
Silk, M. L., Francombe, J., & Bachelor, F. (2011). The biggest loser: The discursive constitution of fatness. *Interactions: Studies in Communication and Culture, 1*(3), 369-389.
Simovska, V. (2012). What do health-promoting schools promote?: Processes and outcomes in school health promotion, *Health Education, 112*(2), 84-88.
Sinkinson, M., & Hughes, D. (2007). Food pyramids, keeping clean and sex talks: pre-service teachers' experiences and perceptions of school health education. *Health Education Research, 23*(6), 1074.
Sirna, K., Tinning, R., & Rossi, T. (2008). The social tasks of learning to become a physical education teacher: considering the HPE subject department as a community of practice. *Sport, Education and Society, 13*(3), 285-300.
Sirna, K., Tinning, R., & Rossi, T. (2010). Social processes of health and physical education teachers' identity formation: reproducing and changing culture. *British Journal of Sociology of Education, 31*(1), 71-84.
Sloan, S. (2010). The continuing development of primary sector physical education: Working together to raise quality of provision. *European Physical Education Review, 16*(3), 267-281.
Smith, W., & Philpot, R. (2011). The preparation of HPE teachers in New Zealand. *Asia-Pacific Journal of Health, Sport and Physical Education, 2*(3), 71-80.
Solmon, M., & Lee, A. (2008). Research on social issues in elementary school physical education. *Elementary School Journal, 108*(3), 229-239.
Sparkes, A. (1999). Exploring body narratives. *Sport, Education and Society, 4*(1), 17-30.

Sparkes, A., Nilges, L., Swan, P., & Dowling, F. (2003). Poetic representations in sport and physical education: Insider perspectives 1. *Sport, Education and Society, 8*(2), 153-177.

Sparkes, A., & Templin, T. (1992). Life Histories and physical education teachers: exploring the meanings of marginality. In A. Sparkes (Ed.), *Research in Physical Education and Sport*. London: Falmer Press.

Speller, V., Byrne, J., Dewhirst, S., Almond, P., Mohebati, L., Norman, M., Roderick, P. (2010). Developing trainee school teachers' expertise as health promoters, *Health Education, 110*(6), 490-507.

Spiegel, S., & Foulk, D. (2006). Reducing overweight through a multidisciplinary school-based intervention. *Obesity, 14*(1), 88-96.

St Leger, L. (2001). Schools, health literacy and public health: possibilities and challenges. *Health Promotion International, 16*(2), 197-205.

St Leger, L. (2006). Health Promotion and Health Education in Schools – Trends, Effectiveness and Possibilities. Noble Park North: Royal Automobile Club of Victoria.

St. Pierre, E. (2001). Coming to theory: finding Foucault and Deleuze. In K. Weiler (Ed.), *Feminist Engagements: Reading, Resisting and Revisioning Male Theorists in Education and Cultural Studies*. New York: Routledge.

St.Pierre, E. A. (1997). Circling the Text: Nomadic Writing Practices. *Qualitative Inquiry, 3*(4), 403-417.

Stewart, S., Riecken, T., Scott, T., Tanaka, M., & Riecken, J. (2008). Expanding health literacy: indigenous youth creating videos. *Journal of Health Psychology, 13*(2), 180-189.

Stokes, C. C. (2008). *Healthist ideologies: The case of Lululemon Athletica*. Dissertation/Thesis, Queen's University, Kingston, Ontario.

Stone, H. (2006). *Specialist Teachers and Curriculum Reform in a Western Australian Primary School in 2002: A Comparative Study of Specialist Music, Health and Physical Education, and Languages-Other-Than-English Teaching Professionals*. Master of Education (Research), Murdoch University, Perth.

Story, M., Kaphingst, K., & French, S. (2006). The role of schools in obesity prevention. *Future Child, 16*(1), 109-142.

Strong, T. (2002). Poetic Possibilities in Conversations About Suffering. *Contemporary Family Therapy, 24*(3), 457-473.

Swabey, K., Castleton, G., & Penney, D. (2010). Meeting the standards? Exploring preparedness for teaching. *Australian Journal of Teacher Education, 35*(8), 29-46.

Swinburn, B., Egger, G., & Raza, F. (1999). Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive Medicine, 29*(6), 563-570.

Sydney Morning Herald. (2012a). Government fends off Big Tobacco arguments. Retrieved 23 April, 2012, from http://www.smh.com.au/national/health/government-fends-off-big-tobacco-arguments-20120405-1wfm1.html

Sydney Morning Herald. (2012b). Sugar as harmful as tobacco, alcohol, experts say. Retrieved 4th Feburary, 2012, from http://www.smh.com.au/lifestyle/diet-and-fitness/sugar-as-harmful-as-tobacco-alcohol-experts-say-20120202-1quat.html

Szwed, C. (2010). Gender Balance in Primary Initial Teacher Education: Some Current Perspectives. *Journal of Education for Teaching: International Research and Pedagogy, 36*(3), 303-317.

Taguchi, H. (2007). Deconstructing and Transgressing the Theory-Practice Dichotomy in Early Childhood Education. *Educational Philosophy and Theory, 39*(3), 275-290.

Tamboukou, M. (1999). Writing Genealogies: an explanation of Foucault's strategies for doing research. *Discourse: Studies in the cultural politics of education, 20*(2), 201-217.
Tamboukou, M. (2008). A Foucauldian approach to narratives. In M. Andrews, C. Squire & M. Tamboukou (Eds.), *Doing Narrative Research* (pp. 102-120). London: Sage.
Tamboukou, M. (2010). *In the Fold Between Power and Desire: Women Artists' Narratives*. Tyne, UK: Cambridge Scholars Publishing.
Taylor, S. (2001). Locating and Conducting Discourse Analytic Research In S. Taylor & S. Yates (Eds.), *Discourse as Data: A Guide for Analysis* (pp. 5-48). London: Sage.
Thomas-Maclean, R. (2010). Unravelling the ribbon: learning about breast cancer through poetic transcription. *Canadian Woman Studies, 28*(2-3), 166.
Thompson, K. (1998). *Moral panics*. London: Routledge.
Thomson, P. (2000). The Sorcery of Apprenticeships and New/Old Brooms: Thinking about theory, practice, the practicum and change. *Teaching Education, 11*(1), 67-74.
Tinning, R. (1997). Performance and participation discourses in human movement: towards a socially critical physical education. In J. M. Fernandez-Balboa (Ed.), *Critical Postmodernism in Human Movement, Physical Education, and Sport* (pp. 99-119). New York: State University of New York Press.
Tinning, R. (2004a). Conclusion: ruminations on body knowledge and control and the spaces for hope and happening. In J. Evans, B. Davies & J. Wright (Eds.), *Body Knowledge and Control: Studies in the Sociology of Physical Education and Health*. London: Routledge.
Tinning, R. (2004b). Rethinking the Preperation of HPE teachers: ruminations on knowledge, identity, and ways of thinking. *Asia-Pacific Journal of Teacher Education, 32*(3), 241-253.
Tinning, R. (2006). Theoretical orientations in physical education teacher education. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *The Handbook of Physical and Health Education*. London: Sage.
Tinning, R. (2008). From Dr Fritz Duras to the 'obesity crisis': observations [of] the evolution of Human Movement Studies as an academic field. [A revisied version of the Inaugural Fritz Duras Lecture, delivered in the 2008 Dean's Lecture Series, Melbourne Graduate School of Education, University of Melbourne.]. *ACHPER Australia Healthy Lifestyles Journal, 55*(4), 21-27.
Tinning, R. (2010). *Pedagogy and Human Movement: Theory, Practice, Research*. Oxon: Routledge.
Tinning, R. (2012). A socially critical HPE (aka physical education) and the challenge for teacher education. In B. Down & J. Smyth (Eds.), *Critical Voices in Teacher Education. Teaching for Social Justuce in Conservative Times* (pp. 223-238). London: Springer.
Tinning, R., & Glasby, T. (2002). Pedagogical work and the 'cult of the body': considering the role of HPE in the context of the new 'public health'. *Sport Education and Society, 7*(2), 109-119.
Tinning, R., Kirk, D., & Evans, J. (1993). *Learning to teach physical education*. Erskineville: Prentice Hall of Australia Pty Ltd.
Tinning, R., & McCuaig, L. (2006). Making a certain citizen: Schooling and HPE. In R. Tinning, L. McCuaig & lisahunter (Eds.), *Teaching Health and Physical Education in Australian Schools*. Frenchs Forest: Pearson Education Australia.
Tohar, V., Asaf, M., Kainan, A., & Shahar, R. (2006). Personal narratives as a way to understand the worlds of college lecturers. *Forum Qualitative Sozialforschung, 7*(3).
NSW Department of Education and Training. (2004). *Fresh Tastes @ School: NSW Healthy Canteen Strategy: Canteen Menu Planning Guide*. Retrieved April 2011, from http://www.schools.nsw.edu.au/studentsupport/studentwellbeing/schoolcantee

n/cmpg_ck.php. Triegaardt, K. (2007). Pre-service teacher education hours are they enough? *New Zealand Physical Educator, 40*(2), 7.
Trost, S. (2006). Public Health and Physical Education. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *Handbook of Physical Education*. London: Sage Publications.
Tsangaridou, N. (2006). Teachers' knowledge. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *Handbook of Research in Physical Education* (pp. 502-515). London: Sage.
Tsangaridou, N. (2007). Trainee primary teachers' beliefs and practices about physical education during student teaching. *Physical Education and Sport Pedagogy, 13*(2), 131-152.
Turner, C. (1966). WHO and UNESCO Promote Planning for Health Education in Schools and Institutions for the Preparation of Teachers. *Journal of School Health, 36*(10), 473-480.
van Strien, T., Frijters, J., Bergers, G., & Defares, P. (1986). The Dutch Eating Behavior Questionnaire (DEBQ) for assessment of restrained, emotional, and external eating behavior. *International Journal of Eating Disorders, 5*(2), 295-315.
Vander Schee, C. (2008). The politics of health as a school-sponsored ethic: Foucault, neoliberalism, and the unhealthy employee. *Educational Policy, 22*(6), 854-874.
Vander Schee, C. (2009a). Confessions of the 'unhealthy': Eating chocolate in the halls and smoking behind the bus garage: Teachers as health missionaries. *British Journal of Sociology of Education, 30*(4), 407-419.
Vander Schee, C. (2009b). Fruit, vegetables, fatness, and Foucault: governing students and their families through school health policy. *Journal of Education Policy, 24*(5), 557-574.
Vendien, C., & Nixon, J. (1985). Physical education teacher education: Guidelines for sport pedagogy. *New York, John Wiley and Sons*.
Verloop, N., Van Driel, J., & Meijer, P. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research, 35*(5), 441-461.
Wagenaar, H. (2011). *Meaning in Action: Interpretation and Dialogue in Policy Analysis*. New York: M.E Sharpe.
Walkerdine, V. (2009). Biopedagogies and beyond. In J. Wright & V. Harwood (Eds.), *Biopolitics and the Obesity Epidemic: Governing Bodies* (pp. 199-207). New York: Routledge.
Walshaw, M. (2007). *Working with Foucault in Education*. Rotterdam: Sense Publishers.
Wang, J., Odell, S., Klecka, C., Spalding, E., & Lin, E. (2010). Understanding teacher education reform. *Journal of Teacher Education, 61*(5), 395-402.
Warin, M. (2011). Foucault's progeny: Jamie Oliver and the art of governing obesity. *Social Theory & Health, 9*(1), 24-40. doi: 10.1057/sth.2010.2
Warin, M., Turner, K., Moore, V., & Davies, M. (2008). Bodies, Mothers and Identities: Rethinking Obesity and the BMI. *Sociology of Health and Illness, 30*(1), 97-111.
Waters, E., de Silva-Sanigorski, A., Hall, B., Brown, T., Campbell, K., Gao, Y., Summerbell, C. (2011). Interventions for prevention obesity in children. *Cochrane Database of Systematic Reviews,* (12). Retrieved August 2012, from doi:10.1002/14651858.CD001871.pub3.
Webb, L., McCaughtry, N., & Macdonald, D. (2004). Surveillance as a Technique of Power in Physical Education. *Sport, Education and Society, 9*(2), 207-222.
Webb, L., Quennerstedt, M., & Öhman, M. (2008). Healthy bodies: construction of the body and health in physical education. *Sport, Education and Society, 13*(4), 353-372.
Webster, P. (2001). *Teachers' perceptions of physical education within the K-6 personal development, health and physical education key learning area*. Doctor of Philosophy, University of Wollongong, Wollongong.

Weedon, C. (1987). *Feminist Practice & Poststructuralist Theory*. Oxford: Basil Blackwell Ltd.
Welshman, J. (1996). Physical Education and the School Medical Service in England and Wales, 1907-1939. *Social History of Medicine, 9*(1), 31-48.
Wilson, P. (2011). Denmark's fat tax serves up food for thought in Britain. *The Australian*. Retrieved 5th Feburary, 2012, from http://www.theaustralian.com.au/news/world/denmarks-fat-tax-serves-up-food-for-thought-in-britain/story-e6frg6so-1226161602443
Witz, A. (2000). Whose body matters? Feminist sociology and the corporeal turn in sociology and feminism. *Body Matters, 6*(2), 1-24.
World Health Organisation. (2008). School Policy Framework. Implementation of the WHO Global Strategy in Diet, Physical Activity and Health. Retrieved March 2011 from http://www.who.int/dietphysicalactivity/schools/en/index.html
Wray, S., & Deery, R. (2008). The medicalization of body size and women's healthcare. *Healthcare for Women International 29*, 227-243.
Wrench, A., & Garrett, R. (2008). Pleasure and pain: Experiences of fitness testing. *European Physical Education Review, 14*(3), 325-346.
Wright, J. (1991). The contribution of teacher talk to the production and reproduction of gendered subjectivity in physical education lessons" *University of Wollongong Thesis Collection* (1991).
Wright, J. (1996). Mapping the discourses in physical education: Articulating a female tradition. *Journal of Curriculum Studies, 28*(3), 331-351.
Wright, J. (2000a). Bodies, meanings and movement: A movement comparison of the language of a physical education lesson and a Feldenkrais movement class. *Sport Education & Society, 5*(1), 35-49.
Wright, J. (2000b). Disciplining the body: power, knowledge and subjectivity in a physical education lesson. In A. Lee & C. Poynton (Eds.), *Culture and Text*. Sydney: Allen & Unwin.
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. 19-31). London and New York: Routledge.
Wright, J. (2004b). Poststructural Methodologies. In J. Evans, B. Davies & J. Wright (Eds.), *Body Knowledge and Control: Studies in the sociology of physical education and health*. London: Routledge.
Wright, J. (2006). Physical Education Research from Postmodern, Poststructural and Postcolonial Perspectives. In D. Kirk, D. Macdonald & M. O'Sullivan (Eds.), *The Handbook of Physical Education*. London: Sage.
Wright, J. (2009). Biopower, biopedagogies and the obesity epidemic. In J. Wright & V. Harwood (Eds.), *Biopolitics and the Obesity Epidemic*. New York: Routledge.
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).
Wright, J., & Dean, R. (2007). A Balancing Act: Problematising prescriptions about food and weight in school health texts. *Journal of Didactics and Educational Policy, 16*(2), 75-94.
Wright, J., & Forrest, G. (2007). A social semiotic analysis of knowledge construction and games centred approaches to teaching. *Physical Education and Sport Pedagogy, 12*(3), 273-287.
Wright, J., & Harwood, V. (Eds.). (2009). *Biopolitics of the 'Obesity Epidemic': Governing the Body*. New York: Routledge.

Wright, J., Konza, D., Hearne, D., & Okely, T. (2007). The Gold Medal Fitness Program: A Model for Teacher Change. *Physical Education and Sport Pedagogy, 13*(1), 49-64.
Wright, J., O'Flynn, G., & Macdonald, D. (2006). Being fit and looking healthy: Young women's and men's constructions of health and fitness. *Sex Roles - A Journal of Research, 54*(9-10), 707-716.
Yager, Z. (2007). *Body Image, Body Dissatisfaction, Dieting and Disordered Eating and Exercise Behaviour of Trainee Physical Education Teachers: Investigation and Intervention.* Doctor of Philosophy, The University of Sydney, Sydney.
Yager, Z., & O'Dea, J. (2005). The role of teacher and other educators in the prevention of eating disorders and child obesity: what are the issues? *Eating Disorders: The Journal of Treatment and Prevention, 13*(3), 261-278.
Youdell, D. (2011). *School Trouble: Identity, Power and Politics in Education*. New York: Routledge.
Young, I. (1990). *Justice and the Politics of Difference*. New Jersey: Princeton University Press.
Zahner, L., Puder, J., Roth, R., Schmid, M., Guldimann, R., Puhse, U., Knopfli, M., Braun-Fahrländer, C., Marti, B., & Kriemler, S. (2006). A school-based physical activity program to improve health and fitness in children aged 6-13 years ("Kinder-Sportstudie KISS"): Study design of a randomized controlled trial. *BMC Public Health, 6 (147).*
Zarina, A. (2012). Gender Inequality in Teacher Training Programs. *International Journal of Business and Social Science, 3*(10), 260-266.
Zeichner, K. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education, 34*(3), 3-9.
Ziguras, C. (2004). *Self-Care: Embodiment, Personal Autonomy and the Shaping of Health Consciousness*. London: Routledge.