Physical education teachers’ engagement with health-related exercise and health-related continuing professional development: a healthy profile?

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Physical Education Teachers’ Engagement with ‘Health-Related Exercise’ and Health-Related Continuing Professional Development: A Healthy Profile?

By Laura G. Ward

A Doctoral Thesis submitted in partial fulfilment of the requirements for the award of

Doctor of Philosophy of Loughborough University

April 2009
Abstract

Over the past decade there have been increasing amounts of academic, political and media interest in Physical Education teachers and their role in promoting healthy, active lifestyles. Indeed, there is a long-standing assumption that schools play a fundamental role in producing ‘a healthy nation’ and that Physical Education is responsible for promoting sport, physical activity and health amongst young people. This research was located within the context of Health-Related Exercise (HRE), a statutory component of the National Curriculum for Physical Education in England which aims to promote in pupils the knowledge, skills and understanding necessary to lead healthy, active lifestyles. An extensive and critical review of literature revealed that there were continuing concerns over the status, organisation and teaching of HRE within the curriculum, and that questions had been raised over Physical Education teachers’ knowledge of HRE and the extent to which they have engaged with continuing professional development (CPD) in the area (HRE-CPD). The reasons underpinning these concerns have been relatively unexplored and this thesis represents a contribution towards understanding the social processes which have served to influence the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD.

In response to the review of literature, the research was guided by two main questions: i) What is the nature and extent of Physical Education teachers’ engagement with: a) HRE; and b) HRE-CPD? and; ii) Which social processes have influenced Physical Education teachers’ engagement with: a) HRE and; b) HRE-CPD? Acknowledging the importance of context, and that teachers do not exist in a vacuum, a process (figurational) sociological approach (Elias, 1978) was adopted in order to allow for an understanding of the complex and dynamic nature of their social context. The guiding principles of this approach were drawn upon and the central concept of ‘figuration’ was used to illuminate the social processes and ‘chains’ of interdependence which served to both constrain and enable the Physical Education teachers’ engagement with HRE and HRE-CPD across their lifespan. In order to investigate the research questions, a two phase ‘mixed-method’ research project was carried out. Phase one
(n=112) involved a survey questionnaire, conducted with a sample of Physical Education teachers from secondary schools across England, and phase two comprised semi-structured interviews with a sample of twelve secondary school Physical Education teachers drawn from the original broader sample. The findings revealed that at least half of the teachers who participated in this study had not engaged with HRE whilst at school as a pupil (57%), during their initial teacher education (ITE) (50%), or as part of their subsequent CPD (70%). This therefore raises questions about the extent to which they were ‘equipped’ to teach HRE effectively. The findings also suggested that the status, organisation and teaching of the area continued to be marred by a lack of coherence and clarity and that, for many physical educators, their understanding of HRE was characterised by a narrow focus upon ‘fitness for sport’. Such a narrow focus, it is argued, can prove problematic in terms of achieving the learning outcomes associated with HRE which were suggested by Harris (2000, 2009).

From a process sociological perspective, the Physical Education teachers’ engagement with HRE and HRE-CPD was explained in terms of the social processes and interdependencies which operated at personal (for example, their ‘philosophies’), local (for example, departmental support and funding) and national (for example, opportunities for HRE-CPD) levels of the education figuration. Whilst it is acknowledged that a multi-layered approach to this complex issue is necessary, it is argued that effective HRE-CPD could play an important role in challenging, clarifying and broadening Physical Education teachers’ views and practices within HRE and thus, go some way to disturbing the persisting cycle of incoherence which has characterised HRE to date. The present findings suggest that the learning outcomes associated with HRE have been ‘lost in translation’, and that the teachers’ engagement with HRE and HRE-CPD did not demonstrate ‘a healthy profile’.
List of Abbreviations

AARE - Australian Association for Research in Education
afPE - Association for Physical Education
AST - Advanced Skills Teachers
ATs - Attainment Targets
BERA - British Educational Research Association
CPD - Continuing Professional Development
DCMS - Department for Culture, Media and Sport
DCSF - Department for Children, Schools and Families
DES - Department for Education and Science
DfEE - Department for Education and Employment
DfES - Department for Education and Skills
DoH - Department of Health
EPPI - Evidence for Policy and Practice Information
ERA - Education Reform Act
GTC - General Teaching Council
HBPE - Health Based Physical Education
HE - Health Education
HEIs - Higher Education Institutes
HFPE - Health Focused Physical Education
HoD - Head of Department
HRE - Health-Related Exercise
HRE-CPD - Continuing Professional Development related to Health-Related Exercise
HRE-ITE - Initial Teacher Education related to Health-Related Exercise
HRF - Health-Related Fitness
HRPE - Health-Related Physical Education
HRPF - Health-Related Physical Fitness
INSET - In-Service Education for Teachers
ITE - Initial Teacher Education
LAs - Local Authorities
LDAs - Local Delivery Agents
LLPA - Life Long Physical Activity
MORI - Market and Opinion Research International
MVPA - Moderate to Vigorous Physical Activity
NCC - National Curriculum Council
NCPE - National Curriculum for Physical Education
NCSL - National College for School Leadership
NFER - National Foundation for Educational Research
NHS - National Health Service
NHSP - National Healthy Schools Programme
NICE - National Institute for Health and Clinical Excellence
NQTs - Newly Qualified Teachers
OFSTED - Office for Standards in Education
PDB-PE - Professional Development Board for Physical Education
PE - Physical Education
PEA - Physical Education Association
PESSCL - Physical Education, School Sport and Club Links
PESSPD - Physical Education and School Sport Professional Development
PESSYP - Physical Education and Sport Strategy for Young People
PoS - Programme of Study
PSHE - Personal, Social and Health Education
QCA - Qualifications and Curriculum Authority
QTS - Qualified Teacher Status
SITE - Schools and In-Service Teacher Education
SoW - Scheme of Work
SPSS - Statistical Package for the Social Sciences
SSCo - School Sports Coordinator
TDA - Training and Development Agency for Schools
TIPD - Teachers' International Professional Development Programme
TIPS - Teacher Induction Pilot Schemes
TPLF - Teachers' Professional Learning Framework
TTA - Teacher Training Agency
WHO - World Health Organisation
WO - Welsh Office
Conference Presentations


Publications

A large number of people have been instrumental in the development of this thesis. I must firstly thank Lorraine Cale and Louisa Webb who have provided me with unwavering guidance, support and encouragement throughout the PhD process. Their words of wisdom have been invaluable and working with them has been a pleasure. Acknowledging that I probably would not have embarked upon this PhD if it were not for those at the Chester Centre for Sport in Society, I would like to thank Katie, Ken, Andy and Dan for making me think in sometimes weird and wonderful ways. I must also thank Kathy Armour, Jo Harris, John Evans, Di Bass, Emma Rich, Jessica Lee and the members of the Physical Education and Sport Pedagogy research group at Loughborough University, many of whom have provided me with advice and guidance when I needed it the most. After a chance meeting in Fremantle, Australia, Jeanne Keay was also abundant with advice and I thank her for her time. It is of course necessary to acknowledge and thank the teachers who participated in this research. Without them, this thesis would not have been possible. It was an absolute pleasure to get ‘back to school’ and it reminded me of many things which I never want to forget! Support can come in various forms, and I will be forever grateful to the following people who helped me along my merry way, and who kept me sane(ish): Toni, Claire, Sophie, Kate, Jo, Karen, Ruth, Andrea and Lara. It goes without saying that my parents have provided ongoing love and support (I.O.U) and my thanks goes to them for always being interested in my work (apparently “Elias seems like a very nice chap” [Mum, 2008]). I would like to take the opportunity to thank my colleagues at Monash University who, in the final stages of the PhD process, have provided unwavering support during extremely testing times, as well as provided fuel for my academic fire. I have never been very good at juggling in the tangible sense but I can proudly claim to have juggled a new job, a new life and a doctoral thesis for four months. My juggling success would not have been so if it was not for one person, Nathan. I would like to thank him for his love, support and for doing all the washing up! If it means I don’t have to do any housework I might start another PhD? Or maybe not...!
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Chapter One: Introduction

1.1 The Research in Context

The purpose of this research was to explore the nature and extent of Physical Education teachers' engagement\(^1\) with Health-Related Exercise (HRE) and continuing professional development (CPD) within HRE (HRE-CPD). This chapter serves to contextualise the research and introduce the areas of inquiry upon which it is centred. Physical educators have a statutory responsibility to teach HRE and are expected to promote healthy, active lifestyles as part of the National Curriculum for Physical Education (NCPE) in England. It is therefore important that they have the necessary support, guidance, knowledge, skills and understanding to do so. Research suggests, however, that there are continuing concerns over the status, organisation and teaching of HRE within the curriculum (Almond & Harris, 1997; Cale & Harris, 2005a; Cale, 1996; Harris, 2009), and questions have been raised over Physical Education teachers’ knowledge of HRE and the extent to which it features within their CPD profiles (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Cale, Harris & Leggett, 2002; Castelli & Williams, 2007; Harris, 1997). The reasons underpinning these concerns have been relatively unexplored and this thesis represents a contribution towards understanding the social processes which have served to influence the nature and extent of Physical Education teachers' engagement with HRE and HRE-CPD.

After introducing the key areas of inquiry, this chapter outlines the research questions which guided the study. Process sociology is introduced as a framework within which Physical Education teachers' engagement with HRE and HRE-CPD can be further understood. More specifically, the principles which underpin process sociology are briefly introduced and, with the use of examples, a particular ‘way of seeing’ Physical Education teachers is illuminated. That is to say, they will be viewed from a socio-

\(^1\) “Engagement” is defined as a “work-related state of mind that is characterized by vigour, dedication, and absorption” (Schaufeli & Bakker, 2004: 295). Within this context, engagement essentially refers to how Physical Education teachers view, experience and teach HRE.
historical perspective and their social interdependencies will be explored in order to understand the processes which have both constrained and enabled their engagement with HRE and HRE-CPD. Finally, the structure of the thesis is outlined.

1.2 Health-Related Exercise
Within the NCPE in England, HRE is a statutory component which aims to promote in pupils the knowledge, skills and understanding necessary to lead healthy, active lifestyles (Harris, 2000). Essentially, HRE is "physical activity associated with health enhancement" and refers to the processes through which pupils learn in and through "active participation in purposeful activity embracing a range of sport, dance and exercise experiences including individualised lifetime activities" (Cale & Harris, 2009a, p.141). As the most recent Programme of Study for Physical Education suggests, HRE is concerned with the 'Key concept' of 'Healthy, active lifestyles' and it seeks to promote the 'Key processes' of 'Making informed choices about healthy, active lifestyles' (Qualifications and Curriculum Authority [QCA], 2007).

There is a long-standing assumption that schools play a fundamental role in producing 'a healthy nation' (Cale & Harris, 2009a; Chow, McKenzie & Louie, 2008; Cothran, McCaughtry, Hodges Kulina & Martin, 2006; Keay, 2006a; Penney & Jess, 2004; Salmon, Booth, Phongsavan, Murphy & Temperio, 2007; Webb & Quennerstedt, in press) and that Physical Education is a key vehicle through which to promote physical activity and health among young people (Cale & Harris, 2005a; Green, 2008, 2002; Johns, 2005; Shephard & Trudeau, 2000; Stratton et al., 2008; Webb, Quennerstedt & Öhman, 2008). Indeed, in England, government policies, initiatives and documents have consistently identified physical educators as instrumental in providing opportunities for young people to improve their health (Cale, 2000a, 2000b; Evans, Rich, Davies & Allwood, 2008; Harris 2005, 2009; Penney, 2008; Waring, Warburton & Coy, 2007). For example, the 'National Healthy Schools Programme' (Department for Children, Schools and Families [DCSF]/DoH, 1999), 'Every Child Matters' (Department for Education and Schools [DfES], 2004), 'Extended Schools' (DfES, 2005), Public Service Agreement 12 (HM Treasury, 2007) and 'Healthy Weight, Healthy Lives' (DoH & DCSF, 2008) have all served to reinforce the view that
schools have a responsibility to promote health. Similarly, in North America, the National Task Force on Community Preventive Service has identified Physical Education as one of the five most strongly recommended interventions for increasing physical activity (Chow et al., 2008; Kahn et al., 2002). More recently, the current children’s minister, Baroness Delyth Morgan, has suggested “all schools should be judged on their contribution to the wellbeing of pupils” (Lipsett, 2008). On this basis, a consultation document was published in October 2008 on behalf of the Department for Children, Schools and Families (DCSF) which proposes a standardised set of indicators which could aid the assessment of schools’ contribution to pupil wellbeing (http://www.dcsf.gov.uk/consultations/). For Webb and Quennerstedt (in press), such developments highlight prevailing cultures of performativity which, to a certain extent, serve to regulate Physical Education teachers’ behaviour by, for example, presenting them with a range of performance targets.

Further, media coverage continues to place schools and Physical Education in an ever more prominent position with regards to improving the ‘health of the nation’. An article from the Guardian newspaper, for example, stated that “A leading doctor has accused schools of making children more overweight after government figures showed rates of obesity rise” (Batty, 2008). In the same article, it was noted that “Dr David Haslam, Clinical Director of the National Obesity Forum, has called for children to do more Physical Education” in order to combat the rise in overweight children (Batty, 2008).

What is absent from much media coverage is the acknowledgement that health is a complex and multi-dimensional concept (Cale & Harris, 2009a; B. Evans, 2003; Kirk, 2006; Penney & Jess, 2004; Roberts & Brodie, 1992). A range of interdependent lifestyle factors such as diet, levels of physical activity and alcohol intake can come to influence an individual’s health and wellbeing. It is therefore ambitious to expect Physical Education to be a panacea for the ills of society. That said, however, schools can offer an ideal context for the promotion of healthy behaviours, and Physical Education in particular is a context within which lifelong physical activity (LLPA) can be promoted (Salmon et al., 2007; Stratton et al., 2008).
Fox, Cooper and McKenna (2004, p.339) suggested that “Schools offer a logical and plausible location for the implementation of health promotion strategy”, and Cale and Harris (2009a, p.12) have provided a number of reasons as to why this is the case. They suggest that schools:

- have a statutory responsibility to provide a “balanced and broadly based curriculum which promotes the spiritual, cultural, mental and physical development of pupils” (2002 Education Act);
- provide a captive audience and access to a wide range of young people, as well as teachers, teaching assistants, ancillary staff, governors, parents;
- can occupy up to 45% of young people’s waking time;
- provide a suitable setting for teachers of Physical Education and Personal, Social and Health Education² (PSHE) to disseminate their knowledge of physical activity and health;
- can promote knowledge and understanding of physical activity and health.

As previously stated, schools have a statutory obligation to provide young people with the opportunity to engage with a broad and balanced curriculum. The role of Physical Education within the curriculum is to develop “pupils’ competence and confidence to take part in a range of physical activities that become a central part of their lives, both in and out of school” (QCA, 2007, p.189). In this respect, this thesis refers to Physical Education teachers’ role in physical activity promotion, on the understanding that this plays a role in promoting health more broadly (Harris, 2000; Salmon et al., 2007).

Within the context of education, gender has been identified as a focus for critique and research (Harris & Penney, 2000) and, more specifically, Physical Education has been presented by a number of authors as a site for the production and reproduction of gendered behaviours (Keay, 2007b; Penney & Harris, 2002; Wright & Burrows, 2004). In reviewing the literature in this area, gender emerged as an issue of importance within HRE in particular (Webb, McCaughtry & Macdonald, 2004; Harris & Penney, 2000). On this basis, it was deemed important to acknowledge, where

² Within the current secondary National Curriculum in England (QCA, 2007), introduced in September 2008, the subject of PSHE includes “everything schools do to promote pupils’ good health and well-being” (http://www.teachernet.gov.uk/PSHE/) and it aims to bring together personal, social and health education, work-related learning, careers, enterprise, and financial capability.
necessary within this thesis, gender-related issues and the extent to which Physical Education teachers view them as influential upon their engagement with HRE and HRE-CPD.

As noted earlier, given the requirement for Physical Education teachers to promote healthy, active lifestyles, it is crucial that they have the necessary support, guidance, knowledge, skills and understanding to do so. Also, given the increasing importance of promoting activity levels amongst young people (Cale & Harris, 2009a; Trost, 2006), it would be reasonable to assume that HRE would occupy a privileged place within Physical Education. Research suggests, however, that there are continuing concerns over the status, organisation and teaching of HRE within the curriculum (Almond & Harris, 1997; Cale & Harris, 2005a; Cale, 1996; Harris, 2009), and that questions have been raised over Physical Education teachers’ knowledge of HRE and the extent to which they have engaged with HRE-CPD (Armour & Harris, 2008; Armour & Yelling, 2004a; Cale, 2000b; Cale, Harris & Leggett, 2002; Castelli & Williams, 2007; Fox & Harris, 2003; Harris, 1994; Kulinn et al., 2008; Trost, 2006). Interestingly, these issues are not unique to the United Kingdom and research suggests that similar issues have been identified in Australia (Brown, 2003) and North America (Castelli & Williams, 2007). As a consequence, it has been suggested most recently by Armour and Harris (2008) and Castelli and Williams (2007), that HRE-CPD may prove valuable in addressing some of the issues relating to the organisation and teaching of HRE. The following section introduces and defines the concept of CPD.

1.3 Continuing Professional Development
Over the past decade, CPD has become increasingly popular, at least at policy level (Keay, 2005a). Indeed, it has been suggested that CPD is “an expectation of all professionals” (Day & Sachs, 2004, p.4) and “both a contractual right and a contractual duty” for all teachers (Johnson, 2001, p.5). Within the context of education in England, the increasing prominence of CPD has been signalled by extensive government investment in, for example, the National CPD Strategy (Department for Education and Employment [DfEE], 2001) which seeks to raise
standards of teaching and learning by encouraging teachers to maximise their CPD opportunities (Day et al., 2006; Keay, 2005a). Indeed, it has been argued that the heightened interest in teacher CPD is, to some degree, associated with the growing acknowledgement of its effect upon pupil learning (Armour & Yelling, 2007; Borko, 2004; DfEE, 2001; Guskey & Sparks, 2004; Reynolds & Teddlie, 2000). Whilst it is not valuable to view teacher CPD as a panacea for all that is wrong with education (Armour & Yelling, 2007; Fishman, Marx, Best & Tal, 2003), research suggests that CPD can contribute in a positive way towards the quality of teaching in schools (Armour & Yelling, 2007).

CPD is a complex and dynamic process and it has been argued that it is characterised by “extreme conceptual vagueness” (Friedman & Philips, 2004, p.362). For Craft (2000, p.9), the term CPD refers to “all types of professional learning undertaken by teachers beyond the initial point of training”. A more adequate conceptualisation of CPD, however, is to view it as the start of an ongoing process which begins at the point of initial teacher education (ITE) and continues throughout teachers’ careers (Harris, 2007). This view of CPD coincides with the process sociological framework within which this study is located, and focuses on long-term processes of development. For the purpose of this study, the term CPD refers broadly to any activity from the point of ITE that “increases the skills, knowledge or understanding of teachers, and their effectiveness in schools” (DfEE, 2000, p.3).

To date, relatively little research has focused upon Physical Education teachers’ experiences and views of CPD (Armour & Yelling, 2007). Furthermore, a critical review of literature (see chapters three and four) revealed that some areas of inquiry remain relatively unexplored. Over the past decade, there have been increasing amounts of academic, political and media interest in: i) the role of Physical Education teachers in the promotion of healthy, active lifestyles; and ii) the CPD of teachers. Despite such interest, however, there is limited literature focusing upon HRE-CPD, that is to say, the process by which Physical Education teachers gain the professional knowledge, skills and understanding that enables them to promote healthy, active
lifestyles. As a result, the following research questions were established in order to guide this research.

1.4 The Research Questions

i) What is the nature and extent of Physical Education teachers' engagement with: a) HRE; and b) HRE-CPD?

ii) Which social processes have influenced Physical Education teachers' engagement with: a) HRE; and b) HRE-CPD?

In order to answer these questions, it is necessary to locate the research within a theoretical framework that will adequately reflect the multidimensional and dynamic context within which it is set. Process sociology, or figurational sociology as it is often termed, therefore forms the theoretical framework of this study.

1.5 The Theoretical Framework: Process Sociology

Acknowledging that teachers do not exist in a vacuum, a process sociological approach (Elias, 1978, 2000) was adopted in order to allow for an appreciation of the complex and dynamic nature of human interdependencies. The guiding principles of this approach were drawn upon and the central concept of ‘figuration’ was used to illuminate the interdependencies and wider social processes which served to both constrain and enable Physical Education teachers' engagement with HRE and HRE-CPD across their lifespan. ‘Figuration’ (see Appendix A) has been succinctly defined by Elias (2000, p.482) as a “network of interdependencies formed by individuals” and, with regards to this research, the concept of an ‘education figuration’ (including teachers, school staff, pupils, the local community, commercial CPD providers, Local Delivery Agents, Local Authorities, and the national government amongst others) allows for an understanding of the ways in which Physical Education teachers are constrained and enabled in certain ways as a result of ever-changing, multi-directional balances of power.
The process sociological approach is explored more fully in chapter two, but the key point to consider is that Physical Education teachers, like all social beings, are inevitably linked to others via chains of social interdependency that can come to influence, to varying degrees, their thoughts and actions. For example, on a national level it could be argued that teachers have been required by the curriculum to teach prescribed Programmes of Study to enable pupils to meet prescribed expectations set out within the curriculum. On personal and local levels, however, teachers have the power to use varying degrees of their professional autonomy (Osborn, 2008) and, providing the statutory requirements are met, to teach their subject as they see fit.

In trying to make sense of Physical Education teachers’ experiences and views, which come to form part of their ‘philosophies’, it is necessary to first acknowledge that their experiences and views are grounded in the figurations of which they are a part (Green, 2002). Within this thesis, the term ‘philosophies’ is not used in a “true philosophical sense” but is used to refer to an array of beliefs and underlying ideologies, informed by teachers’ habitus 3 and context (Green, 2003, p.146). Following a study of Physical Education teachers, Green (2003, p.116) suggested that the most prominent ideologies subsumed within their philosophies were the “sporting, health and academic ideologies”. The extent to which such ideologies have influenced Physical Education teachers’ engagement with HRE and HRE-CPD is discussed within this thesis.

‘Involvement-detachment’ is a tenet of Elias’ work that suggests “social science can only improve the human lot by clearing through some of the fog which obscures our understanding of social forces” (Mennell, 1998, p.269). In this instance, the ‘fog’ is provided as a metaphor for personal values and interests which may serve to obscure our understanding of particular social phenomena (Mansfield, 2007). Indeed, a relatively detached understanding of Physical Education teachers ‘in the round’ (Elias, 1978) forms a prerequisite for understanding key aspects of their engagement.

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3 The term habitus is used to refer to both the singular and the plural. This, however, does not suggest that all habitus are the same.
with HRE and HRE-CPD. Below is a reflexive\(^4\) account highlighting personal experiences and subsequent values which I (Laura Ward), as a researcher, feel have influenced how I view and have approached this research.

1.6 Personal Biography
Writing this account has encouraged me to think about how I have reached this point of working towards a Doctor of Philosophy at Loughborough University. Physical Education and sport have always been important in my life and my experiences of Physical Education have been crucial in helping me choose the career path I am now trying to pursue. Following many years of working within the sport, health and fitness industry under various guises, I found myself employed as a consultant by a number of primary and secondary schools to plan and teach HRE within Physical Education. Initially, I viewed this experience as invaluable because I saw it as preparation for my Initial Teacher Education (ITE) that was due to commence the following year. Finding myself in this situation where I, an unqualified ‘teacher’, was partly responsible for the Physical Education of so many pupils, however, made me temporarily lose faith in the system that enabled this to happen. How could somebody who had no teaching qualifications be responsible for educating young people in and through the physical? What was my situation telling me about how Physical Education and Physical Education teachers were viewed within the wider school context? For me, the employment of unqualified Physical Education teachers, such as myself, was a concern.

Whilst working as a so-called ‘HRE specialist’ in schools, I was also nearing the completion of a masters degree in the sociology of sport and exercise. Working towards a masters degree encouraged me to think more critically about school Physical Education and my current role within that context. Recognising that I would need to start planning my future career, I remained unsure about what to do. I felt constrained in a number of ways by my biography and, whilst I wanted to fulfil my ambition of becoming a Physical Education teacher, I also wanted to make sense of

\(^4\) A reflexive researcher acknowledges the impact of his or her values and past experiences upon his or her approach to the research process (Etherington, 2004).
my experiences as an unqualified ‘teacher’ and gain an understanding of the wider social processes that influenced how Physical Education was viewed and experienced by teachers and pupils. Furthermore, given that with no formal teaching qualifications I was regarded as a ‘HRE specialist’, I had serious concerns about the state and positioning of HRE within Physical Education in particular. Why was it necessary to employ external (unqualified) consultants to teach pupils about HRE?

Fortunately for me, I was not the only person querying Physical Education teachers’ knowledge, skills and understanding with regards to HRE. On the basis of my previous experiences and qualifications I was offered a studentship to carry out a research project which focused on the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD. Following my masters degree I felt well positioned to be reflexive about my approach to the research. In process sociological terms, I attempted a ‘detour via detachment’ and was able to recognise my own involvement in the area of study, and acknowledge my value-laden beliefs about Physical Education and Physical Education teachers. My love for Physical Education and sport have, more-or-less, dictated my career-path thus far. It was crucial, however, that in conducting this research I recognised my vested interests and tried not to let them obscure the research or its interpretation.

On reflection, being an unqualified teacher had both positive and negative repercussions. In one respect, I was able to approach the research from a relatively detached perspective, but I also recognised that I may lack specific understandings of the day-to-day life of a full-time physical educator. In an attempt to address my lack of experience as a qualified teacher I: i) drew upon my experience of working in schools and Physical Education departments in particular; ii) continued to work within Physical Education departments; iii) ensured that I kept abreast of developments within the context of Physical Education, health and teacher CPD. I would argue that a suitable balance between involvement and detachment was achieved within this research.
1.7 The Structure of the Thesis

Following on from this introduction, chapter two introduces process sociology as the theoretical framework within which this study is located. It outlines the underlying principles which guide the approach and suggests a ‘way of seeing’ social life that can aid understanding of social phenomena. This chapter provides a theoretical foundation for understanding the methodological approach to the research which is outlined in chapter five.

From a process sociological perspective it is valuable to adopt a socio-historical perspective in order to gain a better degree of sociological understanding. An extensive and critical review of literature was therefore undertaken at the outset of this research. Chapters three and four present the review, with each focusing upon a central concept of the study. Chapter three defines the concept of health and utilises a process sociological approach towards exploring the historically-rooted relationship between Physical Education, health and HRE. In so doing, the initial emergence of Health Education (HE), the recognition of multiple dimensions of health, and the emergence of the health movement are discussed. With reference to more recent developments, the formalisation of HE (now Personal, Social and Health Education [PSHE]), the introduction of the National Curriculum and the NCPE are discussed together with some relevant policies and initiatives which have been introduced in recent years. Existing literature is drawn upon in order to highlight that schools offer a logical site for the promotion of healthy, active lifestyles (Cale & Harris, 2009a; Fardy, Azzollini & Herman, 2004; Harris, in press; Harris & Cale, 1997; Johns, 2005; Keay, 2006a; O’Sullivan, 2004; Salmon et al., 2007; Trost, 2006; Welk, Eisenmann & Dollman, 2006). More specifically, HRE is introduced as the component of Physical Education which is primarily responsible for promoting purposeful physical activity associated with health enhancement (Cale & Harris, 2009a). In this respect, existing findings relating to HRE are presented and discussed, with the intention of providing an insight into how Physical Education teachers engage with HRE and HRE-CPD as part of their professional lives.
Chapter four defines the process of CPD and draws upon existing literature to highlight some issues and considerations that have characterised its development since the 1970s. The focus subsequently turns to Physical Education-CPD (PE-CPD) in particular. A socio-historical perspective is provided and an exploration of existing literature allows for an understanding of how Physical Education teachers view their CPD experiences. To conclude chapter four, the process of HRE-CPD is addressed, an outline of some issues and concerns is provided and examples of HRE resources and opportunities for HRE-CPD are highlighted.

Chapter five outlines and analyses the research process and provides a rationale for the ‘mixed-method’ methodology (Day, Sammons & Gu, 2008) and the methods used in the study, namely questionnaires and interviews with secondary school Physical Education teachers. It discusses the process sociological approach to research and, in doing so, considers ontology and epistemology and the ways in which philosophical and theoretical frameworks can aid the research process.

Chapter six introduces the survey findings. It presents demographic data that were provided by the participating teachers and data that represented their engagement with HRE whilst at school as a pupil, during their ITE and whilst teaching. The remainder of the chapter presents statistical data regarding the nature and extent of the teachers’ engagement with PE-CPD and HRE-CPD respectively.

Chapter seven presents the findings from the interviews, and discusses them in relation to the survey data presented in chapter six. The first half of the chapter addresses the first research question and the latter half addresses the second research question. All findings are discussed with reference to the research questions and existing literature. Moreover, process sociology is used to illuminate the findings and provide a framework within which Physical Education teachers’ engagement with HRE and HRE-CPD can be more adequately understood.

The final chapter is framed around the research questions and serves to summarise the key findings which were uncovered throughout the research process. A summary of
existing literature (presented in chapters three and four) is provided in order to contextualise the research. Focus is drawn to the central concepts: i) HRE; ii) CPD; iii) HRE-CPD. The two-phase ‘mixed-method’ (Day, Sammons & Gu, 2008) research project is outlined and the most pertinent findings from both phases of the research are stated. Conclusions are drawn, limitations of the research are discussed and recommendations for future research are made.

The research presented in this thesis is significant because it contributes towards an understanding of the nature and extent of Physical Education teachers’ engagement with HRE and, more importantly, the processes which have constrained and enabled their acquisition of professional knowledge, skills and understanding with regards to HRE. Moreover, it presents recommendations for future research and implications for practice within HRE and HRE-CPD.
Chapter Two: The Theoretical Perspective

2.1 Introduction
This chapter introduces process (figurational) sociology, developed largely by Norbert Elias, which provided the theoretical framework within which this research was located. Whilst sociology generally, and the sociology of Physical Education in particular, is multi-paradigmatic, the process sociological perspective has begun to provide a valuable addition to the theoretical work focusing on Physical Education (see Green, 1998, 2000, 2003, 2006; Smith & Green, 2005). To date, process sociology has been used as a framework within which to locate a greater sociological understanding of Physical Education teachers and their ‘philosophies’ on Physical Education teaching (Green, 2000, 2002, 2003, 2008), but it has not yet been applied to the specific contexts of HRE or teacher continuing professional development (CPD). Using this framework encourages an appreciation of the dynamic social processes that characterise the interdependencies associated with the education figuration and, particularly, the consequences they can have for Physical Education teachers. The process sociological approach can aid one’s understanding of the complex and sometimes invisible chains of interdependence that characterise the relations between those involved in HRE and CPD (including teachers, school staff, pupils, the local community, CPD providers, Local Delivery Agents [LDAs], Local Authorities [LAs], and the national government). This chapter reflects upon the extent to which the work of Elias and other process sociologists can illuminate our understanding of Physical Education teachers’ engagement with HRE and HRE-CPD. There is an emphasis on the explanatory power of process sociology and the underlying principles which guide this approach.

This chapter will firstly address the traditionally dichotomous approach to thinking about the dynamic relationship between ‘individual’ and ‘society’. Process sociology is offered as a fruitful approach in terms of its ability to highlight the multi-directional social processes, or interdependencies, which characterise the relationship between individual and society. There is thus an acknowledgement that each cannot exist
without the other. After introducing the approach, process sociology will be explored and its relative value within the context of this research will be addressed. The central concept of ‘figuration’ is introduced and it is recognised that any interdependence can rarely be discussed in depth without reference to power balances. The concept of habitus, initially used by Mauss in 1934, is then presented and its value within process sociology is discussed. Further exploration enables a distinction between ‘individual’ and ‘social’ habitus and the value of understanding habitus is explained in terms of understanding Physical Education teachers ‘philosophies’ (Armour & Jones, 1998; Evans, 1992; Green, 2003; Keay, 2005b).

Within sociology there is a long-standing concern regarding the conceptualisation of the individual-society or the agency-structure dichotomy. For this reason, before embarking upon a more detailed explanation of process sociology, the following section highlights some of the most prominent ‘ways of seeing’ the relationship between individuals and the societies of which they are a part.

2.2 Ways of Thinking about Individual and Society

In his work *Society of Individuals*, Elias (1991, p.3) observes that people pass the word ‘society’ “on to another like a coin whose value is unknown and whose content no longer needs to be tested”. In other words, the term ‘society’ is frequently used but less frequently understood in sociological terms. It is questionable whether people have an adequate understanding of the differential interdependence between people, which we usually term ‘society’, and the plurality of outcomes from this interdependence. Elias (1978) argues that much of the misunderstanding relating to modern conceptions of ‘society’ has its origins in ‘enlightenment thinking’ and in particular in the tendency to present the individual at the centre of their own world and complete in and of themselves (otherwise known as the ‘humanist subject’). He referred to this as *homo clausus* thinking. In addition to this restricted way of seeing the world and those within it, the ‘age of enlightenment’, usually associated with the eighteenth century, was also characterised primarily by rationalism.
Theoretical Perspective

The notion of rationalism refers to “any view appealing to reason as a source of knowledge or justification” (Lacey, 1996, p.286). In the sixteenth and seventeenth centuries, a number of socio-historical processes led to ‘enlightenment’ and changes in awareness about the world, and theological, philosophical and mythical approaches to thinking about the world were challenged. The ‘enlightened’ believed that their knowledge and reason could be a panacea for social ills. They attempted to use reason as a way to combat issues relating to religion and the ruling aristocracy. More specifically, they challenged the previously unquestioned authority of kings and spiritual leaders (Kilminster, 1998). During this period, the implicit assumption underlying most thinking about society was that “the main condition for the proper or better functioning of society was that those who governed should have the right ideas, aims and intentions” (Mennell, 1992, p.183). The ‘enlightened’ ones challenged the dominance of such pre-existing ideas about “the way the world worked”.

The egocentric perspective adopted by the ‘enlightened’ can be seen as dichotomous in that it separates people from the societies and figurations within which they are enmeshed. From this perspective, a person is conceptualised in the singular as a ‘subject’, a “single thinking mind inside a sealed container” (Mennell, 1992, p.188). This view suggests that ‘subjects’ can never know anything about other ‘objects’ in other ‘containers’ and are therefore homo clausus, or ‘closed personality’ (Mennell, 1992, p.188). To counter this notion, Elias provided the concept of homines aperti (‘open people’) who are bonded together by varying degrees of interdependence. A homo clausus perspective is not fruitful when attempting to adequately understand social life. Individuals can only be understood in the plural, as being linked to others by chains of interdependence which, to varying degrees, both constrain and enable the actions of those involved (homines aperti).

Society exists because a large number of people exist and it functions because the individuals within it have particular interests and act in particular ways. However, the socio-historical processes which have come to affect society as we know it, “clearly

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3 The term ‘egocentric’ refers to the tendency for individuals to view themselves as the centre of their own worlds (Elias, 1978).
do not depend on the intentions of particular people” (Elias, 1991, p.3). When discussing the relationship between individual and society, or structure and agency, some authors have referred to ‘the two sociologies’: i) the sociology of social action (the individual) and; ii) the sociology of social systems (society) (van Krieken, 2002, 2000; Parsons, 1937). The ‘first sociology’ focuses on society as a social system and views socio-historical formations as being planned and created by individuals (or groups of individuals), as a result of rational thought. From this perspective, society is seen as a harmonious whole but, as Elias (1991, p.13) contests, society can be more realistically described as people who “push past each other, each pursuing his or her own goals and plans”.

The ‘second sociology’ relies largely on scientific thought and it views the individual as largely redundant in the formation of society. From this perspective, socio-historical processes are a result of anonymous and supra-individual forces (Elias, 1991). There is a focus on the notion of autonomous individuals who, according to Dawe (1970, p.214), can achieve their potential and “create a truly human social order only when freed from external constraint”. From a process sociological perspective, however, both views are sociologically inadequate in that they do not: i) acknowledge the interdependencies between individuals in the plural and the society of which they are a part; ii) comprehend that society, as we know it, cannot be a result of the thoughts and actions of one person or one group of people; iii) appreciate that human interdependencies are rarely harmonious and are often characterised by contradictions and tensions; iv) appreciate that social phenomena are determined by socio-historical processes and are directed towards future events. From a process sociological perspective, dichotomous thinking leads to the conceptual separation of ‘action’ and those who ‘act’ and is, therefore, unrealistic and sociologically inadequate (van Krieken, 1998).

Dichotomies or dualisms have traditionally been regarded as a common feature of sociological theory and, according to van Krieken (2002), Elias (1978) dismisses the individual-society dichotomy in favour of a ‘way of seeing’ that allows for a more adequate understanding of the complex and dynamic social processes that characterise
societies. It can be noted that the term 'action' continues to be associated with the concept of 'the individual', and although the term agency can be applied to particular social groups, the traditional individual/society dichotomy appears to prevail (for example, Layder, 2006).

van Krieken (2002) argues that most attempts to transcend the agency/structure dichotomy merely reproduce it in a different form because of the prevailing conceptual opposition of 'action' to 'structure' (for example, Layder, 2006). He asserts that most sociological dualisms (such as agency/structure, action/social system, and micro/macro) revert back to the individual/society dichotomy. Furthermore, according to Archer (1995), the dualism between individual and society has always been and will remain the central point of discussion within sociology because it is concerned with what society essentially is: people and societies or agency and structure. Moreover, the historically-rooted nature of this dualism means that it is so deeply engrained in so many people’s thoughts and philosophies that a more adequate and sociological conceptualisation may be difficult to engender.

It could be argued that the sociology of education, and in particular the sociology of Physical Education, is constrained by an inability to adequately conceptualise the issue of agency and structure within the education figuration, especially in relation to Physical Education teachers’ engagement with HRE. Mennell and Goudsblom (1998) suggest that using process sociology can encourage a more productive conceptualization of the individual-society dichotomy. The guiding principles of process sociology and the concept on which it centres, figuration, are to be applied to the context of education, with a specific focus on Physical Education. What follows is a more detailed exploration of process sociology and Elias’ ‘way of seeing’ the relationship between individual and society.

2.3 What is Process Sociology?

van Krieken (2002) argues that traditional sociological thought is centred on the concept of ‘action’. Adopting a process sociological approach, however, encourages a focus upon people and the figurations they are enmeshed within, as opposed to merely
their actions. Figuration has been succinctly defined as a “network of interdependencies formed by individuals” (Elias, 2000, p.482). Indeed, for Elias (2000, p.482):

the concept has been introduced precisely because it expresses what we call 'society' more clearly and unambiguously than the existing conceptual tools of sociology, as neither an abstraction of attributes of individuals existing without a society, nor a 'system' or 'totality' beyond individuals, but the network of interdependencies formed by individuals.

As inferred, Elias (1978) questioned the centrality of 'actions' within sociological theory and argued that human beings should be viewed 'in the round' and not just in terms of their actions. In order to analyse human beings 'in the round', from a process sociological approach, it is first necessary to acknowledge the various figurations of which they are a part. Latour (1993) observes that in 'reality' there is an inevitable overlap between 'social fields' such as politics, culture, and religion, but, there is an apparent tendency to conceptualise them as distinct entities. Elias often used the term 'process-reduction' to refer to the ubiquitous tendency within sociology to present the dynamic social processes that characterise figurations as isolated and static (Murphy, Waddington & Sheard, 2000). Reducing the dynamic processes of people’s lives to static structures leads to the assumption that people are separate from others and from the society in which they live (homo clausus) (Elias, 1978; Murphy et al., 2000; van Krieken, 1998). Elias saw it as more beneficial to conceptualise individuals and the society they inhabit as inextricable levels of the same social world (van Krieken, 1998) and, for him, figuration went some way towards encouraging this 'way of seeing'. From this perspective it is important to see figuration as a dynamic concept that is continually in flux and that is characterised by numerous, multi-directional processes and balances of power. Elias' concept of figuration allows for the processual nature of societies to be emphasised and for human beings to be viewed as homines aperi, or "people bonded together in dynamic constellations" (Murphy et al., 2000, p.92).

Elias acknowledged the benefits of a multi-disciplinary approach and claimed that human society, human psychology and human history are “indissolubly
complementary, and can only be studied in conjunction with each other” (Elias, 1991, p.36). He synthesised aspects of some disciplines with the aim of developing a more comprehensive approach to understanding social life. For Elias, the concept of ‘social habitus’ draws upon knowledge from various disciplines and it goes some way to dissolving the false dichotomy between the individual and society. He argued that the socio-genesis of habitus could be found in dynamic human interdependencies (figurations) which correspond to variations in human personality (psychology) that can be observed over time (history). The concept of habitus is explored later in this chapter.

Process sociology constitutes a theoretical position which can potentially avoid two pertinent flaws in sociological research: the focus upon the theory of ‘action’, as opposed to the actors, and the rejection of history. This, in part, provides a rationale for adopting this approach. As stated in chapter one, Elias’ approach (1978, 1991, 1997, 2000) is organised around four fundamental and interrelated principles which relate to: i) the plurality of human beings; ii) the present as a product of the past; iii) unintended consequences of intended social actions; and iv) knowledge as a product of figurations. Acknowledging these principles that underpin process sociology can allow for a number of issues to be illuminated. The intention is that an appreciation of such issues will aid one’s understanding of the findings that are discussed later in the thesis.

Using these central and interrelated principles as a point of departure, the following section incorporates them within an exploration of the concepts of ‘figuration’ and ‘habitus’. Ultimately this aims to provide a more adequate understanding of how Physical Education teachers think and act as they do, specifically within the context of HRE. It is imperative to acknowledge that although these concepts have been separated in order to provide a clearer discussion, they are inextricably linked and cannot be sufficiently understood without an appreciation of the relationships that

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6 To trace the sociogenesis of a social phenomenon is to trace the long-term multi-linear processes which have led to its occurrence.
exist between them. Firstly, the concept of figuration, around which this approach is centred, is explained in greater detail than previously.

2.4 The Figuration
According to Elias (2000, p.316), a figuration is “a structure of mutually oriented and (inter)dependent people” that are “interconnected by a multiplicity of dynamic bonds” which are “produced and reproduced” over time. This view of figuration highlights three fundamental tenets: i) social interdependence; ii) dynamic social relations; and iii) long-term processes of social development, or sociogenesis. In simple terms, concepts such as ‘school’ or ‘family’ refer to “groupings of interdependent human beings, to specific figurations which people form with each other” (Elias, 1978, p.13).

Human interdependence is a universal facet of social life and Elias therefore placed it at the centre of process sociological theory. He maintained that the dynamic nature of social life could only be understood if individuals are conceptualised as being interdependent beings within networks of social interdependency, or figurations. Elias (1978, p.214) suggested that people exist “only as pluralities, only in figurations” and therefore only as a result of their relations with others. Upon entering the world, human beings are inevitably born into pre-existing figurations, that is, they are interdependent with their family and as they grow older, those chains of interdependence become increasingly complex and differentiated (Elias, 1978; Goudsblom & Mennell, 1998; Mennell & Goudsblom, 1998). Throughout one’s life, people constantly reproduce networks of interdependence through their actions (and their consequences) and “as webs of interdependence spread, more people become more involved in more complex and more impenetrable relations” (Mennell & Goudsblom, 1998, p.18). At this juncture, it should be noted that figurations are comprised of both face-to-face and indirect relationships that are not always fully acknowledged or completely understood by those involved. For example, Physical Education teachers are influenced, to varying degrees, by their interdependence with others who they may have never met (for example, policy makers).
The theoretical perspective on figuration allows for teachers' interdependence with others to be understood as "emerging and contingent processes" (Murphy et al., 2000, p.93) within the education figuration. Thus, individuals and society are part of the same, ever-changing process. Consequentially, it can then be said that as the length and complexity of human interdependency chains increase, and as the balances of power (Section 2.5) fluctuate, the relationships between Physical Education teachers and other groups of people (such as school managers and CPD providers) are continually changing.

This research attempts to take a 'snap-shot' of one point in time, whilst also acknowledging the dynamic social processes which may have come to affect the nature and extent of Physical Education teachers' engagement with HRE and HRE-CPD. In this respect, it endeavours to provide an understanding of Physical Education teachers' thoughts and actions within the context of HRE and HRE-CPD. Mennell and Goudsblom (1998, p.22) suggest that "In order to understand the feelings, thoughts and actions of any group of people, we have always to consider the many social needs by which these people are bonded to each other and to other people". As Mennell (1992, p.95) states, in order to fulfil one's own needs and functions "every individual is constrained to take account of the effects of his [sic.] own and other people's actions". Furthermore, the denser the web of interdependencies, the greater the division of competing interests generated within the figuration. Consequently, a degree of foresight is required if behaviour is to be regulated. That is not to say that self-regulation is solely a conscious process, it can also be seen as the product of a longer-term process of blindly functioning self-control (see Elias' work on *The Civilising Process*, [1939] 1994).

For Elias, social life is inherently processual and it can only be understood in terms of long-term processes of development. When using a processual approach towards an understanding of contemporary social relations, it is first necessary to appreciate the long-term, wider social processes that have enabled them to develop. As van Krieken (1998, p.6) suggests, a sociological issue (such as the state of HRE) can only be
understood if it is placed within its socio-historical context and there is an understanding of its ‘sociogenesis’.

Elias viewed people as being enmeshed in dynamic figurations that are characterised by ever-changing social relations and it is therefore beneficial to emphasise both the processual and relational nature of social life. This then avoids reification because it enables social relations to be seen as dynamic, as opposed to static. Elias (1978) thereby dismissed reification, maintaining that social processes were consistently reduced to states, a process he termed ‘Zustandsreduktion’ or ‘process-reduction’. Elias used terms such as professionalisation to engender the notion of continuing processes as opposed to static states. Using the term ‘professionalisation’ as opposed to ‘professionalism’ or ‘professionalised’ is arguably more ‘realistic’ in that it reflects the dynamic nature of such a process (Entwisle, 2008). Furthermore, Elias (1978) suggested that whilst various social processes influence individuals, they themselves could be seen as a process. To say this, is to suggest that individuals can be seen as long-term processes of development and change, rather than static beings. This point can be emphasised whilst considering the concept of habitus which is discussed shortly.

Process sociologists argue that long-term social processes cannot be understood solely in terms of the actions of a single individual (Dunning et al., 2004). As such, Elias (1969, p.143) argued that “underlying all intended interactions of human beings is their unintended interdependence”. He asked the question: “How does it happen at all that formations arise in the human world that no single human being has intended, and which yet are anything but cloud formations without stability or structure?” (Elias, 1994, p.443-444). This implies that the shaping of societies cannot be dictated by any one person, yet the fundamental characteristics of any society are anything but accidental. The term “society” is often used but, arguably, rarely understood. Elias (1991, p.3) states that society:

only exists because a large number of people exist, it only continues to function because many people want and do certain things, yet its structure, its
great historical transformations, clearly do not depend on the intentions of particular people.

Using this quotation as a point of reference, it is suggested that the consequences of social action are not always intended or anticipated. Elias suggests that 'blind' (unknown) social processes are a consequence of the mainly unintended outcomes of changes in human interdependence (Elias, 1939, 1994). As Goudsblom (1977, p.175) states, “every social event has been determined by events in the past and is directed towards future events” and this therefore lends weight to the need to focus on social processes over time. On this premise, it is beneficial to appreciate that the consequences of these ever-changing bonds are, for the most part, unplanned. Furthermore, Elias (1984, p.43) states that although societies are “driven by those who form them”, individuals are also ‘driven’ by the society of which they are a part. Thus, whilst pre-existing societies can both enable and constrain those within them, individual constituents can also, to a certain extent, shape their societies; they have varying degrees of power.

2.5 Power Balances
Elias (1978, p.74) viewed balances of power as “a structural characteristic...of all human relationships” (original emphasis) and therefore studying human relations inevitably involves studying power relations between individuals, and groups of individuals. On this basis, those enmeshed within the education figuration cannot be discussed adequately without also discussing the related balances of power which characterise their interdependencies with others. Elias (1983, p.145) referred to “shifting balances of tensions” and saw this concept as a way of transcending the disputes about freedom and determinism. From a process sociological perspective, the notion of absolute freedom is somewhat of a metaphysical concept due to the inevitable interdependence between human beings. For Elias (1983, p.265), a major flaw with sociological theory was that power was often conceptualised as being unidirectional, “from above to below, but not...below to above”. Elias (1978, p.74) reinforced the reciprocal nature of power relations and, within the context of Physical Education, Webb, McCaughtry and Macdonald (2004) have adopted a similar view.
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In accordance with Elias (1978), Dunning, Malcolm and Waddington (2004) state that, for the most part, power balances are continually in flux and no person or group of people is ever completely powerless or powerful. Understanding power balances from a process sociological perspective is important if one is to understand the complexities of particular interweaving social relations. From this perspective, it is also important to confront the assumptions that relationships are inevitably cooperative, harmonious and equal. They are, for the most part, a blend of cooperation and conflict.

Acknowledging the multi-directional nature of power, the ‘weaker’ members of a figuration do still have some degree of control in as much as the stronger members still have to consider the weaker members when making decisions. For instance, despite the relative power that the stronger members bestow, their actions can still be affected by those of the weaker members. For example, pupils in Physical Education can demonstrate power by withholding compliance in class activities (Cothran & Ennis, 1997; Webb & Macdonald, 2007b). In any social situation, those involved in a specific figuration have fluctuating degrees of power over each other; the ‘more powerful’ have a relatively high degree of control, but not ultimate control, over the outcomes of the situation and over the length of time it takes to achieve intended outcomes (Dopson & Waddington, 1996). As inferred, it is inevitable that there will be some unintended outcomes as a result of the actions that take place within a figuration. As Dopson and Waddington (1996) and Elias (2000) have noted, unintended outcomes result from ever-changing balances of power and are a crucial element of social interdependencies.

Further, as the structural complexity of a figuration increases, the power differentials between the members decrease and the outcomes of the social processes within that figuration become less predictable. To illustrate this point, the lengthening of chains of interdependency as examined by Elias in *The Civilizing Process* involves “a greater number of people, over greater geographical areas, becoming increasingly interdependent” (Dopson & Waddington, 1996, p.534). As chains of interdependency lengthen, the less the dynamic social processes come “to resemble an individual plan”
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(Elias, 1978, p.82). In other words, as chains of interdependence lengthen and configurations become more complex, the outcomes of social action become increasingly unpredictable and they will not necessarily resemble any one individual intention, or indeed the cumulative intended outcomes of groups of people.

The concept of habitus is now introduced in order to highlight the relationship between history, social context, interdependence and action.

2.6 Habitus

Habitus is a sociological concept most commonly associated with the work of Pierre Bourdieu (1978, 1984, and 1986). According to Dunning (2002), however, the concept was used initially by Mauss (1934) and then by Elias in his work, *The Civilising Process* (1939) and *The Germans* (1986, 1999). Using an Eliasian approach, habitus is viewed as a function of pre-existing social configurations and a consequence of the long-term, wider social processes that have shaped the conditions which people are born into. Habitus can be referred to as the product of an on-going process which begins at birth and which comes to be a person’s “automatic, blindly functioning apparatus of self control” or “second nature” (Elias, 2000, p.368). It is developed within specific contexts (configurations) and is influenced by particular social processes. To an extent then, habitus comes to form a “durable and generalised disposition that suffuses a person’s action throughout an entire domain of life” (Camic, 1986, p.1046). In terms of the present study, an investigation into Physical Education teachers’ habitus may help to explain their actions within the domain of HRE.

Writing in 1999, Nash stated, “A recent critique of educational research published by the Office of Standards in Education [OFSTED] has declared...that Bourdieu - and particularly the concept of habitus - appears to have little to offer educational research” (Nash, 1999, p.175). However, he concluded that in order to understand complex social processes it is imperative to engage with “concepts of disciplined thought - including that of Bourdieu” (Nash, 1999, p.175). Nash (1999, p.185) further argued that “the struggle to work with Bourdieu’s concepts (and perhaps with
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Foucault’s or even with Lyotard’s), is worthwhile, just because to do so forces one to think”. This argument could be countered on the basis that most sociological concepts encourage one to think. Arguably, the authors of the OFSTED report (Tooley & Darby, 1998), upon which Nash (1999) comments, have a relatively narrow view of habitus and, on this basis, they limit the degree to which they and others understand the concept.

Habitus, like most conceptual tools, has been criticised but it continues to be employed extensively in sociological research (see Brown, 2005; Green, 2003; Hunter, 2004; Lee & Macdonald, 2008). It is important to note that each theorist or author tends to approach and discuss the concept in different ways. From a process sociological perspective, this thesis aims to explore a particular ‘way of seeing’ Physical Education teachers. That is to say, they will be viewed from a socio-historical perspective and their interdependence with others will be explored in an attempt to understand their engagement with HRE and HRE-CPD. To this end, whilst it is important to realise that everyone has their own individual habitus, people can only be understood in pluralities and, therefore, may share experiences and views with others.

Elias contended that each person develops their own unique ‘individual’ habitus (subsumed within their ‘philosophies’) together with shared ‘social’ habitus which are developed in and through shared experiences with others (Green, 2006). For the purposes of this study, it is considered useful to draw upon the concepts of ‘individual’ and ‘social habitus’ in order to gain a better appreciation of how Physical Education teachers engage with HRE and HRE-CPD.

2.6.1 Individual and Social Habitus

It is important to note that some authors, such as Elias (1991), Goudsblom (1977) and Mennell (1992), illuminate a distinction between individual and social habitus. For Elias, (1991, p.ix), habitus is the “self-image and social make-up of individuals” and he offers the terms ‘I-identity’ to refer to the self-image and ‘We-identity’ to refer to social make-up of individuals. Elias referred to social habitus as “the level of
personality characteristics which individuals share in common with fellow members of their social groups" (Mennell, 1992, p.30), such as Physical Education teachers, on a number of levels. Although each teacher is individual, they are nevertheless inextricably linked to a wider network of interdependence with others on personal, local and national levels of the education figuration.

An exploration of Physical Education teachers’ habitus allows for an understanding of “the various predispositions that suffuse their personal and professional lives” (Green, 2006, p.655), as well as the constraints generated in and through the circumstances they experience. From a process sociological perspective, such predispositions and constraints can be seen as characteristics of the particular figurations within which individuals find themselves. The final section of this chapter introduces the ‘education figuration’ as a way of understanding the complex nature of Physical Education teachers’ professional lives.

2.7 Education: A Figuration

Utilising process sociology can illuminate the dynamic social processes that are inherently characterised by ever changing power balances and that come to influence the outcomes of social interdependence. The education figuration operates on personal, local and national levels (Green, 2002, 2008). The teacher-centric nature of this research means that the personal level of the education figuration, comprised of people who have ‘face-to-face’ relationships on a daily basis, includes teachers, Heads of Department, school staff, school managers and pupils. As the “chains of social interdependence” (van Krieken, 2002, p.103) lengthen, the distance between the ‘personal’ and the ‘local’ levels means that ‘face-to-face’ relationships are possible but less frequent. The local level of the education figuration can include the local community, commercial CPD providers, Local Delivery Agents (LDAs) and Local Authorities (LAs). At the national level, and as the chains of interdependence lengthen further, members of the figuration include government departments (such as DfES and DCFS), afPE, National Governing Bodies, the GTC for England and OFSTED. Appendix A presents a diagrammatic representation of figuration, as presented by Elias (1978). In an attempt to acknowledge that figurations are dynamic
and characterised by multi-directional processes operating on a number of levels, an alternative representation of figuration is presented later.

2.8 Summary
This chapter has considered the capacity for process sociology, the theoretical approach around which this research is framed, to illuminate some pertinent issues regarding Physical Education teachers and their interdependence with others in the education figuration. Power balances were discussed and the concept of habitus was introduced as an extremely influential component of Physical Education teachers' philosophies. Throughout the chapter, effort was made to highlight how these issues, in turn, can aid our understanding of Physical Education teachers' engagement with HRE and HRE-CPD.
Chapter Three: Critical Review of Literature - Health-Related Exercise

3.1 Introduction
In order to understand Physical Education teachers’ engagement with Health-Related Exercise (HRE), this chapter defines health and utilises a process sociological approach towards establishing an understanding of its place within Physical Education and the curriculum. As discussed in chapter two, from a process sociological perspective, all human beings are located within networks of interdependence (figurations) and they can be understood “only as pluralities, only in figurations” (Elias, 1994, p.214). For Elias (1978), the concept of ‘figuration’ is a flexible analytical tool to aid the understanding of social phenomena and it can be “applied to relatively small groups just as well to societies made up of thousands or millions of interdependent people” (Elias, 1978, p.131). In utilising process sociology to explore the research questions, it was deemed necessary to locate Physical Education teachers within the complex chains of interdependence which form the ‘education figuration’, before attempting to understand their engagement with HRE and their continuing professional development (CPD) in the area (HRE-CPD). The reason being, that a teacher’s views and actions can only be understood as the consequence of their interdependencies with others over time. In addition to an understanding of current relations, it is important to adopt a socio-historical perspective and explore the socio-genesis of people and processes over time. This arguably allows knowledge of the past to aid understanding of the present and better prepare people, and teachers in this specific case, for the future.

This chapter represents a contextualisation of the research and aims to promote an understanding of: i) the complex, dynamic and historically-rooted relationship between Physical Education and health; ii) the role of schools and Physical Education in physical activity promotion and; iii) the socio-historical and political context within
which Physical Education teachers have formed their ‘philosophies’\(^7\) about HRE. Existing literature is used to provide an understanding of how Physical Education teachers experience HRE in practical terms. The final section of the review addresses Physical Education teachers’ HRE knowledge (Armour & Harris, 2008; Cale, 2000b; Harris, 1997; Cale, Harris & Leggett, 2002; Castelli & Williams, 2007; Salmon et al., 2007) and provides a foundation from which to discuss their professional learning and development over time.

This review serves also to provide the reader with an appreciation of the complex interdependencies that comprise the education figuration (including teachers, policy makers, school managers and CPD providers) and the ways in which these interdependencies might both constrain and enable Physical Education teachers’ engagement with HRE and HRE-CPD. A number of wider social developments have led to HRE and CPD (the latter of which is addressed in the next chapter) being deemed important and worthy of academic research (Armour & Duncombe, 2005; Armour & Harris, 2008; Cale, 2000b; Cale, Harris & Chen, 2007; Castelli & Williams, 2007; Chow et al. 2008). This research aims to go beyond description and assertion and provide an insight into the reasons why Physical Education teachers engage with HRE and HRE-CPD as they do.

As already noted, the process sociological perspective provides the theoretical framework around which the investigation of the research questions is organised. Adopting this perspective encourages an appreciation of the past in order to better understand the present. Further, it provides a framework (figuration) within which Physical Education teachers can be located and better understood. Thus, this research explores,

interdependent people (Physical Education teachers) whose thoughts and behaviours are heavily circumscribed, not to say constrained, by their habituses (both individual and group) and by broader social networks with other teachers, governors, parents, the Department or Education and Skills,

\(^7\) Teachers’ philosophies are grounded in their figurations, and are an array of beliefs and underlying ideologies that result from “personal and sporting biographies and...working context” (Green, 2003, p.146).
Given that HRE provides the context for this research, it is useful to firstly clarify what is meant by the term ‘health’.

3.2 What is Health?
At present, there is ever-increasing interest in issues surrounding ‘health’ and notions of ‘a healthy nation’ (Cale & Harris, 2009a; Chow et al., 2008; Cothran, McCaughtry, Hodges Kulinna & Martin, 2006; Keay, 2006a; Penney & Jess, 2004; Welk, Eisenmann & Dollman, 2006). This is reflected in part by the degree to which the government has placed health firmly on its agenda (for example, Department of Health [DoH] and Department for Children, Schools and Families [DCSF], 2008; DoH, 2004; HM Treasury, 2007). Despite such growing interest in health, there remains considerable debate around its definition and possible manifestations (Cale & Harris, 2005; Harris, 1994, 1995, 1997; O’Sullivan, 2004). Given that people tend to utilise the term in different ways, it is important to draw attention to potential theoretical and practical problems which may arise as a result of the efforts to adequately define health.

It is argued that many people tend to narrowly define the concept of health and therefore restrict its meaning to the absence of disease (Naidoo & Wills, 2000; Schramme, 2007). Using a sociological perspective, Roberts and Brodie (1992) explored participation in ‘Inner-City Sport’ and, whilst doing so, looked at what the term ‘health’ was taken to mean by certain individuals. Roberts and Brodie (1992, p.96) stated that “When they [participants] described themselves as healthy, most individuals seemed to mean that their lives were normally unimpaired by illness or disability”. Roberts and Brodie (1992), however, view this as a relatively restricted and inadequate way of conceptualising health.

In contrast, health is defined by the World Health Organisation (WHO) as “a state of complete physical, mental and social well-being and not merely the absence of
disease or infirmity” (http://www.who.int/about/en/). More recently the Ottawa Charter (1986) has defined health as “a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities” (WHO, 1998, p.1). Roberts and Brodie (1992, p.96) ascertain that “Perfect health may be regarded as the maximisation of physical and socio-psychological well-being”. Implicit within these definitions is the appreciation that health is multi-dimensional and is not restricted to physical and/or psychological attributes (Cale & Harris, 2009a; Evans, 2003; Kirk, 2006; Penney & Jess, 2004; Sallis et al., 2006) (see Figure 3.1). Echoing these definitions, a processual and dynamic approach to understanding health and HRE is reflected in the theoretical framework of this thesis.

*Figure 3.1. The multiple dimensions of health (adapted from Corbin, Welk, Corbin & Welk, 2004)*

The notion of ‘perfect health’, however, is contestable as it could be argued that health is an ideal state which is pursued but not necessarily attained (Naidoo & Wills, 2000). Adopting the most recent definition of health from the WHO, Cale and Harris (2005a, p.7) view it as “a resource for everyday life”. From this perspective, being ‘healthy’ could come to form a way of gaining a greater degree of power and maintaining a position within the status hierarchy of a particular figuration. For example, given the prominence of physicality within Physical Education, it could be
argued that a Physical Education teacher who is perceived as being physically healthy may have a higher degree of power and influence than one who is not (Webb, Quennerstedt & Öhman, 2008).

Having addressed the concept of health, the following section explores the role of schools and Physical Education in physical activity promotion.

### 3.3 The Role of Schools and Physical Education in Physical Activity Promotion

As stated in the introduction to this thesis, schools are consistently identified as having a key role in producing a healthy nation (Cale & Harris, 2009a; Chow et al., 2008; Fardy, Azzollini & Herman, 2004; Harris & Cale, 1997; Johns, 2005; Keay, 2006a; O'Sullivan, 2004; Welk, Eisenmann & Dollman, 2006). Fox, Cooper and McKenna (2004, p.339) state that “Schools offer a logical and plausible location for the implementation of health promotion strategy” and, as stated earlier, Cale and Harris (2009a) have provided a number of reasons as to why this is the case.

Indeed, within the school context, Physical Education is usually regarded as one of the most suitable vehicles for promoting the health of young people (Green, 2003, 2008; Fairclough & Stratton, 2005; Johns, 2005). Research has suggested that school-based Physical Education programmes can lead to a wide range of positive outcomes (Almond & Harris, 1998; Cale & Harris, 2006a), not least the promotion of young people’s physical activity and fitness levels (Cale & Harris, 2005a; Kahn et al., 2002; Salmon, Booth, Phongsavan, Murphy & Temperio, 2007).

It has been suggested that Physical Education teachers are well placed to help young people become physically active for life, as well as inform them about relevant local initiatives (Fairclough & Stratton, 2005; McKenzie, Marshall, Sallis & Conway, 2000). Fairclough and Stratton (2005) add that teachers are indeed fundamental in helping young people achieve physical activity goals. Providing a broader perspective, Welsman and Armstrong (2000, p.154) highlight that schools, and more specifically Physical Education teachers, have been presented with the National Curriculum and therefore have “a statutory obligation to promote not only the
physical development of pupils...but (also) the acquisition of healthy patterns of behaviour". They also suggest, however, that whilst Physical Education teachers have “a key role” in physical activity promotion, they do not have the power to control young people’s physical activity and health behaviours (Welsman & Armstrong, 2000, p.154). This can be explained in terms of the complexity of the education figuration, whereby the more people and groups of people involved, the less likely it is that any one person can dictate what will happen (Elias, 1978).

Drawing upon the work of Elias, one understands that interdependencies within any figuration constitute relations of power. From an Eliasian perspective, power cannot be possessed but it is inherent in the social relations which comprise figurations. While physical educators can have the power to promote in pupils the knowledge, skills and understanding necessary to have healthy, active lifestyles, the webs of interdependency (including parents, guardians, siblings and friends) which influence pupils’ thoughts and actions are complex, powerful and often contradictory. For example, while teachers may be educating pupils about the benefits of being healthy and active, a parent can exert power over their child in a way that contradicts those messages (by, for example, not allowing them to play and move in open space, or have access to facilities).

Acknowledging the complexity underlying physical activity and health promotion, it can be seen that unrealistic pressures have been placed upon Physical Education teachers and, indeed,

It seems that health and physical educators are increasingly being regarded (both by others and themselves) as capable of inoculating young people against an ever-expanding range of risks and problems such as stress, low self esteem, drugs and alcohol, teenage sex and spiritual decline. (Burrows & Ross, 2003, p.15).

In addition, it is important to acknowledge that school Physical Education occupies just approximately 1-2% of a young person’s waking time (Fox et al., 2004; Fox & Harris, 2003) and within that time, levels of activity are questionable (Fairclough & Stratton, 2005, 2006). Although Physical Education can help to increase participation
in health promoting physical activity, due to a number of factors (such as the frequency and amount of time spent in lessons and the need to simultaneously achieve other important learning outcomes) "Physical Education can only do so much" (Fairclough & Stratton, 2005, p.21). As demonstrated within this section, the extent to which Physical Education can contribute to public health has been a subject of debate and, whilst schools and Physical Education are ideally placed to contribute to physical activity promotion, they cannot be expected to provide sufficient opportunities for all young people.

From an Eliasian perspective it is not sociologically adequate to think in terms of dichotomies (van Krieken, 1998) and it is therefore not a matter of deciding whether Physical Education teachers are responsible for public health or not. On this matter, it may be useful to think in terms of a 'Physical Education and public health continuum'. For example, Fardy and colleagues (2004) purport that Physical Education has foremost responsibility for public health and their views can be seen to be at one end of the continuum. Alternatively, the views of Evans, Rich and Davies (2004) and O'Sullivan (2004) lie towards the other end of the continuum, believing that the public health agenda is not a primary responsibility for Physical Education teachers. It could be argued that Cale and Harris (2005a) and Welsman and Armstrong (2000) lie somewhere in the middle of the continuum, viewing school Physical Education as having a fundamental role in physical activity and health, but also acknowledging that Physical Education is only one component of a wider public health agenda. As noted, whilst there is evidence that Physical Education programmes can be effective in achieving health outcomes (Almond & Harris, 1998; Cale & Harris, 2006a), there is little conclusive evidence to suggest that education is vital in physical activity and health promotion (Kirk, 2006). Further, Armour and Harris (2008) have recently suggested that the Physical Education profession seems uncertain about the role of Physical Education in public health, the kinds of knowledge required to fulfil that role, and the responsibility it is willing to accept. A later section (3.5.4) will further explore the role of schools in health and physical activity promotion in terms of relevant government policies and initiatives which have been introduced in recent years.
Given the inherent complexity associated with a multi-faceted concept such as health, it can be seen how Physical Education teachers may find it difficult to understand and effectively promote healthy, active lifestyles among young people. In order to provide an understanding of how physical educators view health and teach HRE within Physical Education, what follows is a socio-historical and political perspective on the Physical Education-health relationship. This section is separated into two periods of time: i) the 1870s to the 1970s; and ii) the 1980s to 2009. The first period refers to the initial emergence of the Physical Education-health nexus, and the second discusses the more recent re-emergence of a health rationale for Physical Education. Gaining an appreciation of the interweaving social-historical processes that have provided a context for the development of PE and HRE (and CPD) can provide a more adequate basis from which to understand Physical Education teachers' engagement within these overlapping contexts. As Armour and Jones (1998, p.136) state, “If we are not drawing upon wisdom from the past then we are, in effect, constantly reinventing a slightly wobbly wheel”.

3.4 The Physical Education-Health Relationship (1870s-1970s)

According to Haley (1978), the topic of health was at the forefront of people’s minds during the Victorian era (1837-1901). As Park (1994, p.59) suggests, however, “Rhetoric and reality did not always match”. In the late 1800s sport began to occupy an increasingly central position within the public school education of young gentlemen (Green, 2003). This, Green (2003) argues, was a manifestation of the ‘sporting ideologies’ which have continued to characterise Physical Education ever since. Despite this development, masses of young people and especially girls and children of the lower classes were not participating in physical activity. Following the introduction of the 1870 Education Act, drill began to be included in Physical Education lessons (Holt, 1989) and, according to Green (2003, p.36) this “initiated what was to be a long association between Physical Education and concern for health and fitness”. Holt (1989, p.118) argues that at this time “Working-class boys had little enough Physical Education in school, working class girls usually had none at all”.

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In the first half of the twentieth century, the concern for public health was largely preoccupied with disciplined exercise as a means of compensating for physical defects (Kirk, 1992; Bray, 1991; Holt, 1989). Harris (1997) provides a comprehensive overview of the history of the relationship between Physical Education and Health. She cites the first national syllabus for Physical Education (Board of Education, 1909, p.9) to emphasise that, at the time, the aim of any Physical Education programme was to “maintain and, if possible improve, the health and physique of the children”. In the 1920s there were improvements in recreational facilities and an expansion of the perceived remit of Physical Education (Harris, 1997). Following an exploration of individual sport and leisure patterns during this period, Graves and Hodge (1991) argued that most sports, especially football, tennis and swimming, were becoming increasingly popular. Towards the end of the 1920s the concept of slimming became fashionable and “many people adopted the habit of doing early morning physical jerks” (Graves & Hodge, 1991, p.227). Reportedly, this trend continued into the 1930s and it came to be known as ‘keeping fit’ (Graves & Hodge, 1991). Despite such developments, the various Physical Education syllabi that were published between 1909 and 1933 continued to serve as confirmation that Physical Education had a medically informed rationale and was “an arm of the School Medical Service” (Kirk, 1992, p.129).

The 1933 syllabus of physical training for schools demonstrated that there had been little change in terms of ideologies or practice since the syllabus of 1909 (Board of Education, 1933, cited in Green, 2003). Although the 1933 syllabus included activities such as games, swimming, dance and gymnastics (Bray, 1991), it continued to reflect a largely ‘medico-health rationale’ (Green, 2003; Harris, 1997) for Physical Education as a form of training to combat physical defects. At this time, the syllabus could be seen as a “confirmation of the past” (Kirk, 1992, p.130) and thus helped to perpetuate the status quo.

Following the British Medical Association’s report on Physical Education (1936) and in response to a perceived lack of fitness and poor health of the British public, the government issued a White Paper on Physical Training and Recreation (McIntosh,
1968). It was accompanied "by the publication of technical handbooks, 'Recreation and Physical Fitness for Youths and Men and Recreation and Physical Fitness for Girls and Women' and by the setting up of a National Advisory Council for Physical Training and Recreation" (McIntosh, 1968, p.242). Shortly after, the Physical Training and Recreation Act was launched (Welshman, 2003) and, collectively, these developments signalled a preoccupation with having a fit and healthy male population who could defend the country at war, as well as strong and healthy mothers for future generations (Green, 2003). Consequentially, Physical Education consisted largely of “military drill fleshed out with some general exercise” (Holt, 1989, p.139) and therapeutic gymnastics, with this considered to be all that working class children required (Green, 2003).

In the 1950s, and following World War II and the introduction of the 1944 Education Act, two distinct approaches to Physical Education were emerging and becoming ever more contrasting (Kirk, 2002; McIntosh, 1968). One approach emanated largely from private girls' schools and was underpinned by the notion that health was strongly linked to the "harmonious development of the whole body" (McIntosh, 1968, p.120). According to Kirk (2002, p.28) "educational gymnastics was the rising star of Physical Education in the 1950s". Its strong association with the education of females, however, "probably ruled it out of contention for the men" (Kirk, 2002, p.28). Boys' Physical Education largely consisted of activities such as circuit training and weight training and this was, in part, a reflection of the prevailing view that the body was a machine that needed to be maintained (Kirk, 1998). At this time, both girls' and boys' Physical Education practices were beginning to reflect the increasingly prominent relationship between Physical Education and health and one which focused upon the role of exercise as a means of developing strength and endurance and fitness. The increasingly mechanistic view of the human body, together with a shift in focus from a 'medico-health' rationale to a 'physical fitness' rationale, contributed to the prevailing notion of 'fitness for sport' within Physical Education. Kirk (1992) asserts that the development of this relationship between health and sports performance was largely influenced by the position of England in international sport at the time which was primarily concerned with males.
McNair (1985, cited in Harris, 1997) reported a distinct contrast between two prominent approaches within Physical Education: i) the Ling's Swedish gymnastics, often associated with middle-class young ladies, and ii) the more vigorous approach to physical training which tended to be delivered by retired, working-class, army officers. The conflict between the two approaches served to hinder the development of Physical Education because, as McNair (1985) suggested, it failed to see that both groups could contribute to Physical Education, fitness and health. It could be argued that within society there is a tendency to assume that there is one 'true' and infallible answer for any problem, issue or question. This assumption, however, is inadequate due to the various social, historical, political and personal factors that can come to influence any one sociological issue or phenomenon.

As alluded to previously, sport came to occupy a central position in male public school Physical Education towards the end of the nineteenth century and, after World War II, the medico-health rationale for Physical Education began to be undermined by team games (Green, 2003). According to Green (2003) and Kirk (1992), the privileging of sport at this time was largely due to the influence of newly qualified male teachers teaching in emerging secondary schools who wished to "duplicate the alleged character benefits of games playing" (Green, 2003, p.38) that they had experienced whilst at public school. Kirk (1992) goes on to say that the shift towards Physical Education as opposed to physical training reflected general concerns for moral and social development as well as physical development. As a result, the physical training model of Physical Education was threatened by the popularity of the play movement and its preoccupation with teaching social values in and through games and sport (Park, 1994). Indeed, this notion that Physical Education could address more than just the physical was influential in the emergence of health education (HE).
3.4.1 The Informal Emergence of Health Education

In the 1950s, the informal emergence of health education (HE) signalled an appreciation that health was a multi-faceted concept that was worthy of attention. In 1954, and on the basis of an “Expert Committee on Health Education of the Public”, the World Health Organisation (WHO) published a technical report, which stated that:

The aim of health education is to help people achieve health by their own actions and efforts. Health education begins therefore with the interest of people in improving their conditions of living, and aims at developing a sense of responsibility for their own health betterment as individuals, and as members of families, communities, or governments (Reed, 1964, cited in Harris, 1997).

This report explicitly highlighted that individuals were solely responsible for their own health and there was little appreciation of wider social factors such as socio-economic status. Issues of such so-called individualism or “victim-blaming” with respect to health have been explored by authors such as Colquhoun (1989, 1990, 1991), Kirk and Colquhoun (1989) and Tinning (1991). Similarly Illich (1975), whilst referring to the “medicalization of life”, spoke of health as a “personal task which people must be free to pursue autonomously” (cited in Naidoo & Wills, 2000, p.13). This view, which seems to be tainted by an ideology of healthism (see Section 3.6.2), is inadequate as there are various factors aside from that of personal choice which can and do come to influence one’s health (Green, 2008; Roberts & Brodie, 1992; Sallis et al., 2006).

3.4.2 The Multiplying Dimensions of Health

By the 1960s, health was no longer seen by schools as being confined to the physical and conceptually it was beginning to include intellectual, emotional and contextual factors (Harris, 1997). HE was very much seen as part of the whole-school curriculum, and Physical Education was viewed as having a role to play within it, but it was not the only arena within which health could be addressed. In the 1960s, wider social developments within education were allowing the expansion of the remit of Physical Education in England. For example, during this time there was a “dramatic rise in so-called ‘lifestyle diseases’ such as cancer and coronary heart disease and by
the 1970s the notion that Physical Education could play a role in preventing such diseases was firmly embedded" (Green, 2003, p.46). It was also acknowledged that people living in urban, industrial societies were in greater need of regular exercise in comparison to those from previous generations (Kirk, 1992) and there was a growing consensus that physical activity, together with lifestyle modifications could act as a preventative tool in relation to lifestyle diseases (Colquhoun, 1991, 1992; Colquhoun & Kirk, 1987; Green, 2002). However, despite this acknowledgment, Kirk (1992) suggests that the contribution of Physical Education to health was largely implicit and any health benefits accrued were regarded as a 'by-product' of the curriculum, rather than being a formally stated outcome. This is a point that was later developed by Harris (1995; 1997) and Cale (1996).

3.4.3 The Emergence and Re-Emergence of the Health Movement
During the late 1970s and early 1980s, a second ‘wave’ of the health movement was emerging as a result of concerns over rising health care costs and hypo-kinetic (lifestyle) diseases such as coronary heart disease (Cale & Harris, 2005a; Tones & Tilford, 2001). At this time, there was also growing critical debate concerning the nature and purposes of HRE within Physical Education (Houlihan & Green, 2006). As Harris (1997) highlighted, such concerns were reflected in the first policy document of this nature, ‘Prevention and Health: Everybody’s Business’ (HMSO, 1976). This second ‘wave’ of the health movement is further explored in the following section.

3.5 The Physical Education-Health Relationship (1980-2009)
Retrospectively, the 1980s has been viewed as a time of “watershed in British Physical Education” and “a new moment in the production of definitions of Physical Education” (Kirk, 1992, p.2). It was a time that was characterised by renewed attempts to provide a health rationale for the subject (Armour & Harris, 2008; Cale, 1996; Houlihan & Green, 2006). The renewed focus on health was not an isolated process but was rather a signal of what was occurring in society more broadly. For example, as Harris (1997) noted, Health-Related government policy was being underpinned by the belief that disease prevention was the key to improving health. Indeed, in the late 1980s, a number of White Papers emphasising the importance of
public health were published. Such papers included 'Promoting better health: A strategy for health in England' (HMSO, 1987) and 'Caring for people: community care in the next decade and beyond' (HMSO, 1989). Furthermore, accelerated developments in exercise sciences began to establish stronger correlations between physical activity and health, and mass media was beginning to facilitate a change in how society viewed physical activity, health, exercise and fitness. The media encouraged the view that physical activity was becoming fashionable (Fox, 1996). Such developments also prompted health issues to become more important within the context of school Physical Education, a trend that seems to have continued (Gard & Wright, 2005), at least in terms of rhetoric. The trends outlined above provide some indication of the interdependencies - with policy makers, members of the Government and the media - within which Physical Education teachers are inevitably bound.

Since the late 1980s a number of important developments have occurred within Physical Education, not least the re-emergence and development of the area that is now known commonly known as HRE. Colquhoun (1991, p.7) suggested that “The ultimate objective of Physical Education should be to aid the students in acquiring the skills, knowledge and attitudes needed to become a life-time exerciser and to maintain a good level of health”. Similarly, and more recently, Welk et al. (2006, p.667) have drawn upon the work of Pate and Hohn (1994) to suggest that the aim of Physical Education is “to promote in youngsters the adoption of a physically active lifestyle that persists throughout adulthood”. Within the Physical Education curriculum, the area of HRE is primarily concerned with achieving the fundamental aims of Physical Education, as presented by Colquhoun (1991) and Welk et al. (2006), and therefore aims to encourage young people to make ‘informed choices about healthy, active lifestyles’ (QCA, 2007). Harris (2009) has organised the learning outcomes for HRE around four categories in order to highlight the breadth and progression of learning within and across the Key Stages. Table 3.1 presents examples of these learning outcomes for Key Stage 3 pupils (11-14 years).
Table 3.1 Example of HRE learning outcomes at Key Stage 3 (adapted from Harris [2009]).

<table>
<thead>
<tr>
<th>Category of HRE Learning Outcomes</th>
<th>HRE Learning Outcomes at Key Stage 3 (11-14 yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Issues</td>
<td>Understand the value of preparing for and recovering from activity and the possible consequences of not doing so, and be able to explain the purpose of and plan and perform each component of a warm up and cool down.</td>
</tr>
<tr>
<td>Exercise Effects</td>
<td>Understand and monitor a range of short-term effects of exercise on body systems (for example, cardiovascular system - changes in breathing and heart rate, temperature, appearance, feelings, recovery rate, ability to pace oneself and remain within a target zone).</td>
</tr>
<tr>
<td>Health Benefits</td>
<td>Know and understand a range of long-term benefits of exercise on physical health (for example, reduced risk of heart disease, osteoporosis, obesity, back pain).</td>
</tr>
<tr>
<td>Activity Promotion</td>
<td>Be able to access information about a range of activity opportunities at school, home and in the local community, and know ways of incorporating activity into their lifestyles.</td>
</tr>
</tbody>
</table>

In the last twenty years, HRE has been interpreted differently by different Physical Education teachers (Armstrong & Biddle, 1992; Green, 2008; Harris, 2000, 2009). Harris (2000, p.2) also observed that it has been known by many different terms including Health-Related Fitness (HRF), Health-Related Physical Education (HRPE) and Health Based Physical Education (HBPE). By the late 1980s, there was a gradual shift in emphasis away from the term fitness towards health and exercise (Harris, 2005) in acknowledgment that physical fitness is largely influenced by genetics and that exercise, in comparison, could be experienced by all and be more important in terms of current and future health (Harris, 2005). As a result, HRE became the chosen and more favoured term for this area of the Physical Education curriculum in the England (Cale & Harris, 2005a) and this is the term accepted for the purpose of this research. It is important to highlight, however, that despite changes in terminology there has arguably continued to be a privileging of fitness-related contexts for learning about healthy, active lifestyles in England (Cale et al., 2007; Cale & Harris, 2006) as well as overseas (Burrows, 2004). This has been viewed as problematic in recent
times (Gard & Wright, 2001) and reasoning for this will be provided later in this chapter (see Section 3.6.1.1).

What follows is an exploration of some of the longer-term social processes that have come to influence the context within which HRE has developed over the last 20 years. More specifically, a socio-historical perspective is offered in order to encourage an understanding of the nature and extent of Physical Education teachers’ engagement with the area.

3.5.1 The Formalisation of Health Education within the National Curriculum

After the launch of the Education Reform Act (1988), the responsibility for the development and teaching of the curriculum shifted away from the central government and towards individual schools and, as Evans and Penney (1998, p.78) argue, the degree of flexibility afforded within the National Curriculum served to “obscure the limited commitments of the state to Physical Education”. The Reform Act (1988) placed statutory responsibility upon schools to provide a “broad and balanced curriculum” that “promotes the spiritual, cultural, mental and physical development of pupils” (Harrison & Edwards, 1994, p.1) and it was from this Act that the National Curriculum emanated. HE, now subsumed within the Personal, Social and Health Education (PSHE) framework as part of the new secondary National Curriculum (QCA, 2007), was formally acknowledged as a non-statutory theme within the first National Curriculum in 1988 (National Curriculum Council, 1990b). It was argued, however, that HE was given minimal attention (one paragraph) in the National Curriculum and that this served to reflect the low priority that was afforded to the theme at the time (Cale, 1996). By referring to HE as non-statutory, Harris and Penney (2000, p.249) argue that “its position and status as subordinate to long-established academic school subjects” was reinforced. Although the inclusion of HE could be viewed as a positive development, it could be argued that alongside its inclusion came the reinforced subordination of the theme (Tones & Tilford, 2001).
Harrison and Edwards (1994, p.2) claimed that in order for HE to successfully develop within the curriculum it “requires that all staff, pupils, parents and governors share a clear understanding of the primary aims and objectives of health education”. From the outset, however, there was limited or no support for those attempting to understand and teach HE (Harrison & Edwards, 1994). For example, when the National Curriculum Council published curriculum guidance documents for HE (NCC, 1990a, 1990b, 1992), no form of support or professional development for teachers followed them (Edwards & Fogelman, 1993). Once again this added to the incoherence and lack of status that characterised cross-curricular themes in general and HE specifically. Various reasons were proposed as to why HE was not seen to be highly prioritized within the National Curriculum, including, for example: i) constraints upon the curriculum; and ii) the fact that teachers did not feel equipped to effectively teach about health issues (Harrison & Edwards, 1994). It is important to acknowledge, however, that the work of Harrison and Edwards is relatively dated and therefore the issues surrounding HE, or PSHE as it is now known, may have changed since the mid-1990s. A literature search was carried out in order to establish the nature and extent of teachers’ engagement with PSHE but limited research of any relevance was found. Perhaps given the often sensitive nature of issues addressed in PSHE (such as race and sexuality), a search for literature suggested that there were limited amounts which focused upon specific areas of study. It was questioned within the literature, however, whether teachers were adequately equipped to address particular issues, such as personal safety (Harris, 2006) and sex education (Graham, Dawson & Moore, 2000).

Within the current secondary National Curriculum (QCA, 2007), introduced in September 2008, the subject of PSHE includes “everything schools do to promote pupils’ good health and well-being” (http://www.teachernet.gov.uk/PSHE/) and it aims to bring together personal, social and health education, work-related learning, careers, enterprise, and financial capability. There are two new non-statutory Programmes of Study at Key Stages 3 and 4: i) personal wellbeing; and ii) economic wellbeing and financial capability (http://curriculum.qca.org.uk/key-stages-3-and-4/subjects/pshe/index.aspx). The Programmes of Study are based on the ‘Every Child
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Matters' (DfES, 2004) outcomes and build on the existing frameworks and guidelines in these areas. The National Curriculum website (http://curriculum.qca.org.uk) identifies PSHE as an opportunity to address issues relating to:

- emotional health and wellbeing;
- nutrition and physical activity;
- safety;
- personal finance and;
- sex and relationship education.

As evidenced above, there are clear links between aspects of PSHE, PE and HRE. This suggests that PE and HRE could make a valuable contribution to PSHE by promoting 'nutrition and physical activity' as well as 'safety' and 'emotional health and well-being'.

A further component of the curriculum (QCA, 2007) is the cross-curricular dimension of 'Healthy Lifestyles'. By including 'Healthy Lifestyles' as a cross-curricular dimension, the QCA is recognising that "Good health and effective learning go hand-in-hand". The QCA have identified a number of objectives for the 'Healthy Lifestyles' dimension of the curriculum, one of which aims to "provide high-quality Physical Education and school sport, and promote physical activity as part of a lifelong healthy lifestyle" (QCA, 2007). Links are made to a number of resources which can aid the achievement of such objectives. These include, for example, the 'National Healthy Schools Programme' (DCSF/DoH, 1999) (see Section 3.5.4.1), a preventative resource entitled 'Making Sense of Health' (http://www.making senseofhealth.org.uk/), and national guidelines produced by the National Institute for Health and Clinical Excellence (NICE) (http://www.nice.org.uk/guidance /CG43/niceguidance/word/English) which address the assessment and management of weight amongst children and adults.
The introduction of the National Curriculum for Physical Education (NCPE), and some of the socio-historical and political processes that led to this development, are now introduced in chronological order.

3.5.2 The Introduction of the National Curriculum for Physical Education

Four years after the launch of the National Curriculum, the NCPE was introduced (Department for Education and Science [DES] & Welsh Office [WO], 1992). Up until this point, “Physical Education had experienced a prolonged period at the margins of education policy in general and curriculum discussions in particular” (Houlihan & Green, 2006, p.73). Whilst Physical Education was becoming more prominent within the policy context, its formalisation also served to highlight particular tensions, such as limited funding for Physical Education resources, that characterised the development of Physical Education at the time (Harrison & Edwards, 1994). As a way of reconciling competing interests between curriculum subjects, “the concept of ‘flexibility’ emerged as a critical feature of the government’s discourse” (Evans & Penney, 1998, p.78). With regards to the NCPE, Evans and Penney (1998, p.78) have suggested that the concept of flexibility as a “rhetorical device” was used in order to “reduce the level of prescription” which had previously characterised the NCPE and thus reduce the funding needed to develop it in schools.

Within the National Curriculum (QCA, 1992), HRE was presented as a compulsory component of the NCPE from the outset. It permeated all Programmes of Study (PoS) and was referred to in Attainment Targets (ATs) and end of Key Stage Statements. Despite these developments, HRE was “not included as an area of activity in its own right” (Fairclough, Stratton & Baldwin, 2002, p.72). It has been argued that, in the early 1990s, a particular view of Physical Education continued to be privileged within the National Curriculum, namely, traditional, competitive team games (Evans & Penney, 1998; Green, 2003; Smith, 2004). As Kirk (1992) comments, the Conservative party aimed to re-establish a Physical Education curriculum that emulated the traditional Physical Education of English public schools in which sporting performance was prioritised. Such a focus on competitive team sports meant that HRE, despite being a compulsory component of the NCPE, was given relatively
limited attention. This, it is argued, is an issue that has resonated in the continued implementation of the NCPE ever since (Green, 2008; Kirk, 1992). Although the first NCPE revision in 1995 continued to emphasise the range of activities that were evident in the original NCPE (such as swimming and dance), the trend towards team games continued. This continuity occurring alongside change (Curtner-Smith, 1999) highlights a degree of ‘slippage’ (Penney & Evans, 1999) between policy and practice, within the Physical Education context.

In the second curriculum revision (QCA, 1999), competitive team games remained compulsory at Key Stage Three but became less prominent at Key Stage Four and were no longer compulsory within the Programme of Study. Also within this revision, HRE was included as one of the four aspects of the NCPE and was known as ‘knowledge and understanding of fitness and health’ (see Cale & Harris, 2005a). The 1999 revision was “explicitly designed to provide clarity and ‘uniformity’ in interpretations of particular terminology” but, as subsequent research has suggested, there continued to be a degree of confusion surrounding the area of HRE in particular (Penney & Chandler, 2000, p.76). According to Penney and Chandler (2000, p.76), the 1999 revision (QCA) “highlighted the continued tendency to portray various areas of activity as distinct from one another, and to identify them as mechanisms for promoting different values and interests” (emphasis in original). They argued that if Physical Education was going to make a contribution to the whole-school curriculum, “whole-scale change” was required (Penney & Chandler, 2000, p.76).

The most recent curriculum revision (QCA, 2007) has arguably served as an attempt to achieve more “whole-scale change” and, in comparison to previous revisions, health is more prominently positioned within it. It focuses on ‘Key Concepts’, ‘Key Processes’, ‘Range and Content’ and ‘Curriculum Opportunities’ with the intention of developing “pupils’ competence and confidence to take part in a range of physical activities that become a central part of their lives, both in and out of school” (QCA, 2007). Arguably, a move away from the ‘activity areas’ which characterised previous versions of the NCPE may (or may not) represent an acknowledgment that such a preoccupation with activities may limit pupil learning. Indeed, Penney and Chandler
(2000, p.72) recognised the limitations of a curriculum framework which privileges the learning of activities and, in so doing, advocated a curriculum which promotes “learning in and via activity contexts”. The 2007 revision, with reference to HRE, is discussed in greater detail in the following section.

In summary, it is concluded that the marginal status of Physical Education within the National Curriculum (Houlihan & Green, 2006), coupled with the privileging of competitive team games by the Government (Evans & Penney, 1998; Green, 2008; Kirk, 1992; Smith, 2004) has contributed towards HRE being marginalised (Kirk, 2006). From a process sociological perspective, it is recognised that this marginalisation was not the intention of individuals or indeed groups of people, nor was it realised via purposive action. Rather, it was an unintentional consequence “flowing from the intermeshing of the actions of numerous people” (Elias, 1991, p.146-147). As the actions of interdependent people (such as teachers, parents and policy makers) intertwine, no single person or group of people can determine long term social processes, such as the marginalisation of HRE within the National Curriculum.

3.5.3 The Formalisation of HRE within the National Curriculum

Harris (1995) highlights how the development of the NCPE allowed HRE to evolve from being an implicit component of Physical Education to being a more explicit and planned way of achieving specific learning outcomes, primarily concerned with the promotion of healthy, active lives (Cale, 1996). Because HRE lacked a specific PoS, however, this encouraged wide-ranging teaching practices and highlighted the marginal status of the area to be perpetuated (Harris & Penney, 2000).

Writing in 1995, Harris identified some confusion and a number of issues concerning the status, organisation and teaching of HRE which, it could be argued, were not being alleviated by the position of the area within the National Curriculum. For example, Physical Education teachers often used the terms ‘health’ and ‘fitness’ as though they were synonymous and this had some implications for practice which are discussed later. She also stated that a large proportion of schools did not have a
specialist HE (now PSHE) coordinator or a formal, written commitment to HRE in the form of a Scheme of Work (Harris, 1995). In addition, HRE tended to be unstructured with inconsistent guidance and inadequate HRE-CPD (previously known as In Service Training [INSET]). With reference to her concerns over the unstructured nature of HRE teaching, Harris (1995, p.30) highlighted issues such as relevance, consistency, progression, coherence and equal opportunities and went onto ask whether “a degree of lip service” was “being paid to the delivery of HRE”.

As stated in chapter one, existing research suggests that gender has emerged as an issue of importance within HRE (Harris & Penney, 2000; Webb, McCaughtry & Macdonald, 2004). Indeed, Harris and Penney (2000) argued that there were notable differences between female and male Physical Education heads of department (HoD) in relation to how they design and teach HRE within the curriculum. They add that “HRE can be regarded as legitimating stereotypical images and attitudes regarding gender appropriate behaviours” (Harris & Penney, 2000, p.250). Drawing upon existing research by Scraton (1986), Harris (1997) and Harris and Penney (2000) suggested that ‘male’ and ‘female’ versions of HRE were being taught in schools. On this basis, the present study will consider gender-related issues and the extent to which they appear to influence the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD.

The development of HRE within the curriculum is complex and it would therefore be inadequate to provide a uni-dimensional explanation for the issues outlined above. It is argued, however, that the positioning of HRE within the NCPE has had some influence over its development, or its socio-genesis (Elias, 1994; Neistroj, 2006). Subsequent revisions of the NC (in 1995, 1999 and 2007) have arguably placed HRE in an increasingly stronger position (Fox & Harris, 2003). Such revisions, however, still appear to have led to few developments with regards to the content and teaching of HRE in practice (Harris & Penney, 2000). As a consequence, it is felt that HRE continues to be considered marginal compared to other areas of Physical Education (Green, 2003), to be characterised by confusion and variations in teaching practices, and that health promotion as a goal of Physical Education remains “neither
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universally accepted nor well understood” (Cale & Harris, 2005a, p.165). In addition, it is suggested that physical educators are unsure as to how best to teach HRE as part of their subject (Cale, 2000b).

In an attempt to address the apparent confusion and to support teachers in the teaching of HRE within the curriculum, a HRE Working Group was established in 1997 which comprised representatives from schools, higher education, the advisory service and prevalent Physical Education, sport and health organisations (Cale & Harris, 2005a). The Working Group produced practice guidelines for teachers for HRE in the form of a curriculum resource entitled ‘Health-Related Exercise in the National Curriculum at Key Stages 1-4: Guidance Material’ (Harris, 2000). Upon publication, this resource was ‘Kitemarked®’ by the Teacher Training Agency (now known as the Training and Development Agency for Schools) in recognition of its contribution to teachers’ knowledge. Following the production of this resource, research suggested that it had a positive impact for those teachers who accessed it (Cale et al., 2002). Further details concerning this resource are presented in Sections 3.6.1 and 3.6.2.

With the intention of providing a more relevant curriculum for more learners, the most recent secondary National Curriculum (QCA, 2007), offers revised programmes of study (PoS) for all subjects. The Physical Education PoS features the ‘Key Concept’ of ‘Healthy and active lifestyles’ and the Key Process of ‘Making informed choices about healthy, active lifestyles’. Within its Range and Content, the revised PoS furthermore contains a wider range of practical activities than in previous PoS, identifying ‘exercising safely and effectively’ as one area of knowledge which teachers should draw upon when teaching the Key Concepts and Key Processes. Consequently, and with respect to ‘healthy, active lifestyles’, it would seem that it has the potential to encourage physical educators to teach a broader and more balanced curriculum that meets the educational needs of more pupils. Interestingly, however, the skills that are identified within the ‘Key Process’ of ‘Developing physical and mental capacity’ have a marked preoccupation with physical fitness and performance.

According to the British Standards Institution (BSI) website (http://www.bsi-global.com/en/ProductServices/About-Kitemark/), the Kitemark® is “the world's premier symbol of trust, integrity and quality”.

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Privileging fitness and performance in this way may mean that Physical Education fails to engage all learners and that HRE is unlikely to promote healthy, active lifestyles (Cale et al., 2007).

3.5.4 Physical Activity Promotion in Schools: Recent Policies and Initiatives

The political arena has identified Physical Education as an important context in which to provide opportunities for young people to participate in sport and physical activity (Green, 2002, 2009; Harris & Penney, 2000; Penney, 2008). The Department of Health (DoH) (1999, p.46) states that education is “vital to health” and that “Good health is fundamental to us all” (DoH, 2004, p.1). Indeed, the Education Act (2002) states that schools, and more specifically those working within schools, have a statutory responsibility for the physical development of young people. A number of policies and initiatives spanning a number of years have reinforced the view that schools are a suitable site for promoting health. These include, the ‘Health of the Nation’ White Paper (DoH, 1992), the ‘Health and Physical Education Project’ (Cale, 1996), the ‘Young and Active’ Policy Framework, (Health Education Authority, 1998), the ‘National Healthy Schools Programme’, (DCSF/DoH, 1999), ‘Choosing Health’ (DoH, 2004), ‘Every Child Matters’ (DfES, 2004), ‘Extended Schools’ (DfES, 2005) and ‘Healthy Weight, Healthy Lives: A Cross-Government Strategy for England’ (DoH and DCSF, 2008). Similarly, in North America, the National Task Force on Community Preventive Service has identified Physical Education as one of the five most strongly recommended interventions for increasing physical activity (Chow et al. 2008; Kahn et al. 2002).

In England, the ‘Every Child Matters’ (DfES, 2004) policy aims to promote the well-being of children and young people from birth to 19 years and focuses upon the school as one context within which to do so. Through ‘Every Child Matters’, the Government’s aim is for every child and young person to have the support they need to:

- Be healthy
- Stay safe
• Enjoy and achieve
• Make a positive contribution
• Achieve economic well-being.

As discussed earlier, this policy commitment to promoting health through education is, of course, also reflected in the NCPE in which HRE is a compulsory component (Cale, 1996; QCA, 2007) (see Section 3.5.2).

Whilst Physical Education can play a vital role in physical activity and health promotion, it cannot however be held accountable for society's health problems. Adopting a broader, social-ecological approach to this issue is considered desirable to allow for a more sound appreciation of the numerous factors that can come to influence engagement in healthy, active behaviours (O'Connor, 2008). On this basis, what follows is an introduction to some ‘settings-based’ initiatives which have been adopted and advocated in schools in recent years (Cale, 1997; Cale & Harris, 2009a; Sallis, et al., 2006), born out of a social-ecological approach to the promotion of physical activity and health.

3.5.4.1 The National Healthy Schools Programme

The National Healthy Schools Programme (NHSP) uses a holistic, settings-based approach in an attempt to “achieve healthy lifestyles for the entire school population...by developing supportive environments conducive to the promotion of health” (Cale & Harris, 2005a, p.173). The Government's over-arching target is to have all schools participating in the NHSP by 2009, and for 75% of those to have achieved National Healthy School Status. The formally stated aims of the NHSP are to:

• support children and young people in developing healthy behaviours;
• help raise the achievement of children and young people;
• help reduce health inequalities and;
• help promote social inclusion.

(http://www.healthyschools.gov.uk)
Three key elements have traditionally formed the basis of a healthy school, these being: i) the curriculum; ii) the environment (or hidden curriculum\(^9\)); and iii) the community (Cale & Harris, 2009a; Nutbeam, 1992). The programme currently focuses upon four core themes that relate to the school curriculum as well as to the wider context of the school. These include: i) PSHE; ii) healthy eating; iii) physical activity; and iv) emotional wellbeing, and each one includes a number of criteria that schools need to fulfill in order to achieve National Healthy School Status (http://www.healthyschools.gov.uk/About-Themes.aspx). Within the physical activity theme, for example, a Healthy School is required to:

- Provide clear leadership and management to develop and monitor its physical activity policy;
- Have a whole school physical activity policy, developed through wide consultation, implemented, monitored and evaluated for impact;
- Ensure a minimum of two hours of structured physical activity each week for all of its children and young people in or outside the school curriculum;
- Provide opportunities for all children and young people to participate in a broad range of extra-curricular activities that promote physical activity;
- Consult with children and young people about the physical activity opportunities offered by the school, identify barriers to participation and seek to remove them;
- Involve School Sport Co-ordinators and other community resources in provision of activities;
- Encourage children and young people, parents/carers and staff to walk or cycle to school under safer conditions, utilizing the School Travel Plan which outlines a school's strategy on travel to and from school;
- Give parents/carers the opportunity to be involved in the planning and delivery of physical activity opportunities and helps them to understand the benefits of physical activity for themselves and their children;
- Ensure that there is appropriate training provided for those involved in providing physical activities and;
- Encourage all staff to undertake physical activity.

(Cale & Harris, 2009a, p.188; DCSF/DoH, 1999)

To aid the implementation of the NHSP (DfEE, 2000), each local authority in England operates a Local Healthy Schools Programme which offers support to

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\(^9\) Various authors have used the term 'hidden' or 'implicit' to refer to some of the less formal components of the curriculum that are recognised to be influential but are not always prioritised (Cale, 1996; Green, 2002; Harris, 1995; Kirk, 1992).
schools, via a Regional Coordinator, in achieving National Healthy School Status (Cale & Harris, 2009a). Moreover, there is an NHSP website (http://www.healthyschools.gov.uk), previously the ‘Wired for Health’ website, and a range of resources such as the ‘In Brief Handout - What is a Healthy School?’ and ‘Step by Step Guide for Schools’. With specific reference to physical activity, the British Heart Foundation and the Association for Physical Education have also supported the development of Physical Activity Guidance booklets which help schools to work towards the NHSP ‘Physical Activity’ criteria (British Heart Foundation [BHF], 2007).

3.5.4.2 The Active School

Similar to the ‘healthy school’, the concept of the ‘active school’ also represents a holistic and settings-based approach but it is primarily concerned with physical activity promotion (Cale, 1997; Fox, Cooper & McKenna, 2004; Naylor, Macdonald, Warburton, Reed & McKay, 2008). It too extends beyond the curriculum to address the broader role of schools in promoting active and healthy lives (Sallis et al., 2006; Whitelaw et al., 2001). Moreover, it seeks to identify and optimise different avenues through which physical activity can be promoted (Cale, 1997). On the basis of previous research, Fox and colleagues (2004, p.346) stated that “school physical activity promotion needs to change from a restrictive, one-dimensional focus on traditional curricular sport and Physical Education” and suggested that the Active School model would be a suitable alternative that could encourage the development of an ethos that is characterised by a long-term commitment to health and physical activity (Fox et al., 2004).

In order to be an Active School it is recommended that relevant policies are in place, and that an ‘Active School Committee’ be established in order to coordinate the initiative, reach targets and evaluate the process (Cale, 1997; Cale & Harris, 2005a). Cale (1997) presented an Active School model which identified seven main avenues through which physical activity can be promoted in schools. These included: the formal curriculum; the informal curriculum; school ethos; care and support; community links; the environment and policy. The work of Cale (1997) was valuable
in that it acknowledged that each school is unique and proposed that the model was intended as a flexible tool to encourage schools to embark upon projects and initiatives which are feasible and appropriate for them.

As stated in chapters one and two, a process sociological approach promotes the notion that individuals can only exist in relation to others. Figure 3.2 (overleaf), therefore, draws upon the work of Cale (1997) and Sallis et al. (2006) amongst others in order to present a model that locates individuals (such as pupils) centrally, whilst also acknowledging the broader socio-cultural, historical and political processes that can affect the development of a particular figuration. The model presented in Figure 3.2 is by no means exhaustive but it does provide an indication of the complexity that underlies the process of becoming an Active School.

The Active School concept has now been implemented in a number of countries and successful endeavours include the Canadian ‘Action Schools! BC’ initiative (Naylor, Macdonald, Warburton, Reed & McKay, 2008), the Dutch ‘JUMP-In’ initiative (Jurg, Kremers, Candel, Van der Wal & De Meij, 2006), and the North American interventions, ‘Take 10!’ (Stewart, Dennison, Kohl & Doyle, 2004) and ‘PLAY’ (Pangrazi, Beighle, Vehige & Vack, 2003). These initiatives have demonstrated a flexible approach towards the Active School model (by focusing on particular areas of the model, for example), and subsequent research to evaluate the success of such initiatives has revealed some positive outcomes. For example, following the introduction of Active School initiatives (Jurg et al., 2006; Naylor et al., 2008; Pangrazi et al., 2003; Stewart et al., 2004), children have been found to be significantly more active throughout the school day. Furthermore, the ‘JUMP-In’ initiative was found to prevent the decrease in physical activity that usually comes with age (Jurg et al., 2006).

Whilst it is acknowledged that the components of the Active School model are interdependent, this research is mainly concerned with the component of ‘The Curriculum’ within the model (see Figure 3.2). According to Cale and Harris (2005a), the curriculum can contribute towards physical activity promotion in a number of
ways. For example, an Active School would ensure that sufficient time was dedicated to PE and HRE particularly and physical educators would teach planned, coherent and coordinated HRE which meets statutory requirements (Cale & Harris, 2005a). As existing research suggests, however, Physical Education teachers have not always approached HRE in a planned, coherent and coordinated manner (Harris, 1994a, 1995, 1997) (see Section 3.6).
Figure 3.2. The Active School Model. Adapted from Cale (1997), Cale and Harris (2005a), O'Connor (2008) and Sallis et al. (2006).
3.5.4.3 Healthy Weight, Healthy Lives

The Department of Health (DoH) and the Department for Children, Schools and Families (DCSF) have recently launched "Healthy Weight, Healthy Lives: A Cross-Government Strategy for England" (DoH & DCSF, 2008). The aim of this strategy is to reduce the number of overweight children to the levels that were recorded in 2000. In order to do so, the strategy proposes that it will:

- invest to ensure all schools are healthy schools, including making cooking a compulsory part of the national curriculum by 2011 for all 11-14 year-olds;
- invest £75 million in an evidence-based marketing programme which will inform, support and empower parents in making changes to their children’s diet and levels of physical activity;
- invest in a ‘Walking into Health’ campaign, aiming to get a third of England walking at least 1,000 more steps daily by 2012 - an extra 15 billion steps a day and;
- invest £30 million in ‘Healthy Towns.

(DoH & DCSF, 2008)

Thus far, this chapter has introduced the concept of health and has focused upon the role of lifelong physical activity (LLPA) in its promotion. It has furthermore provided socio-historical and political perspectives of the Physical Education-health relationship and its development within the curriculum and the National Curriculum and has thereby provided a context within which Physical Education teachers’ engagement with HRE can be better understood. The following section explores Physical Education teachers’ engagement with HRE.

3.6 Physical Education Teachers’ Engagement with HRE

Within this thesis, the term ‘engagement’ is used to refer to the experiences and views, as well as the philosophies more broadly, of Physical Education teachers. Although the experiences and views of Physical Education teachers are inextricably linked, with each informing the other (Elias, 1971), the two concepts have been separated for the purpose of critique and discussion.
3.6.1 Physical Education Teachers’ Experiences of HRE

As previously stated, whilst the relationship between Physical Education and health is historically rooted, HRE did not become statutory until the introduction of the NCPE in 1992 (DES & WO, 1992). Despite its statutory nature, however, HRE was not afforded the status of having a Programme of Study and, thus, many teachers tended to teach HRE solely through the activity areas that comprised the NCPE at the time (athletics, dance, games, gymnastics, outdoor and adventurous activities, swimming) (Harris, 2005, in press). The teaching of HRE is discussed in greater detail later in this section but, at this juncture, it is important to note that HRE extends beyond a collection of health-related activities, and it is more accurately referred to as a process through which pupils learn how to lead healthy, active lifestyles.

From the outset, and within the context of the National Curriculum, Physical Education teachers were afforded a high degree of flexibility to exercise their ‘professional judgement’ with regards to the teaching of HRE (Harris & Almond, 1994). Harris (1995, 1997) suggested that this degree of flexibility contributed to the variations in teaching practices and a lack of structure within HRE. The lack of structure, she argued, was reflected by the large proportion of schools that did not have a formal, written commitment to HRE (in the form of a Scheme of Work, for example) (Harris, 1995, 1997). These findings were supported by Cale (1996) who suggested that, as a result of the lack of planning and commitment to HRE, Physical Education teachers’ practices tended to lack coherence and clarity.

On the basis of such concerns, various developments have sought to provide Physical Education teachers with support and guidance within the context of HRE (for example, Harris, 2000). With regards to pedagogy, however, initial research by Cale (2000a, 2000b) suggested that Physical Education teachers’ HRE practices continued to be varied, with too heavy a focus on a limited range of activities. Subsequent research, however, suggested that the resource written by Harris (2000) served to positively impact upon the practices of those teachers who had accessed it (Cale et al., 2002). More specifically, findings suggested that the resource (Harris, 2000) enhanced the development of teachers’ knowledge and understanding of HRE, as well
as their planning, content, organisation and evaluation of the area (Cale et al., 2002). The limitation, however, was that only a limited number of teachers had access to the resource, and the existence of longer-term support is questionable.

3.6.1.1 Content Areas and Contexts for Learning
Following an analysis of HRE within Physical Education, Harris (1995) revealed teachers' strengths in terms of teaching about safety issues (such as correct lifting technique, warming up and cooling down) and about exercise effects. Weaker areas of learning which were afforded relatively limited attention, however, were related to the health benefits of exercise (such as the links with energy balance and weight), and physical activity promotion (such as recommendations for physical activity and opportunities to take part). These findings have since been affirmed by the findings of a critical document analysis of OFSTED inspection reports (1997-2000) of 33 secondary schools in the Midlands (Harris, 2009). As Harris (2009) summarises, the OFSTED reports suggested that Physical Education teachers' interpretations of HRE were generally narrow and focused mainly on 'safety issues' and 'exercise effects', with minimal attention to 'health benefits' and 'activity promotion'. Such limited interpretations of HRE suggest that some Physical Education teachers do not view it as an ongoing process of learning and living and this, it seems, is likely to have a limiting effect on pupil learning (Harris, 2009).

With respect to contexts for learning about HRE, Cale's study of Physical Education teachers' views of HRE and physical activity promotion suggested that they were not always broad and balanced (Cale, 2000a; 2000b). On the basis of her findings, she concluded that Physical Education teachers had a "rather narrow view and limited understanding" of health and how to best promote physical activity within Physical Education (2000b, p.167). Indeed, there is also evidence to suggest that Physical Education teachers often over-rely on fitness-related activities, such as circuit training and fitness testing, in order teach HRE (Cale et al., 2007; Elbourn, 2001; Harris, 1994). Whilst fitness-related activities can be valuable within a broad and balanced HRE programme, there are dangers related to an over-reliance on performative-based ideologies. Indeed, Evans, Evans, Evans and Evans (2002, p.206) argue that the
emphasis upon fitness and performance within HRE can result in “a cocktail of high performance mixed with body-centred pathology codes (which) may have deeply damaging consequences for students’ identity, their education and health”. As a number of authors have noted, children are not miniature adults and the use of fitness tests which have been designed for adults can pose numerous problems (Harris & Cale, 2007; Hopple & Graham, 1995; Garrett & Wrench, 2008; Rice, 2007). Indeed, Hopple and Graham (1995) explored what children thought, felt, and knew about fitness testing and argued that they viewed such activities as neither meaningful nor positive, but rather as “a painful, negative experience” (Hopple & Graham, 1995, p.413). Similarly, more recent research by Garrett and Wrench (2008) has suggested that pupils’ views of fitness testing are usually located at one end of a continuum which connects ‘joy’ and ‘loathing’. They conclude that “the continuing and unproblematic use of fitness testing in schools and universities might actually contribute to narrow learning outcomes that cause more pain than pleasure” (Garrett & Wrench, 2008, p.21). On a similar note, Cale and Harris (2009b) suggest that there is little or no evidence to suggest that fitness testing has an impact upon children’s motivation to be physically active.

It is suggested that the tendency for Physical Education teachers to rely on fitness-related activities within HRE is linked to their preoccupation with ‘fitness for sport’ rather than ‘fitness for health’ (Harris, 2005). This preoccupation has been challenged by a number of authors (Cale, 2000a, 2000b; Cale & Harris, 2006, 2009a; Corbin et al., 1995; Green, 2008) on the basis of the ‘product versus process’ debate. In other words, should Physical Education teachers focus upon the ‘product’ of fitness or the ‘process’ of physical activity? Whilst in Eliasian terms it is not valuable to dichotomise the product and the process, the degree to which Physical Education teachers focus upon one or the other is clearly important in this context, with both being part of the same process.

Some authors (Cale & Harris, 2005b, 2009a; Harris, 2005; Riddoch & Boreham, 1995) have suggested that, for a number of reasons, focusing upon the process of being healthy and active may be more valuable than focusing upon the product of
fitness. For example, it is argued that whilst both can have an impact upon health, levels of physical activity can be controlled to a higher degree than fitness because of the uncontrollable influence of genetics and maturational status on fitness (Cale & Harris, 2005b, 2009a; Riddoch & Boreham, 1995). Furthermore, it has been noted that an emphasis on fitness in the past has not been successful in achieving the aims of HRE (Cale & Harris, 2006). It is therefore argued that a change of emphasis towards physical activity in a community setting may be more conducive and relevant to promoting healthy, active lifestyles (Cale & Harris, 2005b, 2009a; Harris, 2005).

From a behavioural perspective, it has been suggested that Physical Education can provide young people with the knowledge, skills and understanding required to be physically active for life (Cale & Harris, 2002; Fairclough & Stratton, 2005; Pangrazi, 2000). Indeed, as Armour and Harris (2008) highlight, it is likely that a focus on education and the determinants of behaviour will have a greater long-term impact upon LLPA than a fitness focus. This is closely aligned with the work of Hopple and Graham (1995), Garrett and Wrench (2008) and Cale and Harris (2009b) which has suggested that children do not appear to learn via their engagement with fitness testing. Indeed, it has been argued that fitness testing within PE and HRE “may well represent a misdirected effort in the promotion of healthy lifestyles and physical activity, and that Physical Education time could therefore be better spent” (Cale & Harris, 2009, p.103). Having discussed content and contexts for learning about HRE, the following section addresses how the area is, and can be taught.

3.6.1.2 Modes of Teaching HRE
There are a variety of methods through which HRE can be taught. These include, permeation, focused, topic and combined. Table 3.2 (overleaf) outlines the strengths and limitations of each approach. Although the effectiveness of the learning is the prime concern (Harris 2000), whether HRE should be taught via ‘permeation’ or as ‘focused’ units remains an issue of debate (Almond & Harris, 1997; Cale, 2000a; Cale & Harris, 2005a).
### Table 3.2. Modes of Teaching HRE (adapted from Cale and Harris [2009a] and Harris [2000]).

<table>
<thead>
<tr>
<th>Mode</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permeation</td>
<td>HRE knowledge, skills and understanding can be seen as integral to all Physical Education experiences. The intention is that young people learn that all physical activities can contribute towards healthy, active lifestyles.</td>
<td>HRE knowledge, skills and understanding may be marginalized in favour of those relating to skills and performance. Pupils may be overloaded with information and it is important that all pupils receive similar information from different teachers. The approach may be ad hoc.</td>
</tr>
<tr>
<td>Focused</td>
<td>Such a specific focus ensures that sufficient attention is paid to HRE. Adopting this approach suggests that HRE is viewed as important and, as such, the status of the associated knowledge, skills and understanding are raised.</td>
<td>HRE may be viewed as an isolated component and links to other areas of Physical Education may be ignored. HRE knowledge, skills and understanding may be taught intermittently over a long period of time and, unless measures are taken, this is problematic in terms of cohesion and progression. Furthermore, the knowledge base may be taught in a way that limits activity levels within lessons.</td>
</tr>
<tr>
<td>Topic</td>
<td>HRE may be taught in a more holistic manner with links being made to a range of health behaviours (such as healthy eating) and other National Curriculum subjects. The area can be covered in more depth and be closely related to pupils' personal experiences. The amount of time engaged in physical activity in Physical Education lessons might be increased if introductory and follow-up work is conducted in the classroom.</td>
<td>A topic or theme-based approach may be more time consuming with respect to planning. This approach could be less practically oriented than other approaches (if it incorporates a high degree of classroom based work).</td>
</tr>
<tr>
<td>Combined</td>
<td>This builds on the strengths of each approach. It suggests that HRE is valued and that the area of work is closely linked to all Physical Education experiences and other health behaviours as well as related curriculum subjects such as IT, maths, science and music.</td>
<td>Combined approaches initially may be more time consuming to plan, structure, implement and co-ordinate within the curriculum.</td>
</tr>
</tbody>
</table>

As previously noted, because HRE was not afforded the status of being a Programme of Study when the NCPE was introduced, teachers were (and indeed still are) granted the flexibility to teach HRE as they wished (wish), which was usually by permeation (Harris, 2005). Whilst all approaches have strengths and limitations, Cale and Harris (2009) suggest that a combined approach is preferable because, as Harris (2000) suggested, it "builds on the strengths of each approach" and "implies that the area is..."
being reinforced as important" (Cale, 2000a, p.163). A combination approach is potentially more effective because it suggests that teachers value HRE enough to teach it as a focused, planned and structured unit, but they also permeate HRE through all aspects of Physical Education. Moreover, it allows the area to be reinforced and links to be made between HRE and other areas of the Physical Education curriculum via permeation, whilst also avoiding divorcing HRE from other areas of learning (Cale & Harris, 2009a).

Following an insight into how physical educators practically engage with, and teach HRE, the next section draws upon existing research in order to highlight the ways in which Physical Education teachers think about health and HRE. The work of Capel (2007) and Green (2003) has highlighted the often contradictory nature of Physical Education teachers' views and philosophies and it is useful to acknowledge this throughout the present research.

3.6.2 Physical Education Teachers' 'Philosophies' and Views of HRE
Teachers' views, as part of their philosophies, have become "one of the most important concepts in teaching and teacher education" (Tsangaridou, 2006, p.486). As Curtner-Smith and Meek (2000, p.32) suggest, most Physical Education teachers modify, adapt and re-create the NCPE "to fit with their own beliefs and values" and their philosophies more broadly (Armour & Jones, 1998; Evans, 1992; Green, 2000, 2002, 2003; Keay, 2005b, 2006a, 2007a). Physical Education teachers' views and philosophies can influence the development of HRE at a practical level (Cale, 1996) and it has been suggested that more attention needs to be paid to teachers' views and their potential influence upon the quality of teaching (Borko & Putnam, 1996; McCaughtry, Barnard, Martin, Shen & Hodges-Kulinna, 2006; Tsangaridou, 2006). Limited, though increasing amounts of research have attempted to provide an understanding of Physical Education teachers' views of HRE and the key findings are discussed below, in chronological order. From a process sociological perspective, teachers' views are a product of their figurations and what follows highlights some of the complex interdependencies between those in the education figuration.
The former Physical Education Association (PEA) of the United Kingdom (1987) presented findings which suggested that Physical Education Heads of Department (HoD) viewed health promotion as the second most important objective of Physical Education (Harris, 1994a). Furthermore, whilst exploring the views of Physical Education HoDs on the inclusion of HRE in the NCPE, Harris (1994a) revealed that most HoDs welcomed the introduction of HRE and viewed it as an important development for Physical Education and Health Education (now Personal, Social and Health Education [PSHE]). In addition though, Harris' (1994a) study revealed a number of issues and elements of contradiction with regard to HRE. As mentioned earlier, for example, despite the reported importance of HRE (Harris, 2005), less than two thirds of the Physical Education departments had an updated Scheme of Work (SoW) for HRE (Harris (1994a). Harris (1994a, p.9) suggested that this could be due to two reasons: i) writing a SoW for HRE may be “considered to be less of a priority than writing SoW for the specific areas of activity” and; ii) there had been a relatively short amount of time between the launch of the National Curriculum (June, 1992) and the time of the research (February, 1993). She also highlighted concerns regarding teachers’ interpretations of HRE and suggested that further guidance was needed.

Whilst exploring Physical Education teachers’ views and understanding of physical activity promotion, Cale (2000b, p.167) found that whilst teachers held a positive view of the area, they also had a “rather narrow view and limited understanding” of what HRE constituted and how it could be taught. On the basis of her findings, she also suggested that more CPD, time and funding could allow teachers to gain a clearer and more coherent understanding of the area. According to Cale and Harris (2005a, 2009a), some of these issues of contradiction and confusion continue to prevail within the context of HRE and, arguably, the comments of Cale (1996, 2000b) and Harris (1997) remain relevant. For example, and as discussed in the following section (3.7), Physical Education teachers often used the terms ‘health’ and ‘fitness’ as though they were synonymous and this had implications for practice (Cale, 2000b; Garrett & Wrench, 2007; Harris, 1997).
In an attempt to overcome such confusion and contradiction, and as explained earlier, the HRE Working Group produced 'Health-Related Exercise in the National Curriculum at Key Stages 1-4: Guidance Material' (Harris, 2000). Cale et al. (2002, p.145) subsequently sought to evaluate the impact of this resource and to ascertain whether it was "making a difference" to those who accessed it. Whilst this resource had a positive impact on the teachers and some of their practices, it was found to be less successful in influencing their pedagogies and their philosophies (Cale et al., 2002). Drawing upon the work of Elias (1978), the relatively limited impact of the resource could be due to: i) the lack of support and reinforcement across multiple levels of the education figuration (at department, school, Local Authority and national level); ii) the complexity of the interdependencies which characterise the education figuration meaning that unless interventions are valued and operate across multiple levels and over time, long-term change is unlikely; iii) the historically- and deep-rooted nature of teachers' philosophies which means that change is possible but not always easy.

Utilising a process sociological perspective, Green (2000, 2003) carried out a study entitled 'Physical Education Teachers on Physical Education: A Sociological Study of Philosophies and Ideologies' and within his work he discussed teachers' views of their subject, including HRE. For Green (2000, 2002, 2003), the term 'philosophies' is not meant in the "true philosophical sense", but rather it refers to an array of beliefs and underlying ideologies that result from "personal and sporting biographies and...working context" (Green, 2003, p.146). Green (2003, p.1) justifies his use of the term 'philosophies' providing the following reasons:

i) in answer to questions in the study regarding their thoughts on what Physical Education should be about, Physical Education teachers themselves frequently referred to 'my philosophy'...; ii) several authors in the broad field of sociology (see for example Armour, 1997; Armour & Jones, 1998; Evans, 1992) make use of the term 'philosophy' when referring to teachers' ideas; iii) I (Ken Green) am attempting to ascertain the 'surface-level'...of their consciousness in the first instance; whilst, iv) reserving the more sociological concept of 'habitus' for a more specific role in explaining Physical Education teachers 'philosophies'.

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Whilst HRE was not the specific focus of Green’s (2000, 2003) research, an exploration of Physical Education teachers’ philosophies allowed some issues surrounding HRE to emerge. Green (2003, p.141) found, for example, that many of the Physical Education teachers who participated in his study presented views that were “heavily tinted with Health-Related justifications for Physical Education”. Whilst most of the teachers believed Physical Education to be primarily concerned with sport, “at the same time they also placed great store by the ability of physical activity and particularly sport to promote individuals’ health” (Green, 2003, p.141). Indeed, Physical Education was typically viewed by teachers as having a major role to play in the education and health promotion of young people and he argues that a medico-health rationale or a ‘paramedical’ role for Physical Education had infused many teachers’ philosophies (Green, 2003). According to Green (2003, p.141), however, this medico-health rational for Physical Education was often “on the basis of ‘lay’ understandings of the relationship between health and exercise” which continue to be reinforced by the media (see Batty, 2008) and the government (see DoH & DCSF, 2008), who continue to present Physical Education teachers as responsible for improving the ‘health of the nation’. An article from the Guardian newspaper, for example, stated that “A leading doctor has accused schools of making children more overweight after government figures showed rates of obesity rise” (Batty, 2008). In the same article, it was noted that “Dr David Haslam, Clinical Director of the National Obesity Forum, has called for children to do more Physical Education” in order to combat the rise in overweight children (Batty, 2008).

Research suggests that issues surrounding health are often value-laden and bear the hallmark of ideology (Austin, 1999; Evans, 2003; Evans, Rich, Davies & Allwood, 2008; Gard, 2004a, 2004b). Indeed, Evans, Rich and Davies (2004, p.376) pose the question, “How on earth are we to read this literature and wade through the quagmire of facts, ideology, and assertion that trade as knowledge in the health fields?”. Within the context of Physical Education, two of the most uncritically accepted assumptions are that: i) sport is tantamount to good health, and ii) fitness is synonymous with health (Garrett & Wrench, 2007; Green, 2008; Waddington, 2000). These assumptions are characteristic of the ideologies of health which have circulated
Physical Education since its inception (Cale, 2000a; Fairclough, Stratton & Baldwin, 2002; Green, 2003; Harris, 1997; Rich, Evans & Holroyd, 2004; Webb, Quennerstedt & Ohman, 2008) and it has been argued by Green (2000, 2003) that such ideologies have come to influence Physical Education teachers’ philosophies about their subject and the state, organisation and positioning of HRE within it.

Since the late 1980s “health has become a symbolic category of considerable importance” and “a particular view of health as corporeal and individualistic has become pervasive within the new health-consciousness” (Kirk & Colquhoun, 1989, p.417). Indeed, Kirk and Colquhoun (1989, p.417) suggested that “school Physical Education represents one site among many where the ideology of healthism is produced”. Healthism refers to a tendency to, amongst other things, individualise health and encourage a culture of self-regulation (Garrett & Wrench, 2008) and it encourages the view that individuals are largely responsible for their own health and have the capacity for ‘choosing health’ (see for example, DoH [2004]).

According to a number of authors (Lupton, 1995; Rich, Holdroyd & Evans, 2004; Webb, Quennerstedt & Ohman, 2008), healthism refers to a regulatory technique of power. In this instance, health is viewed as the ultimate goal and individuals have the responsibility of achieving that goal (Webb et al., 2008). Within a school context, however, there is a danger of uncritically accepting the assumption that “fit bodies are seen as healthy and ideal bodies” (Garrett & Wrench, 2008, p.17) and this can counteract the overarching goal of ‘healthy, active lifestyles’ whilst simultaneously reproducing the ideology of healthism.

As Green (2008, p.111) suggests, the “ideology of healthism falls into the trap of perceiving as a private problem something that is better understood as a public issue”, influenced by multiple factors. To a certain extent, the ideology of healthism can be explained with reference to the previously discussed Active School model (see Figure 3.2). For instance, healthism is manifested in a tendency for some individuals and groups (such as policy makers) to focus on the centre of the model (intrapersonal factors such as biology and gender), whilst paying little attention to the broader
aspects of the model which refer to the social, historical and environmental factors that can come to influence health. In acknowledging the multi-dimensional nature of health, the merits of a whole-school, multi-layered approach to physical activity and health promotion can therefore be recognised.

3.7 Physical Education Teachers’ Knowledge of HRE

Teachers are clearly a fundamental component of the education process (Darling-Hammond, 1998; Labaree, 1992) but there seems to be a degree of confusion surrounding the concept of teacher knowledge and what it constitutes (Capel, 2007; Hoyle & John, 1995). More specifically, Armour and Harris (2008) have suggested the Physical Education profession seems uncertain about the role of Physical Education in public health and the kinds of knowledge required to fulfil that role. Indeed, the limited expression of health within Physical Education (Cale & Harris, 2009a), as well as the narrow focus of HRE (Cale, 2000a, 2000b), has been partly attributed to Physical Education teachers’ limited knowledge and understanding of the area (Almond & Harris, 1997; Cale, 2000b; Harris, 1997; Cale et al., 2002).

The concerns surrounding Physical Education teachers’ limited HRE knowledge (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Harris, 1997; Cale et al., 2002) are not confined to England. Indeed, research suggests that similar issues have been identified in Australia (Brown, 2003) and North America (Castelli & Williams 2007). Castelli and Williams (2007), for example, carried out a study in North America whereby they tested the Health-Related Fitness (HRF) knowledge of 73 Physical Education teachers. Whilst the findings revealed that the teachers were very confident in their perceived knowledge of HRF, their HRF knowledge test scores “did not meet the standard of achievement expected of a ninth-grade student, as assessed by the South Carolina Physical Education Assessment Program” (Castelli & Williams, 2007, p.3). They thus concluded that a large proportion of the Physical Education teachers they questioned did not have the necessary knowledge to effectively teach pupils about HRF. In this respect, Castelli and Williams, (2007, p.

10 Health related Fitness is the North American equivalent of HRE.
14) highlighted CPD as an issue of “the highest importance” (Castelli & Williams, 2007, p.14). Physical Education teachers’ professional knowledge and engagement with CPD is explored in more detail in the following chapter.

3.8 Summary
This chapter explored the historically-rooted relationship between health and school Physical Education. In summary, the key findings from the literature revealed that:

- There have been many changes in terminology within the context of HRE (Harris, 2009b);
- The terms ‘health’ and ‘fitness’ tend to be used interchangeably as though they were synonymous (Garret & Wrench, 2007; Harris, 1995) and HRE tends to be interpreted in a narrow sense (Cale, 2000a, 2000b; Cale & Harris, 2009a);
- Wide-ranging teaching practices are evident within HRE (Cale, 2000a; Harris, 2005; Harris & Penney, 2000);
- HRE programmes taught in schools often lack relevance, consistency, progression, coherence and equal opportunities (Harris, 1995);
- Many teachers do not follow a planned, structured and coherent scheme of work (SoW) for HRE (Harris, 1995);
- A number of initiatives have been introduced in order to improve the status, organisation and teaching of HRE in schools (Harris, in press);
- A resource written by Harris (2000) which aimed to guide and support the teaching of HRE was found to positively impact the teaching practices of those who accessed it (Cale et al., 2002);
- The status, organisation and teaching of HRE within Physical Education continue to be questioned (Cale, 2000a, 2000b; Cale et al., 2007; Harris, 1995, 1997, 2008);
- Health based Physical Education remains subordinate to more ‘traditional’ forms of Physical Education which are usually concerned with sporting performance (Capel, 2007; Garrett & Wrench, 2007; Green, 2003).
Having discussed the state, organisation and positioning of HRE within the National Curriculum and the NCPE, the following chapter introduces the concept of CPD with the intention of providing a framework within which Physical Education teachers' engagement with HRE-CPD can be better understood than it is currently.
Chapter Four: Critical Review of Literature - Health-Related Continuing Professional Development

4.1 Introduction
This chapter is presented in four main sections. The first section introduces and defines the process of continuing professional development (CPD) within the context of the education figuration. Following on, the second section provides a socio-historical perspective of CPD with the intention of utilising knowledge of the past to illuminate present issues and inform future developments. In this respect, relevant issues and considerations are highlighted and the notion of effective CPD is explored. The third section provides a socio-historical perspective of PE-CPD and explores how teachers engage with the process. In the final section, the concept of HRE-CPD is addressed and an outline of some of the key issues and findings is provided. Further, some examples of HRE resources and opportunities for HRE-CPD are identified.

Over the past decade the concept of CPD has become increasingly popular, at least at policy level (Keay, 2005a, 2007a) and it has been suggested that CPD is “an expectation of all professionals” (Day & Sachs, 2004, p.4) and “both a contractual right and a contractual duty” for all teachers (Johnson, 2001, p.5). Within the context of education, the increasing popularity of CPD has been signalled by extensive government investment in, for example, the National CPD Strategy (Department for Education and Employment [DfEE], 2001) which seeks to raise standards of teaching and learning by encouraging teachers to maximise their CPD opportunities (Day et al., 2006; Keay, 2005a). It has been argued that the heightened interest in teacher CPD is associated with the growing acknowledgement of its effect upon pupil learning (Armour & Yelling, 2007; Borko, 2004; DfEE, 2001, Guskey & Sparks, 2004; Reynolds & Teddlie, 2000). Whilst teacher CPD should not be viewed as a panacea for all that is wrong with education (Armour & Yelling, 2007; Fishman, Marx, Best & Tal, 2003), research suggests that teacher-CPD can contribute in a positive way towards the quality of teaching in schools (Armour & Yelling, 2007). What is meant
Review of Literature: CPD

by the term ‘effective CPD’ will be outlined later in the chapter, but it is necessary to first introduce the process of CPD.

CPD is complex and dynamic and it has been argued that it is characterised by “extreme conceptual vagueness” (Friedman & Philips, 2004, p.362) and is often viewed in a narrow sense (Armour & Yelling, 2007). The process of CPD is inextricably bound up with a range of contextual factors and it is therefore one dimension of wider social networks, or figurations, within which teachers are enmeshed. The education figuration presents various opportunities for CPD (Keay, 2005a) but, as Armour and Yelling (2007) argue, the tendency to view it narrowly and with little clarity can limit its potential.

For the purpose of this thesis, the term CPD refers broadly to any activity, from the point of initial teacher education (ITE), which “increases the skills, knowledge or understanding of teachers, and their effectiveness in schools” (DfEE, 2000, p.3). According to Craft (2000), possible methods of professional learning include self-directed study, personal reflection, collaborative learning, courses, mentoring or peer coaching, and teacher placement. In order to encourage further understanding of the theoretical and practical issues surrounding CPD, it is necessary to first analyse the three main components of CPD, these being ‘continuing’, ‘professional’ and ‘development’.

4.1.1 ‘Continuing’ Professional Development

Lorriman (1997) uses the term ‘continuing’ to refer to a lifelong commitment to learning whilst Armour and Fernandez-Balboa (2001, p.103) also argue that professional development “is a life-long process”. This view of CPD coincides with the processual framework within which this study is located which focuses on long-term processes of development. For Craft (2000, p.9), the term CPD refers to “all types of professional learning undertaken by teachers beyond the initial point of training”. From an Eliasian perspective, however, it is more sociologically accurate to view it as an ongoing process which begins at the point of ITE and continues throughout one’s teaching career. Indeed, the Professional Standards for Teachers,
published by the Training and Development Agency for Schools (TDA) (2007), represent an acknowledgment that teacher CPD is an ongoing process and that teachers are not homogenous. The standards “provide the framework for a teacher’s career and clarify what progression looks like” (TDA, 2007, p.2). Standards are provided for:

- the award of Qualified Teacher Status (QTS)
- teachers on the main scale
- teachers on the upper pay scale (Post Threshold Teachers)
- excellent teachers
- Advanced Skills Teachers (AST).

The framework of standards is arranged around three interrelated sections which are concerned with: i) professional attributes; ii) professional knowledge and understanding; and iii) professional skills. The standards outline the professional characteristics that a teacher should attain and maintain throughout each career stage. After the induction year, for example, teachers are expected to continue to meet the core standards\textsuperscript{11} and to broaden and deepen their professional attributes, knowledge, understanding and skills within their subject and profession. This principle applies at all subsequent career stages and, arguably, highlights the importance of effective CPD.

4.1.2 Continuing Professional Development

According to Day (1999, p.5), people must fulfil four sets of criteria in order to be classed as ‘professional’ and for their mode of employment to be classed as a ‘profession’. He draws upon the work of Larsson (1977) and Talbert and McLaughlin (1994) in order to suggest that professionals must have:

\begin{itemize}
  \item i) a specialised knowledge base - \textit{technical culture};
  \item ii) commitment to meeting client needs - \textit{service ethic};
  \item iii) strong collective identity - \textit{professional}
\end{itemize}

\textsuperscript{11} Core standards are organised around the key themes of: i) developing professional and constructive relationships; ii) working within the law and frameworks; iii) professional knowledge and understanding; iv) professional skills; and v) developing practice.
commitment; and iv) collegial as against bureaucratic control over practice and professional standards — professional autonomy.

Although this definition is valuable, it is important to acknowledge that there can be, and no doubt are, various interpretations of these criteria, depending on which figurations one is, and have, been a part of. This partly contributes to the complexity of the term 'professional'.

Using the above definition as a point of departure, and with the aim of working towards a more sociological definition, it could be argued that due to lengthening chains of interdependence, teachers are increasingly accountable to organisations such as the General Teaching Council (GTC) for England, the Office for Standards in Education (OFSTED), and the Department for Children, Schools and Families (DCSF) and therefore can only claim to be relatively autonomous. The point of sociological interest is that in the context of teachers' working lives, they are all more or less constrained and enabled to greater or lesser degrees by others enmeshed in various levels of the education figuration (Green & Thurston, 2002).

In terms of teaching as a profession, Etzioni (1969) states that it is questionable whether teaching can be classed as a profession, but rather a ‘semi profession’ (Donnenwerth & Cox, 1978; Horowitz, 1985; Winch, 2004). Etzioni (1969) assumed that a ‘profession’ is an ‘ideal’ and to be anything less (i.e. a ‘semi-profession’) is inadequate in some way. Elias (1978, p.50) discussed the tendency to refer to “the ultimate ideal of professionalism” which suggests that professionals have ‘absolute autonomy’ of a particular speciality. At this juncture the two points of contention are: i) the seemingly ideological notion of professionalism; and ii) the notion of ‘absolute autonomy’. Firstly, the term ‘ideal’ may not be the most adequate term to use because an ideal is rarely universal and individual differences should be taken into consideration. It could also be argued that an ideal, an ultimate standard, is an ideological state that is not possible to attain. Is the concept of perfection realistic? In relation to the second point, although it is sometimes desirable, it is not possible to have absolute autonomy. Chains of social interdependence are constantly enabling
and constraining, to varying degrees, the actions of all people within a specific figuration (Elias, 1978). That is not to say, however, that teachers cannot have relative autonomy within the context of their classroom insofar as, for example, how they plan lessons and discipline pupils. Instead of referring to "the ultimate ideal of professionalism" (Elias, 1978, p.50) and attempting to classify teachers as professionals or semi-professionals, it may be more beneficial to focus on how to enhance teaching and learning, or pedagogy, within a school context.

4.1.3 Continuing Professional Development

The Department for Education and Skills (DfES) (now the DCSF) stated that CPD is "relevant to all teachers" and that it is concerned with the "increasing of teachers' skills, knowledge and understanding" (http://www.teachernet.gov.uk/professional development/). Blandford (2000) suggests that the ultimate aim of CPD is to develop teachers' classroom practice. She presents a 'school development plan' in order to provide a framework within which schools, and those who work within schools, can develop. It has also been argued that there is greater potential for teachers to develop when they are encouraged to "reflect, access new ideas, experiment and share experiences within school cultures in which leaders encourage appropriate levels of challenge and support" (Muijs, Day, Harris & Lindsay, 2005, p.291). However, that is not to say that the accessing of new ideas is the only aspect of collaborative activities that allows for professional development. It is imperative to acknowledge the impact of wider social processes over time upon teachers' philosophies and, in turn, how those affect their practices.

In their respective research, Armour and Fernandez-Balboa (2001), Darling-Hammond (2005) and Darling-Hammond and McLaughlin (1995) present the teacher as both an educator and a life-long learner. Acknowledging that people, and teachers particularly, are affected by a multitude of complex social constraints, leads to a further appreciation of both their personal and professional needs. In an attempt to understand the complexity of CPD, Blandford (2000) incorporates the concepts of personal development, team development and school development into her work. This relatively broad conceptualisation of CPD highlights that people are connected on a
number of levels by complex and invisible chains of interdependence that have both enabling and constraining consequences for them, some of which we might not appreciate. For instance, the extent to which Physical Education teachers engage with CPD, and HRE-CPD particularly, can be influenced to varying degrees by their own philosophies and their interdependence with colleagues within their department, school managers and CPD providers.

Process sociology has emerged out of the commitment to study human interdependencies and social life in a processual and developmental way (van Krieken, 1998). It has already been explicitly stated that in order to understand the present, it is necessary to explore the past (Goudsblom, 1977). With the intention of illuminating some issues that characterise Physical Education teachers’ engagement with HRE-CPD, a socio-historical and political perspective of CPD is now provided.

4.2 CPD: A Socio-Historical and Political Perspective

The process of CPD may be seen as a recent development but, from a process sociological perspective, it can be regarded as a historically rooted practice. In order to better understand CPD and HRE-CPD, it is considered necessary to first gain an appreciation of the socio-historical and political context in which it has emerged and developed into an aspect of Physical Education teachers’ lives. According to Armour and Duncombe (2004, p.12), the James Report (1972) represented a “milestone in the history of CPD” and, as such, the publication of this report is used as a starting point for the following section. References are made to the wider context of education and issues concerning CPD and PE-CPD since 1972 are outlined.

4.2.1 A History of Teacher CPD (1972-2008)

Smith and Varma (1996) stated that in the 1970s there was a growing assumption in society generally that the British education system had failed. They went on to assert that such an assumption was a reaction to the economic unrest that was facing the country at the time. Within this era of unrest, CPD was beginning to be viewed as a prevalent political issue and it was bestowed with the aim of ‘modernising’ teaching (Campbell, MacNamara & Gilroy, 2004; Ruddock, 1991). The James Report entitled
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'Teacher Education and Training' (1972) represented a step towards systematic CPD for teachers and it provided initial recommendations with regards to In-Service Training (INSET) (now referred to as CPD) for all teachers (Aspland & Brown, 1993). The report argued that teacher CPD was inadequate, largely due to the distinct separation of initial teacher education (ITE) and CPD (Aspland & Brown, 1993).

The James Report presented CPD as the most effective and economical way of improving the quality of education in schools, as well as raising the standards and status of the teaching profession (Aspland & Brown, 1993). Furthermore, it allowed CPD to become a planned and strategic way of developing teachers professionally (Bradley, 1991). In order to define ‘effective’ CPD and extrapolate how it could be successfully implemented in schools, ‘The Teacher Induction Pilot Schemes’ (TIPS) were launched (Bolam, 1994), funded by the Department of Education and Science (DES) (1973-1978). The findings of the TIPS project were disseminated through publications and conferences and in 1978 formed the basis of a booklet entitled ‘Making Induction Work’ (Bolam, 1994; Duncombe, 2005). The booklet was sent to every school in England and Wales and it sought to provide guidance for teacher-induction as the important link between ITE and teachers’ subsequent professional development (Bolam, 1994). In 1978, ‘The Schools and In-Service Teacher Education (SITE) Evaluation Project’, also funded by the DES (1978-1981), was initiated. As a result, there was a call for changes to CPD on personal, local and national levels. More specifically, schools were encouraged to develop their own CPD policies and methods of implementation; Local Authorities were expected to support them, and the Government was required to provide funding where necessary (Bolam, 1994).

In 1986, increased recognition of the importance of CPD was signalled by the introduction of INSET days (Duncombe, 2005). Named after Kenneth Baker, the Education Secretary at the time who was responsible for the introduction of INSET, ‘Baker Days’ were the name given to the five days of CPD that teachers were entitled to each year (Duncombe, 2005). The purpose of the INSET days was to provide teachers with the opportunity to engage with activities that were relevant to their
needs and the needs of their school, and which would promote their professional learning and development.

Subsequently, and in an attempt to monitor and evaluate INSET provision, the National Foundation for Educational Research (NFER) published a report (Harland et al., 1999). Findings suggested that whilst those within the wider education figuration (members of local authorities, for example) were enabling teachers to engage with CPD, they were simultaneously constraining it by the timing of the INSET days. This highlights the multi-directional nature of social processes, as discussed by Elias (1978) in his development of process sociology, whereby the same group of people can both enable and constrain a particular social behaviour. Consequentially, Harland and colleagues (1999) suggested that the needs of teachers did not appear as being paramount. The report also suggested that much INSET (two-thirds) was dedicated to listening to presenters and there was limited support for ongoing developments (Harland et al., 1999).

Since 1986, other wider socio-political developments have influenced CPD provision. For example, the introduction of the Education Reform Act (ERA) and the National Curriculum (1988), the development of the Qualifications and Curriculum Authority (QCA) (1997), National Curriculum revisions (1995, 1999, 2007), the introduction of the Office for Standards in Education (OFSTED) (now known as the Office for Standards in Education, Children's Services and Skills), and the formation of the General Teaching Council (GTC) for England (2000).

A particularly noteworthy development in 2001 was the launch, by the government, of the National CPD Strategy (DfEE, 2001). The strategy aimed to raise standards of teaching and learning by encouraging teachers to maximise their CPD opportunities (Day et al., 2006) and they provided a context for the introduction of a number of progressive initiatives (Keay, 2005a). For example, the National College for School Leadership (NCSL) Networked Learning Communities (NLC) programme, introduced in 2002, encouraged schools to work collaboratively and thereby provide opportunities and improve standards for pupils (Muijs & Harris, 2003). More recently,
the TDA broadened its remit and is encouraging schools managers to develop their workforce which, as of April 2005, has included specific responsibilities for teacher CPD (Day et al., 2006).

Teacher CPD has also been the focus of the General Teaching Council (GTC) for England Teachers’ Professional Learning Framework (TPLF). Centred on enhancing the quality of pupil learning, the framework supports teachers in their CPD and highlights the importance of effective CPD. In 2007 and as part of the TPLF, the GTC published a range of resources to help guide and support teachers’ CPD. Such resources include leaflets entitled ‘The learning conversation: Talking together for professional development’, ‘Networks: The potential for teacher learning’ and ‘Using research in your school and your teaching’ (http://www.gtce.org.uk/sharedcontentlibs/gtc/141488/201083/making_cpd_better.pdf.). Another related initiative is the GTC Teacher Learning Academy (TLA) (www.gtce.org.uk/tla). According to the GTC website, the TLA:

...offers public and professional recognition of teachers' learning, development and improvement work. It aims to stimulate learning experiences for teachers which are effective for them, their pupils, their schools and for the education service. It seeks to support learning communities within and beyond schools that enrich teaching practice and support innovation.

Case study research conducted by the GTC suggested that engagement with the TLA can allow for a range of improvements regarding CPD engagement. Such benefits included more opportunities for CPD, more support for early-career teachers and increased focus on the role of the CPD leader (www.gtce.org.uk/tla).

4.3 Teacher CPD: Issues and Considerations

Various authors have explored teacher CPD (Armour & Yelling, 2007; Day et al., 2006; Hustler et al., 2003; Keay, 2005b, 2006b) and what follows is an overview of some of the key issues and considerations that have been identified by existing research. Drawing on examples from Physical Education, this section begins to allow for a further understanding of Physical Education teachers’ engagement with CPD.
4.3.1 Teaching: A Profession?

As alluded to earlier, there is an element of inconsistency with regard to what constitutes a profession and whether teachers are professionals (Day & Sachs, 2004). The increasingly disparate views regarding the professional status of teachers are partly a result of dynamic and ever-changing balances of power between those who comprise the education figuration. It could be argued that shifting power balances between the government and private enterprise, together with changing levels of responsibility and accountability, have instigated an apparent re-orientation of how 'professionalism', or professionalisation, and CPD are viewed and experienced by teachers (Keay, 2007a). As chains of social interdependence have lengthened, the roles of the teacher have become increasingly complex and levels of teacher autonomy have been challenged by changes in policy and technology. For example, developments such as the World Wide Web (internet) have allowed information to be more easily accessible than ever before and, as communication technologies evolve, they serve to “erode the role of the teacher as exclusive holder of expert knowledge” (Day & Sachs, 2004, p.5). Arguably, this shift in the balance of power between the various groups involved in the education figuration has resulted in the professional status of teachers being questioned (Webb, 2006).

Whilst presenting a ‘new professionalism’, Hargreaves (1994) suggests that if schools are to be improved, it is imperative that there is a synthesis of teacher CPD and institutional development. In other words, the development of both the teacher and the school are inextricably linked and an understanding of the ways in which each constrain and enable the other may allow for more adequate CPD strategies to be implemented. Whilst discussing teacher professionalism, Day and Sachs (2004) refer to the dominant educational ‘discourses’ of ‘democratic professionalism’ and ‘managerial professionalism’. Democratic professionalism focuses on collaboration between teachers and other stakeholders within the education figuration and it proposes that teachers, as a group, have a collective responsibility to contribute to the school and the wider community (Day & Sachs, 2004). An example of such collaboration includes the ‘Healthy Schools’ initiative (http://www.healthy schools.gov.uk/) which adopts a whole school approach to the promotion of health.
(Cale & Harris, 2009a; DfEE, 2000). Alternatively, managerial professionalism is relatively competitive and policy driven and aims for political gain. It is manifested, for example, in the publication of ‘School and College Achievement and Attainment Tables’ and increasing levels of competition between schools (http://www.dcsf.gov.uk/performance_tables/). Clarke and Newman (1997) argue that managerial professionalism is externally regulated and encourages groups of individuals to strive for institutional reform. Hargreaves (1992), and more recently Williamson and Myhill (2008), refer to this as one aspect of the ‘intensification’ of teachers’ lives. Teachers’ thoughts and actions can be affected by the shifting balance that exists between democratic professionalism and managerial professionalism with elements of both approaches operating simultaneously and therefore constraining teachers in a number of ways. For example, in process sociological terms, teachers seem constrained by the perceived need to contribute to the ‘community’ and also the need to achieve politically driven aims.

Helsby, McCulloch, Saunders and Warburton (1997) carried out research in order to establish how teachers in England perceived their professionalism. Teachers tended to stress the difference between “being a professional” and “behaving like a professional” (Helsby et al., 1997, p.10). Furthermore, Day (1999) purports that the professional behaviour of teachers is directly related to the quality and effectiveness of teaching and learning. If this is accepted, irrespective of whether teachers are perceived as professionals, the development of professional behaviour can prove to be beneficial for both teachers and pupils. However, much research has suggested that teachers’ motivations and abilities to be ‘professional’ can be impaired by several factors. Helsby et al. (1997) suggest that the most influential factors include their salary, recognition from within and outside of the school, and their appraisals. Whilst acknowledging the increasing constraints upon teachers, Sachs (2003) proposes that there has been an emerging pattern of reform within teacher CPD that consists of a shift from local initiatives towards national initiatives that are assessed in terms of pre-determined standards. For example, local CPD initiatives for Physical Education teachers have often been replaced with national government initiatives such as the National Physical Education and School Sport Professional Development Programme.
which forms part of the Physical Education and Sport Strategy for Young People (PESSYP) (DfES/Department for Culture, Media and Sport [DCMS], 2008). More details on this programme and strategy are provided later (Section 4.8.1).

Day (1999, p.6) suggests that the intensification of teachers’ working lives is characterised by “extended bureaucratic and contractual accountability, decreasing resources and increased managerialism”. Williams and Myhill (2008) add that international trends demonstrate changes in teachers’ work which have resulted in increased hours, class sizes and tasks. Further highlighting the intensification of teaching, Smaller (2005, p.2) draws upon a number of authors who emphasise that teachers need to be “carefully selected, trained, directed, evaluated, tested and controlled”. This statement demonstrates the power that is arguably shifting away from teachers and highlights aspects of professionalisation which have become increasingly apparent, at least at policy level, within education. Utilising the concept of the education figuration, it can be seen that the lengthening of increasingly complex chains of interdependence are contributing to an intensification of teachers’ lives, with pressure being exerted upon them from numerous sources.

It has been acknowledged that to be deemed a profession, teaching must have a recognised body of knowledge (Keay, 2007a) and therefore the following section addresses the concept of teachers’ professional knowledge.

4.4 Teachers’ Professional Knowledge
As suggested in the previous chapter, teachers are central within the education process (Darling-Hammond, 1998; Labaree, 1992) but there is a degree of confusion surrounding the concept of teacher knowledge and what it constitutes (Capel, 2007; Hoyle & John, 1995). Keay (2007a, p.2) suggests that teachers experience “a distinct form of professionalism” and she goes on to acknowledge that professional knowledge is a fundamental element of that professionalism. Teaching is viewed as a predominantly pragmatic endeavour and it is assumed that the knowledge needed is “basic, technical and practical in nature” (Keay, 2007a, p.12). It could be argued that this assumption is particularly meaningful within the context of Physical Education.
due to the intrinsically practical nature of the subject (Capel, 2007), and that it can consequently have repercussions for those working within the area (Rovegno, 2003).

A number of authors have discussed and theorised teachers' professional knowledge. Some of the most influential include Giddens (1984, 1991), Lusted (1986) and Shulman (1986, 1987). Giddens (1984, p.375) uses the notion of “knowledgeability” to refer to “everything which actors know (believe) about the circumstances of their action and that of others” and also the way in which one acquires knowledge or forms beliefs (Giddens, 1991). In this context, he emphasises the notion of reflexivity which, for him, “should be understood not merely as ‘self-consciousness’” but as the “monitored character of the ongoing flow of social life” (Giddens, 1984, p.3). From this perspective, to be knowledgeable is to also be reflexive and reflective, a point which has since been made by other authors (Capel, 2007; Mansfield, 2008).

The work of Shulman (1986, 1987) has been cited by many authors such as Garet, Porter, Desimone, Birman and Yoon (2001), Hayes, Capel, Katene and Cook (2008) and Keay (2007a). Shulman (1986, 1987) presented a theoretical framework that can provide an appreciation of teachers' knowledge. He emphasised the notion of content knowledge and, in order to enhance understanding of this multidimensional concept, he introduced three categories: subject matter content knowledge; pedagogical content knowledge; and curricular knowledge (Rossi & Cassidy, 1999). Subject matter content knowledge is concerned with more than subject matter. It refers to knowledge of the various social processes that have led to particular topics being valued and sometimes prioritised within a particular context such as Physical Education. The second category, pedagogical content knowledge, is concerned with the “knowledge for teaching” and “ways of representing and formulating the subject that make it comprehensible to others” (Shulman, 1986, p.9). This particular kind of knowledge is crucial in order to understand the dynamic processes of teaching and learning and as such, be a knowledgeable teacher. The third category, curricular knowledge, refers to knowledge of the curriculum and of the resources available to aid teaching. Shulman (1986) presented a further four categories that included: general pedagogic
knowledge, knowledge of learners, knowledge of educational contexts, and knowledge of educational ends.

In comparison to Shulmuns’s approach, Lusted’s (1986) notion of pedagogy is more akin to process sociological principles in that it views the production and transmission of knowledge as a dynamic process as opposed to isolated stages within a pedagogical act. For Lusted (1986), pedagogy is not only concerned with how one teaches, but also with the subject being taught (subject matter content knowledge) and more importantly, how one learns (knowledge of learners). Rossi and Cassidy (1999, p.195) draw upon the work of Lusted (1986) and state that “the relationship between teacher, learner and content is a dynamic one”. Echoing the thoughts of Elias (1971), they subsequently argue that “teacher knowledge can never be absolute, it can only ever be contextual like ever shifting desert sands constantly shaped by competing and complementary elements” (Rossi & Cassidy, 1999, p.195). According to Lusted (1986, p.4), “knowledge is produced...through the process of thought, discussion, writing, debate, exchange; in the social and internal, collective and isolated struggle for control of understanding” which, from a process sociological perspective, can only occur as a product of figurations (Elias, 1978).

As Cassidy, Jones and Potrac (2009) purport, the crucial difference between Lusted and other theorists is that he not only focuses upon knowledge but also on its production. This concurs with the process sociological approach which, in simple terms, encourages an appreciation of socio-historical developments in order to allow for a more adequate understanding of current phenomena (Goudsblom, 1977). More critically, however, Cassidy et al. (2009) highlight that Lusted (1986) fails to adequately consider the agents that have a role in the process of pedagogy and, as an Eliasian approach would encourage, in attempting to understand pedagogy it is imperative to gain an understanding of the individual agents as opposed to their detached actions.

It has previously been argued that teachers tend to be unsure of the knowledge that distinguishes them from other professions and, despite significant scholarly attention,
there remains an uncertainty about what it is to be a 'knowledgeable' Physical Education teacher (Cassidy et al., 2009; Rossi & Cassidy, 1999). More recently, there have been some developments within this context and, according to Hayes et al. (2008), knowledgeable teachers focus upon pupil learning and are able to plan the content and pedagogical approaches that will best achieve the aims of Physical Education. Furthermore, they are able to critically reflect on their values, beliefs and practices as well as those of others in order to challenge the status quo within Physical Education and make it relevant and meaningful for young people.

The TDA (2007) identify 'Professional Knowledge and Understanding' as one category of the professional standards that all teachers, including trainee teachers, are required to meet (see Section 4.1.1). The rationale for this category is based on the understanding that "teachers will be more able to respond to the individual needs of learners" and influence their "well-being, development and ability to learn" if they have the relevant professional knowledge and understanding (http://www.tda.gov.uk/teachers/professionalstandards/standards/guidance/theme3.aspx). With regards to pedagogic practice, for example, standard Q15 of the Qualified Teacher Status (QTS) standards requires trainee teachers to "Have a secure knowledge and understanding of their subjects/curriculum areas and related pedagogy including: the contribution that their subjects/curriculum areas can make to cross-curricular learning, and recent relevant developments". Further identifying a need to address teacher knowledge, the TDA have also introduced 'Subject Knowledge Booster Courses' which are designed to help (potential) trainee teachers gain the depth of knowledge needed to teach (http://www.tda.gov.uk/Recruit/thetrainingprocess/pretrainingcourses/subjectknowledgeboostercourses.aspx).

Given that teachers are required to demonstrate professional standards of knowledge throughout their careers (TDA, 2007), it is imperative that there is an adequate understanding of where, how and in what contexts they acquire this professional knowledge. Researchers have attempted to address these questions (Lambert, 2001) but, as some authors have pointed out (Castelli & Williams, 2007; Cochran-Smith & Lytle, 1990, 1993; Doyle, 1997; Kennedy, 1999), "the knowledge teachers use is of a
very different kind than usually produced by educational researchers" (Hiebert, Gallimore & Stigler, 2002, p.3).

With respect to this particular research, Physical Education teachers can be fundamental in promoting healthy, active lifestyles (Cale, 2000b; Cale & Harris, 2009a) yet, as previously stated, their knowledge, skills and understanding of HRE has been the subject of concern. In line with professional standards (TDA, 2007), and as Cale (2000b) has argued, if Physical Education teachers are expected to promote physical activity and health within schools, it is imperative that they have the knowledge, skills and understanding to do so.

4.5 Professionalisation: CPD as a Process
Within the CPD literature, terms such as ‘professional’, ‘professionalism’ and ‘professionality’ are used frequently and interchangeably. The complexities and difficulties that arise from the interchangeable use of these terms can be addressed by adopting a process sociological perspective and utilising the term ‘professionalisation’ (Johnson & Maclean, 2008). This may be a more appropriate term because it allows CPD to be conceptualised as an ongoing process as opposed to a static state. The process of professionalisation has been associated with increased levels of accountability within the context of education (Sachs, 2003) and issues relating to this are addressed next.

4.5.1 Accountability
Linn (2003, p.10) states that accountability is “shared responsibility” and argues that policy makers lay much emphasis upon accountability and its potential to enhance pupil learning. Furthermore, he suggests that within an accountability system it is necessary to acknowledge two pertinent questions: i) what is important? and; ii) who is accountable? Questions such as these can enable those involved in CPD to have greater clarification and to develop CPD within the context of education. It is important to acknowledge, however, that systems of accountability will not automatically enhance pupil learning.
Campbell (2003) asserts that over the past 20 years there has been rising pressure for school accountability. Indeed, it has been argued that prevailing systems of accountability, combined with heightened demands, limited resources and lack of job security have resulted in a "low trust model of education" (Wragg, Haynes, Wragg & Chamberlin, 2000, p.13). Evidence of accountability within education is increasingly visible (Campbell, 2003) and to highlight this, Armour and Duncombe (2004) present the example of public access to OFSTED reports which has been statutory since October 1992. They explain that the release of OFSTED reports into the public domain highlights the profession's obligation to provide evidence of its effect upon pupils and also upon broader society (Armour & Duncombe, 2004). According to Smyth (1991), externally imposed forms of accountability and standardisation such as those imposed by OFSTED, "indicate a lack of respect for teachers' own capacities for reflective, critical inquiry" (Kennedy, 2005, p.241). Indeed, Darling-Hammond (2000) argues that accountability systems were introduced in order to benefit schools that scored highly on standardized tests, and to use as a basis for punishment for those schools that failed to do so.

Stein, Smith and Silver (1999) contend that, if the needs for accountability and more effective CPD are going to be suitably dealt with, there needs to be significant changes in the thoughts and practices of many CPD providers. Linn (2003) notes that in the past, CPD has been perceived as a relatively narrow concept and it would be beneficial for pupil learning if it were considered in broader terms. In other words, there have been strict notions of what constitutes CPD and this, to some extent, has led to the acceptance of the "one size fits all" approach to CPD (Hustler et al., 2003). McLaughlin and Zarrow (2001) suggest that many existing CPD strategies are "substantively and strategically incomplete" because they fail to acknowledge the varying effects of policy and practice in specific school contexts, or figurations. Similarly, Hustler et al. (2003) imply that whilst having a standardised CPD strategy holds some merit, it is also important to acknowledge the specific yet dynamic contexts within which CPD takes place. They argue that CPD should not be dominated by standardised targets but instead should focus on 'balance' in CPD strategies. In terms of CPD strategies, Friedman and Philips (2004) suggest that it
would be more beneficial if they focused on learning and were separated from systems of accountability. They state that a need for accountability can force teachers to consciously, or sub-consciously, re-order their priorities in order to meet externally imposed requirements (for sports teams to win matches and competitions, for example).

Acknowledging the multi-directional nature of social processes, although accountability or “professional responsibility” (Hoyle, 2001, p.150) are often perceived as negative concepts, it could be argued that employing systems of accountability may highlight public interest in teaching and therefore bolster its status generally and the status of particular subjects more specifically (Hoyle, 2001). Before going on to discuss effective CPD, the following section outlines some of the most common types of CPD available to teachers.

4.6 Types of Teacher CPD
In the past decade there has been a shift away from more traditional INSET towards more varied and comprehensive types of professional development (Armour & Yelling, 2007; Blandford, 2000; Keay, 2007a). Bolam (1993) argues that it is important to consider various types of CPD activities and, for him, these include practitioner development, professional training, professional education, and professional support. Practitioner development is carried out in a school context and often involves induction, observing lessons, shadowing other teachers and team teaching. The fundamental objective of practitioner development is to focus on the self-development of teachers whilst extending and renewing their knowledge, skills and understanding (Grundy & Robison, 2004, in Day & Sachs, 2004). Alternatively, professional training takes place external to the school context and is usually managed and delivered by individuals from Higher Education Institutes (HEIs), Local Authorities (LAs) and external consultancy firms. Professional training, as Blandford (2000) suggests, largely consists of courses, workshops and conferences which often focus on achieving national accreditation or academic qualifications. Similar to professional training, professional education is usually externally managed and delivered by HEIs and centres on the relationship between educational theory and
practice. CPD such as this often leads to HEI accreditation or professional qualifications. Also, and in order to enhance CPD, professional support is often provided in partial fulfilment of a contractual agreement which can often take the form of career development advice, appraisals and mentoring (Blandford, 2000; Bolam, 1993).

The literature often tends to divide CPD into distinct categories such as ‘traditional’ or ‘reform’; ‘formal’ or ‘informal’; and ‘individual’ or ‘collaborative’. Authors such as Becher (1999) and Knight (2002), for example, dichotomise ‘formal’ and ‘informal’ learning and, in so doing, serve to limit the degree of sociological understanding that can be provided. Alternatively, conceptualising formal and informal learning as being at opposite ends of a continuum can encourage the view that individual experiences can include varying degrees of formal and informal learning, the extent to which is continually in flux. The following section presents some of the most common dichotomies that have characterised CPD literature, namely: ‘traditional-reform’; ‘formal-informal’; and ‘individual-collaborative’.

4.6.1 Traditional and Reform

According to Garet et al. (2001), it is generally accepted that CPD activities are either ‘traditional’ or ‘reform’. A report published on behalf of the DfES stated that most teachers, of all National Curriculum subjects, viewed CPD in the ‘traditional sense’ and usually in terms of individual courses, workshops, conferences and training days (Hustler et al., 2003) (see Section 4.7). Furthermore, traditional CPD typically tends to involve an ‘expert’ relaying information to participants who attend activities outside of school-time (Loucks-Horsley, Hewson, Love & Stiles, 1998). The intention is that teachers return to their schools and ‘cascade’ the information to their colleagues (Bradley, 1991). Although it can be valuable, traditional CPD has been subject to criticism due to its perceived inadequacy in terms of content and structure (Loucks-Horsley et al., 1998). It has also been accused of being out of context and, in some ways, less valuable than CPD that occurs in the school context (Loucks-Horsley et al., 1998). At the risk of generalising, the content and context of teacher CPD, as well as the methods used to disseminate it have in the past been deemed inadequate
(Armour & Yelling, 2004a, 2007). Thus, whilst traditional forms of CPD hold some merit, Garet et al. (2001) argue that they are not sufficient to enhance teacher development or produce effective changes within the context of the classroom or school.

The view that traditional CPD is insufficient has led to a new ‘wave’ of CPD, often termed ‘reform’ CPD. Desmione, Porter, Garet, Yoon and Birman (2002) suggest that reform activities include teacher study groups, teacher collaborative networks, mentoring, internships, and resource centres. In comparison to more traditional CPD, reform activities tend to comprise “collective participation and longer duration” and are “more likely to have active learning opportunities, coherence and a content focus (Desmione et al., 2002, p.83). Moreover, research has suggested that reform CPD tends to be more successful compared to traditional CPD, in improving knowledge, skills and teaching practices (Garet et al., 2001). Despite such documented benefits, however, few teachers appear to be engaging with reform activities (Desmione et al., 2002).

Conceptualising ‘traditional’ and ‘reform’ CPD as distinct entities may be an appropriate approach for educationalists and policy makers, but establishing such a dichotomy is considered false and inept in process sociological terms. For example, a teacher may go to a ‘traditional’ conference and engage with more ‘reform’ style CPD with fellow teachers at lunchtime. Thus, theoretically, it may be more adequate to conceptualise different modes of CPD as being on a continuum, or part of a multidirectional process. More recent developments, such as the introduction of the Professional Standards for Teachers (TDA, 2007) highlighted earlier, signal an acknowledgment of this which shows promise for future CPD policy.

Aside from the traditional-reform dichotomy, CPD is also often categorised on the basis of its formality. This issue is now discussed.
4.6.2 Formal, Non-Formal and Informal

Eraut (2000 p.232) suggests that education policy tends to portray learning as a relatively formal experience and as a “self-conscious, deliberate, goal-driven process which is planned and organised by providers to yield outcomes that are easily described and measured”. It would be naive to ignore, however, the potential for learning to occur in a less structured manner. Day and Sachs (2004, p.84) have provided a tabulated summary of the differences between formal, non-formal and informal CPD and this is presented in Table 4.1.

Table 4.1 The Nature of CPD Practice (adapted from Day & Sachs, 2004, p.84).

<table>
<thead>
<tr>
<th>Formal</th>
<th>Non-Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taught by university personnel and CPD experts.</td>
<td>The emphasis is on inquiry/learning.</td>
<td>Individual/private.</td>
</tr>
<tr>
<td>Facilitators including short ‘in-service’ as well as extended postgraduate course modules for awards (diplomas/degrees).</td>
<td>School-based/focused.</td>
<td>Staff room conversations; lectures; family/close friends;</td>
</tr>
<tr>
<td></td>
<td>Partnerships: school/university.</td>
<td>reading professional journals/magazines;</td>
</tr>
<tr>
<td></td>
<td>Networks: interests, subjects, innovations.</td>
<td>television/DVD;</td>
</tr>
<tr>
<td></td>
<td>Communities of practice: professional support, sharing expertise, knowledge generation, action-orientated.</td>
<td>unplanned/opportunistic conversations; hobbies and interests.</td>
</tr>
</tbody>
</table>

For the purpose of this research, however, ‘informal learning’ refers to all learning that is not formal. In addition to the examples stated above, it includes spontaneous thoughts, teaching experiences (Kennedy, 2002), reflection, working as part of a team and mentoring (Cheetham & Chivers, 2001).

Although formal learning can be valuable, Becher (1999) argues that for some professionals, informal learning can be more so. He suggests that informal learning is not always recognised as an acceptable form of CPD but claims that it can significantly enhance professional development (Becher, 1999; Cheetham & Chivers, 2001; Kennedy, 2002). Indeed, a number of authors have suggested that teachers can benefit from engagement with informal learning activities (such as conversations in
Like Becher (1999), Knight (2002) argues that the importance of informal learning is insufficiently appreciated. Indeed, whilst informal learning is beginning to receive increasing recognition, it could be claimed that the current Teacher Standards (TDA, 2007) (see Section 4.1.1) and performance assessments in England continue to emphasise the importance of structured, needs-based approaches. With regards to the Standards, the emphasis continues to be on planned development and the attainment of objectives that have been set in relation to externally imposed standards. See, for example, the most recent National Teacher Standards with specific reference to induction (TDA, 2007).

The failure of both teachers and CPD providers to acknowledge the potential of informal learning may serve to limit the extent to which professional development can occur (Becher, 1999) and to which CPD policies can be effective (Knight, 2002). For example, Knight (2002) and Tillema and van der Westhuizen (2006) reported that many teachers, across subjects, felt that informal CPD activities were often helpful in their professional development. Equally, it is important to acknowledge that the quality of learning throughout any CPD is largely affected by the professional learning community, the academic department (Knight, 2002), or the figuration/s within which it is occurring. In other words, the social ecology of the environment needs to be ‘strong’ and conducive for quality CPD. Despite the value afforded to more informal CPD, there still seems to be a common sense reliance on the more traditional types of CPD activities. According to Knight (2002), this reflects a managerialist approach as opposed to a learning-centred approach, the latter of which tends to have a greater appreciation for informal learning within CPD.

Encouraging teachers to be more reflexive from the outset of their training and careers, and throughout their CPD may allow for a greater appreciation of the various opportunities for personal and professional development (Capel, 2007). If teachers are encouraged to recognise the broader scope of CPD at the point of training and
induction then, in theory, it should prepare them for a lifetime of professional learning that encompasses a range of activities. There are different types of informal learning but, as the literature suggests, it tends to be classed as either individual or collaborative.

4.6.3 Individual and Collaborative
Hodkinson and Hodkinson (2005) acknowledge that teachers can learn individually and collectively but they can also learn collaboratively. In line with the process sociological approach, Keay (2006b) suggests that collaborative professional learning is a process, not an isolated activity and it is emphasised that to learn collaboratively requires more than working or cooperating with colleagues (Armour & Yelling; 2007; Cordingley, Bell, Rundell & Evans, 2003; James & Jule, 2005). Lloyd and Beard (1995) present a ‘developmental spiral’ which links cooperation and collaboration and they propose that working together (cooperation) can lead to collaboration if certain criteria are fulfilled. The criteria include adequate personal relations with those involved, a similar approach to learning, mutual respect, encouragement of constructive criticism, and a commitment to a constant process of monitoring and evaluation of the learning process (Lloyd & Beard, 1995, p.14).

Collaborative professional learning is associated with, and is incorporated within, the concept of ‘professional learning communities’ (Bolam, 2008; DuFour & Eaker, 1998). A professional learning community is a group of professionals who are united in their commitment to an agreed outcome, such as an improvement in pupil learning (DuFour & Eaker, 1998). Professional learning communities engage in a range of activities such as collaborative learning, observing colleagues and participating in shared decision making. According to DuFour and Eaker (1998), the potential benefits of professional learning communities can include supported learning, informed and committed teachers and improved pupil learning. More recently, Armour and Yelling (2004a) have suggested that the development of professional learning communities would help teachers meet their own professional needs, as well as externally imposed standards.
4.7 Teachers’ Views of Effective CPD
Over time, various socio-historical and political processes have come to influence the nature and extent of Physical Education teachers’ engagement with CPD. In an attempt to understand what constitutes ‘effective’ teacher CPD, a number of research groups were launched with the intention of exploring how teachers experienced and viewed their CPD. Some of the most recent are discussed below. For example, the EPPI (Evidence for Policy and Practice Information) Centre Review Group was established in 1993 and aimed to explore teachers’ views of their CPD by carrying out systematic reviews of research relating to the perceived outcomes of teacher CPD. It was intended that this process would be continually informed and carried out by teachers with the aim of providing more effective CPD (http://eppi.ioe.ac.uk/cms/). Following the same trend, in 1995 the Teacher Training Agency (TTA) (now the TDA) commissioned Market and Opinion Research International (MORI) to carry out a review of the existing CPD activities available for teachers. The findings suggested that teacher CPD was generally haphazard and marred with inconsistencies (MORI, 1995). There was also little evidence to suggest that any CPD programmes were being monitored and evaluated. More positively, however, some teachers suggested that more informal CPD activities such as discussions with other teachers were often helpful in their professional development. These findings are in accordance with the work of Knight (2002) and Tillema and van der Westhuizen (2006) which have been discussed previously.

Within the remit of the General Teaching Council (GTC) for England is the promotion of effective teacher CPD. The introduction of the GTC in 2000 encouraged national debates regarding teacher CPD which allowed for an understanding of how teachers felt about their CPD and provided the GTC with a more informed basis from which to advise the Government. Three areas were identified by teachers as being fundamental within any teacher CPD strategy: central and local government initiatives; school needs; and individual needs. Although the interests of these three areas can at times be contradictory, the GTC feel that strategic planning can encourage a balance between the perceived needs of the central and local government, schools and individual teachers.
In 2000, and as referred to earlier, the Government published a consultation document on CPD which revealed a number of findings regarding teachers' views of effective CPD. This document later became the National CPD Strategy 'Learning and Teaching: A Strategy for Professional Development' (DfEE, 2001) and it presented teachers with a CPD framework that was based on a number of underlying principles. It stated that in order for CPD to be effective it must offer:

- the opportunity to participate in high quality CPD and work-based learning;
- time for reflection;
- formally stated objectives;
- recognition and commitment from all stakeholders;
- a focus upon the priorities of individual teachers, the school and Government strategies;
- high quality CPD provision.

Following the introduction of the National CPD Strategy (DfEE, 2001), Hustler and colleagues (2003) carried out a study on behalf of the DfES that explored teachers’ experiences, attitudes and expectations of their CPD. Six hundred teachers responded to the consultation document, with some providing positive suggestions for future CPD. For example, 90% of the teachers agreed with the above principles and 95% thought that the decisions regarding CPD should be determined by individual schools. However, responses also suggested that the amount of time available for CPD was a pertinent issue. Approximately 50% of all respondents felt that, as teachers, they needed more time for reflection, more non-contact time and more teachers in their schools in order to cover for CPD attendance (Hustler et al., 2003). Hustler and colleagues (2003) claimed that “most teachers were satisfied with their CPD over the last five years” but many perceived a “one size fits all” approach which did not acknowledge individual teachers’ experiences (Hustler et al., 2003, p.viii). Many teachers suggested that, in order to be effective, CPD should be relevant and applicable to their individual contexts (Hustler et al., 2003 p.viii). This point has since been echoed by other researchers (for example, Armour & Duncombe, 2004; Armour & Yelling, 2004a).

As Keay (2005a, p.140) highlights, the National CPD strategy tends to promote “school-based opportunities for development more than external courses for CPD”.
This view is, to a degree, supported by Garet and colleagues (2001) who suggested that off-site ('traditional') CPD did not offer suitable amounts of support and follow-up in comparison to school-based 'reform' CPD that is more closely linked and integrated into practice. However, Keay (2005a, p.140) argues that “school-based” (inward-facing) opportunities for CPD may “lack the challenge and creativity that external (off-site) sources may offer”.

In keeping with the observations made earlier, Hustler and colleagues (2003) also stated that most teachers viewed CPD in the traditional sense, namely in terms of individual courses, conferences and training days. Teachers furthermore felt that over the previous five years, their CPD had been driven mainly by school needs and government priorities. On the basis of the findings, it was therefore suggested that there should be a balance between school/national priorities and individual needs (Hustler et al., 2003). In addition, there was an apparent desire for teachers to acquire a higher degree of “professional control and self-regulation” (Hustler et al., 2003, p.ix) over their CPD, which seems to suggest that professional development may be more effective if teachers have a sense of ownership and control over their development.

In 2003, the National Foundation for Educational Research (NFER) evaluated the second phase of the Teachers’ International Professional Development Programme (TIPD) (Easton, Whitby & Harris, 2003). Although this explored a more specific type of CPD, namely teacher exchange, the findings are useful in helping to distinguish what types or elements of CPD may be most effective. For example, on the basis of the teachers’ views, the authors suggested that attention should be given to the types of strategies that would be most useful for making teachers more aware of CPD opportunities. Furthermore, the need for funding for supply teachers to cover teachers’ participation in CPD was again highlighted as an issue.

More recently, Day et al. (2006) carried out a longitudinal study on behalf of the DfES, entitled VITAE, which looked at variations in teachers’ work, lives and effectiveness. On the basis of their research, they reported that teachers tend to be in
one of six professional life phases: i) commitment (0-3 years); ii) identity and efficacy in the classroom (4-7 years); iii) managing changes in role and identity (8-15 years); iv) work-life tensions (16-23 years); v) challenges to sustaining motivation (24-30 years); and vi) sustaining/declining motivation, ability to cope with change, looking to retire (30+ years). They purported that teachers’ choices to participate in CPD were largely dependent on their current professional life phase and their corresponding needs and concerns. The teachers in the study viewed CPD as an important professional investment and a way in which to ‘re-charge their batteries’. However, teachers often commented on the lack of time and opportunity to reflect upon their teaching practices and to collaborate with other teachers. Incidentally, it is these same activities that, according to Boyle, Lamprianou and Boyle (2005), are the most effective types of CPD in terms of achieving positive change in teachers’ practices. Penuel et al. (2007) add that CPD is more likely to be effective if it is longer-term, if sufficient resources are available, and if there is a focus on student learning.

Within the remit of teacher CPD, specialised areas have developed. What follows is an overview of the socio-political processes that have influenced the development of PE-CPD specifically. It should be realised that the process of PE-CPD is historically rooted (Kirk, Penney, Burgess-Limerick, Gorely & Maynard, 2002). Due to the constraints of this thesis, however, the introduction of the James Report (1972), referred to previously as a “milestone in the history of CPD” (Armour & Duncombe, 2004, p.12), serves as the point of departure for the following section.

4.8 A History of PE-CPD (1972-2009)

According to Keay (2006a, p.370), “participation in professional development is essential if we are to defend the place of Physical Education teachers in schools”. Since the 1970s, PE-CPD has been characterised by processes of gradual formalisation and organisation (Armour & Duncombe, 2004; Bailey & Vamplew, 1999). In the 1970s and 1980s, the Physical Education Association of the United Kingdom (PEA-UK), now the Association for Physical Education (afPE), provided most of the CPD opportunities available to Physical Education teachers (Bailey & Vamplew, 1999). Recognising that teachers could not rely solely on their ITE, PEA-
UK (as afPE does today) organised conferences and study courses in order to help teachers keep up-to-date with developments in Physical Education and education (Bailey & Vamplew, 1999). Despite their efforts, however, teachers’ inescapable involvement in the education figuration meant that they were often constrained by inadequate ITE, a lack of funding, a lack of support and difficulties in being released from their teaching duties (Bailey & Vamplew, 1999).

In addition to organising conferences and courses, the PEA-UK (and now afPE) also published resources in order to keep Physical Education teachers abreast of developments in the field. Such resources included the ‘British Journal of Physical Education’ and the ‘European Journal of Physical Education’ which are now known as ‘Physical Education Matters’ and ‘Physical Education and Sport Pedagogy’ respectively. Similarly, the British Association of Advisors and Lecturers in Physical Education (which joined with PEA-UK to form afPE) provided The Bulletin of Physical Education, along with a range of other resources (such as ‘Safe Practice in Physical Education’ [1995]), in order to promote ‘good practice’ within Physical Education. At this time, the government was attempting to ‘raise the game’ within Physical Education and, consequentially, opportunities for teacher CPD and resources became increasingly available (Bailey & Vamplew, 1999).

As previously stated, the National CPD strategy (DfEE, 2001) provided a context within which PE-CPD could develop in a more structured fashion. Set within that context, the following sections introduce some of the more recent policies and initiatives which have served to influence the development of PE-CPD specifically over the past decade.

4.8.1 Physical Education and Sport Strategy for Young People

The Physical Education and Sport Strategy for Young People (PESSYP) (formerly known as the Physical Education, School Sport and Club Links [PESSCL] strategy) was launched in October 2002 and was supported by a government investment of £978 million between 2003-04 and 2007-08. Furthermore, lottery funding provided £686 million in order to enhance school sports facilities and in total over £1.5 billion
was invested into Physical Education and school sport in the five years leading up to 2008 (http://www.teachernet.gov.uk/teachingandlearning/subjects/pe/nationalstrategy/). The strategy is being led by the DfES and the DCMS and the objective of the programme is to enhance the take-up of sporting opportunities by 5-16 year-olds. According to the House of Commons website, the DfES and the DCMS have recently committed £783 million to the PESSYP strategy (2008-11), including “£13.45 million for club and dance links, £12 million for leadership and volunteering, and a £3 million increase to the initial coaching programme”. (http://www.publications.parliament.uk/pa/cm200708/cmhansrd/cm080605/text/80605w0002.htm). Underpinning this objective initially was the overarching target of increasing the percentage of school children who spent a minimum of two hours a week on “high quality Physical Education and school sport within and beyond the curriculum to 75% by 2006 and then 85% by 2008” (www.teachernet.gov.uk). According to afPE’s Health Position Paper, “the government in England announced that the 75% target had been met in 2006 and that the 85% target for 2008 was achieved in 2007” (afPE, 2008 p.4). Currently, the long-term aim of the government is that by 2010, all children will be offered at least five hours of high-quality Physical Education and school sport every week, made up of 2 hours in curriculum time and an additional 2 to 3 hours which will be delivered outside of school hours by a range of school, community and club providers (http://www.afpe.org.uk/public/downloads/Health_Paper_Aug08.pdf).

The national strategy is divided into nine inter-related programmes, or strands, which include:

- Sports Colleges;
- School Sports Partnerships;
- Professional Development;
- Step into Sport;
- Club Links;
- Gifted and Talented;
- Sporting Playgrounds;
- Swimming;
- The QCA’s Physical Education and School Sport Investigation (which contains specific references to promoting healthy, active lifestyles).

4.8.2 The Physical Education and School Sport Professional Development (PESSPD) Programme

The National Physical Education and School Sport Professional Development (PESSPD) programme is one strand of PESSYP. The overarching aim of the professional development strand is to enhance teaching, coaching and learning in Physical Education and school sport by helping primary and secondary schools to evaluate their existing Physical Education and school sport provision and CPD opportunities (Armour & Duncombe, 2004; DfES/DCMS, 2003). In addition, there are also a number of underlying ‘whole-school’ aims which are expected to be met through Physical Education. These include “raising educational attainment, contributing to whole school improvement, enhancing health/physical activity links, supporting innovation, and enhancing cross-phase continuity of learning” (Armour & Duncombe, 2004, p.5).

The Professional Development strand of the strategy offers a number of opportunities for teachers to engage with CPD. Within the strategy, a wide range of modules are offered, examples of which include “Is your Physical Education and school sport inclusive?”, “Linking subjects to improve progress and attainment in Physical Education and across the curriculum” and “Learning in and through swimming activities and water safety”. With regards to HRE specifically, relevant modules include “Learning about health and healthy, active lifestyles”, “Is your school a healthy school? How well does it promote activity?” and “Are your pupils healthy, active and fit?”.

The programme has been evaluated by independent researchers (Armour & Makopoulou, 2006) and cited by others (Armour & Duncombe, 2004). Armour and Duncombe (2004) suggest that the aims of the programme were ambitious and highlight that, whilst it provides funding for all teachers to access CPD, it does not compensate schools for any costs incurred in releasing teachers from their duties. This, it is argued, is a crucial determining factor for schools when planning teacher CPD (Armour & Duncombe, 2004; Armour & Makopoulou, 2006). Armour and Duncombe (2004) concluded that more deep-rooted changes may be needed if the
National PESSPD Programme is to achieve its aims and be held accountable for advances in teachers' and pupils' learning.

A more recent development in PE-CPD relates to the launch of the National College for Continuing Professional Development, which is discussed next.

4.8.3 The National College for Continuing Professional Development in Physical Education

The National College was launched by the afPE in 2006. It aims to raise and protect professional standards and enable afPE to develop systematic accreditation systems to ensure appropriate preparation, experience and qualifications; to promote safe and ethical teaching; and to share exemplary practice (www.afpe.org.uk). Ultimately, the aim is to raise the profile and extend the reach of existing and future CPD provision. The College works closely with other national agencies and providers, such as Edge Hill University, on behalf of Physical Education. Furthermore, and with specific reference to health, afPE members have contributed to the “health and fitness” modules within the National PESSPD programme.

Prior to the introduction of the National College, afPE launched of the Professional Development Board for Physical Education (PDB-PE) which was initially established in 2000 and subsequently underwent review, was updated in 2008 and now forms part of the National College. The fundamental aim of the PDB is to work within curriculum guidelines “to ensure quality in the Continuing Professional Development (CPD) of all practitioners in Physical Education and School Sport (PESS)” (http://www.afpe.org.uk/public/pdb_general_information.htm).

Having explored the longer-term socio-historical processes that have contextualised the development of PE-CPD, the following section explores existing literature which has focused upon Physical Education teachers and how they view their CPD.
Review of Literature: CPD

4.9 Physical Education Teachers’ Views of CPD

A number of authors have explored Physical Education teachers’ views of their subject, lives and careers (Armour & Jones, 1998; Dowling Naess, 2001; Green, 2003; Sparkes & Templin, 1992; Templin, Bruce & Hart, 1988; Webb & Macdonald, 2007a, 2007b; Woods & Lynn, 2001) and this section attempts to highlight some of the salient issues that have been uncovered. Armour (2006) provides a succinct overview of a range of studies, some of which are summarised here.

A relatively early piece of research, undertaken by Sikes (1988), focused upon the ways in which Physical Education teachers viewed the aging process. Sikes (1988) categorised her research findings into ‘initial career thoughts’, ‘involvement’, ‘promotion prospects’ and ‘career moves’. Although it is valuable to draw out key themes, it may have been more useful if the interconnected nature of these themes had been highlighted. This would have served to emphasise, in sociological terms, how Physical Education teachers come to feel what they feel, say what they say, and do what they do. Sikes (1988) concluded that a teacher’s career development can be linked to their age and experience. This can present a problem for Physical Education teachers given that the time when they are most experienced is usually when their age is steering them away from Physical Education. She went on to explain that, at the time, males usually occupied senior positions in Physical Education. This therefore led to a “youthful, male orientation to Physical Education” which resulted in a “traditional” curriculum that was slow to change (Sikes, 1988, p.37). Moreover, the work of Armour (2006) and Keay (2007b) suggests that the same comment could still be made today.

Like Sikes (1988), Templin, Bruce and Hart (1988) focused upon age as an influencing factor in the career progression of a Physical Education teacher. Templin et al. (1988) carried out a comparative study between two Physical Education teachers in different countries. They felt that existing research on teachers’ careers presented ‘career’ as a relatively narrow concept and explained that, in comparison, their study was “grounded in a whole life perspective” (Templin et al., 1988, p.58). Common themes that were uncovered included: i) the degree of value attached to education; ii)
the role of a Physical Education teacher; iii) working long hours; and iv) Physical Education as a comparatively low status subject. Indeed, status is an issue which often arises in relation to Physical Education and Physical Education teaching (Hoyle, 2001; Webb, 2006). As Templin and colleagues (1988) have suggested, if Physical Education is regarded as being of lower status than other subjects, this may have an impact on the career progression of some teachers.

Sparkes and Templin (1992) used what Betaux (1981) termed as ‘life history’ to gain a more detailed understanding of Physical Education teachers and their views, values and experiences of their subject. They highlighted the importance of locating teachers in their wider social and developmental framework or, what process sociologists would term, figuration. Sparkes and Templin (1992) presented Physical Education as low status, acknowledging that this is not a new issue. Further, they went on to refer to the “double marginality” of women Physical Education teachers and illustrated the “strands of oppression” that characterised a particular female teacher’s life (Sparkes & Templin, 1992, p.138). The term ‘double marginality’ is used in this instance to refer to the marginalisation of female Physical Education teachers on two accounts: i) their gender and; ii) their ‘low status’ subject.

Schempp (1993) also used life history along with ethnographic techniques to focus on one high school teacher. He suggested that although this case-study could not provide a definitive answer, it did provide a useful insight into how one experienced teacher went about constructing knowledge (Schempp, 1993). The findings highlighted four main sources of a particular teacher’s professional knowledge: i) the expectations of the local community, including parents; ii) the school culture, including pupils; iii) professional sources and resources of the teaching profession; and iv) the teacher’s personal and professional biography. It was argued that teachers may be more receptive to teacher education and CPD if it “addresses the needs and conditions teachers face in schools” (Schempp, 1993, p.21). This point has since been reinforced by Armour and Yelling (2004a) who suggest that there needs to be a closer match between the needs of teachers and the CPD opportunities they are presented with.
Using the same method, Dowling Naess (1996) carried out a study based on the life history of a male Physical Education teacher. An over-arching theme which was highlighted was that, despite the presence of new curricula and policies within the context of Physical Education, the teacher maintained his focus on sport and physical performance. This is a persistent issue which authors such as Capel (2007), Evans (1992), Green (2003) and Smith (2004) have also highlighted. What is important in terms of pedagogy and pupil learning outcomes is that if teachers are preoccupied with sport and team games (i.e. ‘traditional’ Physical Education), how are pupils expected to learn effectively about health and lifelong participation in physical activity? Furthermore, in support of Schempp’s (1993) earlier point, Dowling Naess (1996) claimed that the opportunities for effective professional development were not sufficient, especially with regards to Health-Related issues. This is a point which has since been highlighted and explored in greater depth by authors such as Armour and Yelling (2004a, 2004b) and Castelli and Williams (2007).

Drawing attention to another study, Armour and Jones (1998, p.3) explored Physical Education teachers’ views of their subject, lives and careers in order to illuminate some of the complex links between sport, education and Physical Education. Following a number of in-depth interviews with eight secondary school physical educators, they presented four themes that were persistent within their research: i) the perceived relationship between Physical Education and sport; ii) the low status of Physical Education in relation to other subjects within secondary education; iii) the poor career prospects for Physical Education teachers; and iv) the social and moral education provided by Physical Education. Each of the themes emerged as being an influential aspect of Physical Education teachers’ lives and careers and therefore an appreciation of them is valuable within the present research. Importantly, the authors emphasised that their aim was not to generalise from the Physical Education teachers’ stories, but rather to develop an understanding of the teachers’ lives and philosophies.

Following her paper in 1996, Dowling Naess (2001) once again used life history to focus upon the experiences of a 54 year old female Physical Education teacher. The author drew upon the work of Sparkes and Templin (1992) when she argued that the teacher within her study may have also been subject to ‘double marginality’ on
account of her being both female and a physical educator. Dowling Naess (2001) provided a suitably sociological conclusion when she reported that, although the teacher was not interested in issues of gender or status, she remained inextricable from the structural constraints which characterised her life and career, explaining that teachers do “not live and teach in a vacuum” (Dowling Naess, 2001, p.56).

Acknowledging the broader social interdependencies that can come to influence the process of PE-CPD, Armour and Yelling (2003) carried out a two-year research project which explored experienced Physical Education teachers’ engagement with CPD. The findings revealed that Physical Education teachers tended to define CPD in terms of attending courses and it was suggested that CPD provision needed “to be turned on its head” if it were to be of any value to Physical Education teachers. (Armour & Yelling, 2003, p.11) They also suggested that unofficial (informal) CPD is “ultimately more valuable” than official (formal) CPD such as ‘one-off’ courses (Armour & Yelling, 2003, p.11). In an attempt to explore ways of turning teacher CPD ‘on its head’, they offered three opportunities for change: i) changing CPD providers; ii) changing school structures; and iii) changing Physical Education teachers’ expectations.

In addition, Armour and Yelling (2004a) carried out an exploratory study of effective PE-CPD with 65 teachers (37 men and 28 women) in which the teachers were asked to identify effective and ineffective CPD experiences. The findings suggested that, in order to be effective, PE-CPD must be:

- able to provide ideas and practices (55 mentions);
- relevant and applicable (44 mentions);
- practical (37 mentions);
- well delivered (29 mentions);
- able to provide opportunities for collaboration and reflection (24 mentions);
- challenging and thought provoking (17 mentions).

Whilst discussing the development of the Physical Education profession, Keay (2005a, 2005b) adopted a similar position to that of Dowling Naess (2001) and suggested that an understanding of the school context and culture is imperative if one it to comment on the past, present or future CPD practices of teachers. Focusing upon
newly qualified teachers (NQTs), she conducted a two stage research study that explored their experiences and views of school-based CPD. Keay (2005a, p.149) took the opportunity to caution that although school-based CPD is often viewed positively, "it could produce long-term negative outcomes". Further, she suggested that in order to be effective, school-based CPD needs to be critically reflected upon and proven to improve pupil learning (Keay, 2005a). She drew upon the work of Armour and Yelling (2003, 2004b) who suggested that as well as being relevant and accessible, CPD should involve teacher collaboration or, as Keay (2005a, p.148) proposed, "teachers developing teachers". If teachers fail to engage in some degree of critical reflection then their "voices and actions...will be questionable" (Keay, 2005a, p.151).

With regards to ‘teachers developing teachers’, Keay’s (2006b) research, which this time comprised a three-stage study, explored Physical Education teachers’ experiences and views of professional collaboration as part of their CPD. Keay (2006b, p.288) highlighted that the process of collaborative learning “is not the same as cooperating or working with colleagues, although both may be necessary for collaborative learning to take place”. She went on to refer to a number of authors who have presented certain criteria that are needed for collaboration to occur. Such criteria include mutual professional respect (Lloyd & Beard, 1995), having defined and flexible roles as well as similar standards and expectations (Baldwin & Austin, 1995, cited in Keay, 2006b), and the ability to be reflective practitioners (James & Jule, 2005). Following her study, Keay (2006b) suggested that four themes characterised the ways in which Physical Education teachers viewed and experienced CPD and the extent to which they had identified and taken part in collaborative learning. These included relationships within the subject department, commitment to collaboration, school and department culture and the degree to which it supported teachers in their collaborative endeavors, and reflective practice.

For a number of authors (Armour & Yelling, 2007; Keay, 2006b; Lloyd & Beard, 1995), collaboration is viewed as a fundamental element of CPD but Keay (2006b) additionally suggested that if teachers are to benefit from such opportunities there may need to be changes in both rhetoric and reality within CPD. With regard to the
Review of Literature: CPD

school context, Physical Education departments should consider all development opportunities to be opportunities for collaborative learning and efforts should be made to ensure that professional dialogue is possible between those involved (Keay, 2006b). It has equally been acknowledged by Keay (2006b), however, that collaborative learning is not a replacement but a supplement for other forms of CPD.

Having explored the context of teacher CPD and the ways in which it is viewed and experienced by Physical Education teachers, the following section considers HRE-CPD within Physical Education.

4.10 HRE-CPD

During the 1990s, Harris (1994) and Dowling Naess (1996) raised concerns about the extent to which physical educators were equipped to teach HRE as part of the curriculum. They suggested that, at the time, opportunities for effective HRE-CPD did not seem sufficient and that HRE was “considered to be a priority area for in-service training” (Harris, 1994, p.6). Fox and Harris (2003) have since suggested that “the structure and funding of initial teacher training courses often serve to limit prospective teachers’ experience of Health-Related Exercise within the curriculum” (Harris, 2005, p.91).

As highlighted in chapter three, more recent research suggests that, despite some positive developments, the status, organisation and teaching of HRE continues to be questioned (Cale, 2000a, 2000b; Cale, Harris & Chen, 2007; Harris, 2005, 1997, 1995) and there are concerns over Physical Education teachers’ professional knowledge of the area (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Harris, 1997; Cale et al., 2002). Indeed, following a study of experienced Physical Education teachers, Armour and Yelling (2004b) claimed that health and lifelong physical activity (LLPA) were two areas which tended to be absent from Physical Education teachers’ CPD profiles. Interestingly, these issues are not isolated to the United Kingdom and research suggests a similar picture exists in Australia (Brown, 2003) and North America (Castelli & Williams 2007; Kulinna, McCaughtry, Martin; Cothran & Faust, 2008; Trost, 2006). Indeed, Trost (2006, p.184) has called for
teacher training programmes to “bring a legitimate public health perspective to their students”.

On the basis of such findings, it has thus been suggested that HRE-CPD may prove valuable in addressing some of the issues relating to the organisation and teaching of HRE (Armour & Harris, 2008; Castelli & Williams, 2007). Indeed, Macdonald and Penney (2009, p.256) suggest that HRE-CPD can “inform, motivate and renew teachers and teaching”, whilst also enhancing students’ experiences. Indeed, research suggests that CPD can contribute in a positive way towards the quality of teaching in schools (Armour & Yelling, 2007). Before recommendations can be made and acted upon, however, more needs to be known about the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD and, furthermore about the social processes which constrain and enable their engagement. This research therefore aims to develop our understanding of the nature and extent of Physical Education teachers’ engagement with HRE and CPD in this component of the curriculum.

4.10.1 Opportunities for CPD and Resources within HRE

In comparison to other areas of the Physical Education curriculum, it could be argued that the availability of HRE-CPD opportunities and resources in the United Kingdom (UK) is relatively limited. They do nonetheless exist. The ‘Health and Physical Education Project’ (Cale, 1996), funded by the Health Education Authority (HEA), was the first major project to focus specifically on HRE-CPD for Physical Education teachers. Based at Loughborough University, the project ran from 1985 to 1993 and sought to promote the development of HRE within schools (HEA, 1993) through the delivery of in-service courses and seminars and the production of resources to support teachers’ work (Cale, 1996). Following this, the TDA ‘Kitemarked’ resource mentioned earlier (Harris, 2000) that emanated from the HRE Working Group and which was produced to support the teaching of HRE. Furthermore, the Youth Sport Trust have developed Health-Related courses and resources (such as ‘Fit for Tops’ and ‘Fit for Life’) (Loughborough University & Youth Sport Trust, 2001) and, as

12 According to the British Standards Institution (BSI) website (http://www.bsi-global.com/en/ProductServices/About-Kitemark/), the Kitemark® is “the world's premier symbol of trust, integrity and quality".
highlighted earlier, Physical Education teachers are offered ‘free’ health modules as part of the National CPD Strategy. A series of other resources have also been produced and written in line with the NCPE and aim to help physical educators teach HRE. For example, ‘Warming Up and Cooling Down’ (Harris & Elbourn, 2001), ‘Aerobics and Circuits for Secondary Schools’ (Elbourn, 2008), and ‘Fitness Room Activities in Secondary Schools’ (Elbourn, 2004). More recently, the Amateur Rowing Association (2008) has also produced a resource, entitled ‘Dry Row to Health’, which provides an indoor rowing programme for secondary schools. The resources outlined here are similar in that they encourage a holistic, progressive, process-orientated and pupil-centred approach to HRE and aim to promote personal learning and thinking skills through informed decision making.

For primary school teachers, further HRE-CPD and resources are offered by afPE in the form of ‘Health Matters’. The ‘Health Matters’ education program “aims to provide teachers and practitioners with high quality resources and training opportunities to improve the health, fitness and well-being of young children” (www.healthmatterseducation.co.uk). According to the ‘Health Matters’ website, the CPD programme has been positively evaluated by the teachers who have attended the training (www.healthmatterseducation.co.uk/National%20Launch_files/Launch%20Doc.pdf). That said, the extent to which those claims are trustworthy may be questioned due to the lack of information known about the methodologies employed to uncover the data.

There are of course a wide range of other resources that could aid physical educators’ teaching of HRE (see, for example, the Human Kinetics website) but few are written specifically for the UK context and to meet the National Curriculum requirements. Their direct value is therefore questionable.

4.11 Summary
Chapter four presented the second part of the literature review which was concerned with teacher CPD within the education figuration. For the purpose of this thesis, CPD refers broadly to any activity, from the point of initial teacher education (ITE), which
"increases the skills, knowledge or understanding of teachers, and their effectiveness in schools" (DfEE, 2000, p.3). Existing literature which focused upon CPD, PE-CPD and, to a lesser extent, HRE-CPD was drawn upon in order to gain an understanding of Physical Education teachers’ engagement with HRE-CPD within the education configuration. Common issues that were evidenced within the review included aging, career progression, the status of Physical Education in comparison to other curricular subjects, working long hours, gender and marginality. With regards to teacher CPD in general, a number of key findings were highlighted:

- There is an element of inconsistency with regard to what constitutes a profession and whether teachers are regarded as professionals (Day & Sachs, 2004; Hoyle, 2001);
- Teachers have been unsure of the knowledge that distinguishes them from other professions (Cassidy, Jones & Potrac, 2009; Keay, 2006a, 2007a);
- Teachers’ engagement with CPD has begun to be seen as a prevalent political issue (Campbell, MacNamara & Gilroy, 2004);
- There has been extensive government investment in teacher CPD (for example, the National CPD Strategy [Department for Education and Employment, 2001]);
- There have been strict notions of what constitutes CPD and there has often been a ‘one size fits all’ approach to CPD (Hustler et al., 2003);
- Teacher CPD has become more systematic, planned and strategic (Aspland & Brown, 1993; Duncombe, 2005).

Within the specific context of PE-CPD, the key findings from the literature suggested that:

- Participation in CPD is “essential if we are to defend the place of Physical Education teachers in schools” (Keay, 2006a, p.370);
• An increasing number of resource initiatives and government investment have been targeted at PE-CPD in recent years (Armour & Harris, 2008; Armour & Makopoulou, 2006; Armour & Yelling, 2007; Keay, 2007a);

• In order to be effective, Physical Education teachers’ CPD experiences must be relevant, practical, well-delivered, challenging, and provide opportunities for reflection (Armour & Duncombe, 2004). Moreover, CPD is more likely to be effective if it is longer-term, if sufficient resources are available, and if there is a focus on student learning (Penuel et al., 2007).

Whilst a number of authors have alluded to concerns regarding Physical Education teachers’ engagement with HRE-CPD, inclusive of HRE-ITE, there has been no research addressing this issue in depth. There has, nevertheless, been some discussion around this issue and the existing findings suggested that:

• Concerns have been raised about the extent to which physical educators are ‘equipped’ to effectively teach HRE (Harris, 1995, 2005; Castelli & Williams, 2007);

• Health and lifelong physical activity are two areas which have been absent from Physical Education teachers’ CPD profiles (Armour & Yelling, 2004b; Brown, 2004; Castelli & Williams, 2007; Fox & Harris, 2003; Kulinna, McCaughtry, Martin, Cothran & Faust, 2008; Trost, 2006);

• HRE-CPD can “inform, motivate and renew teachers and teaching”, whilst also enhancing students’ experiences (Macdonald & Penney, in press, p.256). Indeed, research suggests that CPD can contribute in a positive way towards the quality of teaching in schools (Armour & Yelling, 2007).

• HRE-CPD may prove valuable in addressing some of the issues relating to the status, organisation and teaching of HRE discussed previously (Armour & Harris, 2008; Castelli & Williams, 2007; Kulinna et al., 2008).
Chapter Five draws upon the theoretical principles from chapter two in order to explain the processes through which the research questions were answered.
Chapter Five: The Research Process

5.1 Introduction
This chapter outlines and analyses the research process, the methodology\(^{13}\) and methods\(^{14}\) used within this research. The first half of this chapter discusses the process sociological approach to research and, in doing so, considers ontology and epistemology and the ways in which philosophical and theoretical frameworks can guide the research process. The latter half of the chapter focuses specifically on the methodology and methods that were used within this research. The research methodology utilised is best and most often described as 'mixed-method' (Day, Sammons & Gu, 2008; Greene & Caracelli, 1997; Johnson & Onwuegbuzie, 2004) and the rationale behind adopting this approach is discussed. This chapter furthermore addresses some of the fundamental principles that informed the research methodology, and justification is provided for the chosen methods, namely a questionnaire and semi-structured interviews.

5.2 The Research Process: A Process Sociological Perspective
Existing literature suggests that philosophical assumptions determine the objective(s) of inquiry which then determine the choice of theory, methodology and methods, in that order (Bryman, 2008; Crotty, 1998; Oakley, 1999). Indeed, social sciences generally have their foundations in philosophical principles (Denzin & Lincoln, 2005) and within social research it is conventional to discuss the ontological and epistemological assumptions that underpin each study. Ontology refers to the nature of reality and is concerned with whether the social world should be perceived as being external to the human beings within it (objectivism), or as being socially constructed (constructivism) (Bryman, 2008). A related concept, epistemology, refers to the nature of knowledge and is concerned with what is, or what should be, perceived as

\(^{13}\) The term methodology refers to the process by which data are produced and provides a rationale for the methods used. It provides a framework for thinking about knowledge and how 'reality' has come to be (Payne & Payne, 2004).

\(^{14}\) Research methods are the actual techniques that are used for data collection. For example, a questionnaire (Payne & Payne, 2004).
acceptable knowledge in a particular discipline (Bryman, 2008). For example, positivism is an epistemological position that encourages the use of methods that have traditionally been associated with the natural sciences, in the social sciences. In contrast, an interpretivist position acknowledges that social sciences can be very different to the natural sciences and they therefore require a different approach to research. Different theoretical approaches are usually presented as being underpinned by certain philosophical assumptions which in turn are based upon particular ontological and epistemological positions (Crotty, 1998).

Questioning the nature of reality and knowledge is a philosophical tradition. Utilising process sociology, however, encourages a grounded sociological position. From this perspective, the question is not ‘what is reality?’ but ‘how has what we think is reality come to be?’ (Green, 2003). There is a real and social world, but how we come to understand and interpret it is socially constructed, and therefore different people have different views on what reality is and how it came to be.

Bloyce (2004) asserts that strictly categorising approaches to social research, such as ontology/epistemology or positivism/interpretivism or qualitative/quantitative, can serve to distort it from the outset in a number of ways. That is not to say, however, that process sociologists disregard the more traditional approaches to research methods, they simply question the way in which a dynamic process such as research is often presented in strict dichotomous categories. As inferred, process sociology does not fit neatly into these often dichotomous categories and it is therefore difficult to convey the process sociological position in traditional terms (Mansfield, 2008). Those who work within this particular paradigm15 (such as Green [2006] and Mansfield [2008]) do not focus upon philosophical notions, but instead on the subject matter of sociologists, i.e. people in complex webs of interdependence. This requires an adaptation of the traditional scientific method and an equal focus upon, and interplay between the discovery as well as the method(s) of research.

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15 The term paradigm refers to a belief system (Lincoln & Guba, 2000).
Bloyce (2004), Maguire (1988) and most recently Mansfield (2008) have drawn upon the work of Elias in order to argue that the conceptual separation of ontology and epistemology, which is evident in academic texts such as Layder (2006), represents "something of a false dichotomy" (Bloyce, 2004, p.146). To further explain, the nature of social reality (ontology) and the knowledge of social reality (epistemology) are not mutually distinct concepts but are "part of the same process" (Bloyce, 2004, p.146). Process sociology also goes some way towards illuminating and overcoming the false dichotomy which has traditionally separated qualitative and quantitative inquiry. The processual approach to research is viewed as shifting along a continuum between qualitative and quantitative strategies and is therefore best described as 'mixed method' (Day, Sammons & Gu, 2008).

Although process sociologists acknowledge the importance of recognising one's own philosophical and theoretical assumptions, or of being reflexive (Alvesson & Skoldberg, 2000), they would contest that there are more 'reality congruent' ways of approaching social research and understanding social life. Elias (1987) rejected dichotomous epistemological approaches to social research (Mennell & Goudsblom, 1998) because for him, they did not give credence to the dynamic complexities of social research. Research is a social process which is dynamic and complex and, as such, it would be naïve to assume, for example, that a researcher cannot utilise a blend of two approaches in order to most adequately answer the research questions. Indeed, process sociology was born out of a synthesis of a number of sociological perspectives including structuralism, symbolic interactionism and historical sociology (van Krieken, 1998). Elias (1991[1987], p.36) did not condone the disciplinary separation of psychology, sociology and history and proposed that "The structures of the human psyche, the structures of human society are indissolubly complementary". According to van Kreiken (1998, p.8):

A number of commentators have spoken of the fragmentation of sociology as a discipline. What Elias offers is not a 'solution' to that problem, but a set of sensitising concepts\textsuperscript{16}, an orientation to how one thinks about and practices

\textsuperscript{16} A sensitising concept "obtains its concrete functions and contents only in the context of particular empirical-theoretical investigations" (Dunning, 1992, p.241).
sociology with the potential to draw many of the various threads of sociological thought together.

A more recent attempt at drawing some of the "various threads of sociological thought together" is provided by Mansfield (2008). She provides a valuable attempt at merging two approaches to research (process sociology and feminist theories), which have been regarded by some, such as Colwell (1999), as mutually distinct.

This research utilised a process sociological approach because it reflects and allows for an appreciation of the complex, processual and dynamic nature of human interdependencies (Mansfield, 2008). The approach is characterised by a number of pertinent and interrelated principles, or 'sensitising concepts', that have come to guide research within the process sociology. The following section explores some considerations and implications associated with the research process and the ways in which particular sociological concepts informed the research design.

5.3 Process Sociology: Sensitising Concepts

Engaging with the guiding principles of process sociology provides a framework within which valuable research can be located. A number of authors have presented detailed analyses of Elias' work on process sociology (Goudsblom, 1977; Maguire, 1988; Mennell, 1998) and, on this basis, they have suggested that there are four fundamental sensitising concepts which serve to guide research within this paradigm. As stated in chapters one and two, these are:

1. Human beings can only be understood in the plural and as being part of networks, or figurations of interdependence;
2. The figurations that form human societies can only be adequately understood as consisting of long-term dynamic processes of multi-directional development and change;
3. The long-term developments of social figurations are usually the unintended outcome of intentional human actions;
4. Human knowledge develops, over time, within human figurations, and it is fundamental to their development.

It has been noted that the underpinning principles of process sociology are “deceptively simple and self-evident; yet their importance is frequently overlooked” (Goudsblom, 1977, p.6). Process sociology is organised around the concept of ‘figuration’ which was defined in chapter two as a “network of interdependencies formed by individuals” (Elias, 2000, p.482). The extent to which process sociology and the sensitising concepts it comprises, informed and guided the approach to this research is addressed throughout the remainder of this chapter.

5.3.1 Involvement-Detachment

‘Involvement-detachment’ is a tenet of Elias’ work that informs how research within this paradigm is approached. It encourages the view that “social science can only improve the human lot by clearing through some of the fog which obscures our understanding of social forces” (Mennell, 1998, p.269). In this instance, the ‘fog’ is provided as a metaphor for personal values and interests which may serve to obscure our understanding of particular social phenomena (Mansfield, 2007). The theory of involvement-detachment “developed as a way of dissolving dichotomies such as free will/determinism (agency/structure) and individual/society” (Mansfield, 2008, p.102). As Figure 5.1 illustrates, involvement and detachment are not two separate concepts. Indeed, from a process sociological perspective they are best viewed as being at opposite ends of a continuum and therefore as being part of the same process.

Figure 5.1. Involvement-Detachment Continuum (adapted from Mennell, 1998).
As stated in chapter two, Elias viewed social sciences as being constrained by a tendency to think in fixed dichotomous terms (such as 'subjective' and 'objective') and he therefore encouraged sociologists to think more processually. The reduction of continuous processes of change to static positions called process reduction “leaves people with two polar alternatives, both equally unattainable” (Mennell, 1998, p.179). It is neither possible nor desirable for social researchers to be completely involved or detached. As Mennell (1998, p.166) contends, “there are no zero-points: knowledge is always both involved and detached, subject-related and object-related. It is the balance and blend between them that varies”. Elias (1987) utilised the concept of a continuum to demonstrate this point and highlight the ever-changing degrees of involvement and detachment in social research (Mennell, 1998). That said, ‘involvement-detachment’ does not relate only to methodology but also to broader processes relating to knowledge production and behaviour.

To increase the likelihood of quality research, Dunning (1999) drew upon Elias’ work to suggest a ‘detour-via detachment’. He proposes that this ‘detour’ encourages researchers to ‘step back’ and recognise their own involvement and thus, their vested interests and values. The aim is that a recognition of and reflection upon such interests can limit the degree to which they will affect the research and the interpretation of the data. Those working within the process sociological paradigm strive for a certain degree of detachment from their role as ‘participant’ and try to adopt the position of ‘observer and interpreter’ (Mennell, 1998). As Elias contended, however, if social reality is the subject of study then those researching it are inevitably involved and complete detachment is not within the realms of sociology (Mansfield, 2007). The position of individuals, groups and societies along the involvement-detachment continuum is continually in flux (Mansfield, 2007) and as a result, it could be argued that the degree to which a social scientist is involved in their research is always changing. Furthermore, the researcher’s degree of involvement and therefore detachment will be influenced by the social phenomena under exploration and will inevitably change throughout the research process.
Process sociological theorists have been criticised by a number of authors (Hargreaves, 1994; Maguire, 1988) for providing researchers with limited advice with regard to their research ‘position’. Rojek (1986) argued that “figurational (process) sociologists have provided no rules, no drill, to accomplish self-distancing from the object of study” (Dunning & Rojek, 1992, p.252). Dunning (1992), however, has since drawn upon Elias’ theory of involvement and detachment to provide five suggestions as to how best to avoid the problem of degrees of involvement and detachment in research.

Firstly, Dunning emphasises the importance of avoiding preoccupation with, or a ‘retreat to the present’. Doing so encourages a ‘detour-via-detachment’ and also an appreciation of the wider socio-historical interdependencies in which they, as the researcher, are enmeshed. He states that “trying to do this will force you into greater detachment” (Dunning, 1992) and will allow for more effective research. Secondly, Dunning suggests that researchers should focus on contributing to long-term knowledge generation as opposed to the achievement of more short-term objectives. This, he argues, will reduce the chance of demonstrating bias as a result of personal interests or affiliation to particular groups. The third suggestion is to “attempt to see yourself and your work as far as possible through the eyes of others” (Dunning, 1992, p.253). Dunning expresses the need to relate to, and forge connections between your work and the existing knowledge in your area of research.

In relation to the previous point, Dunning adds a fourth suggestion which advocates a relationship between theory and observations. As Elias (1987, p.20) expressed it, “questions emerge and are solved as a result of an uninterrupted two-way traffic between...ideas, theories or models and that of observations and perceptions of specific events”. Theories are fundamental in the generation and continuity of knowledge and, importantly, observation is helpful in strengthening the understanding of the researcher and the quality of the research. Acknowledging this ‘two-way traffic’ between theory and observation can encourage an appropriate blend of involvement and detachment, which a process sociologist would argue, is most conducive to the production of ‘valuable’ knowledge (Dunning, 1992). It is neither
possible nor desirable to be completely detached from one’s research and, consequentially, the fifth suggestion provided by Dunning (1992, p.254) is to “always work in areas in which you are personally interested and involved”.

Dunning’s (1992) suggestions represented an explicit attempt to attend to an area within process sociological theory which some (such as Hargreaves, 1994; Maguire, 1988) had acknowledged as requiring greater attention. In presenting these suggestions, Dunning (1992) furthermore engages with some advantages and disadvantages of the theory of involvement and detachment. Since this time, however, this debate does not appear to have advanced to any great degree.

In addition, from a process sociological perspective, a crucial aspect of research is acknowledging one’s own involvement, beliefs and values with regards to the area of study. Doing so allows one to ‘step back’, take a ‘detour via detachment’ (Elias, 1978), and appreciate how past experiences, or lack of experiences, can inform research. With reference to this research, chapter one has already presented a reflexive account highlighting personal experiences which I, as a researcher, feel influenced how I viewed and approached the process (Section 1.6). In addition, there have been a range of experiences I have gained that have contributed to being able to see my work “through the eyes of others” (Dunning, 1992, p.253). For example, the findings of this research have been presented at a number of conferences in the United Kingdom and overseas. These opportunities to forge links with others in the education figuration, inclusive of academics and the media, have allowed the research to be interpreted from a number of different perspectives.

5.4 Methods of Research
The aims of this research were to explore the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD, and provide an understanding of the wider social processes which have influenced that engagement. As explained at the beginning of this chapter, a mixed-method approach (Day, Sammons & Gu, 2008) comprising a survey questionnaire and interviews were employed within this research. Although both quantitative and qualitative approaches were utilised, this thesis
discusses the ‘trustworthiness’ (Lincoln & Guba, 1985, 2000) of the findings as opposed to their ‘validity’. The reason being, that the term ‘validity’ is more closely aligned with a traditional positivist approach to scientific inquiry and, given that a positivist approach was not deemed the most appropriate, it was considered more suitable to discuss trustworthiness and credibility. The use of different terms, however, does not decrease the focus on conducting quality research.

5.4.1 Trustworthiness

In order for this research to have practical implications for Physical Education in schools, it was imperative that it was regarded as ‘trustworthy’ (Lincoln & Guba, 2000) and that the findings were “worth paying attention to” and as accurate and credible as possible (Lincoln & Guba, 1985, p.290). A ‘mixed-method’ approach can allow for a greater degree of trustworthiness because there is opportunity to provide a broader and more comprehensive representation of the phenomenon under investigation (Axinn & Pearce, 2006; Day, Sammons & Gu, 2008; Greene, Caracelli & Graham, 1989).

Creswell and Miller (2000) outlined a three-pronged approach to credible research. They suggest that credible research comprises: i) accurate and informed interpretations; ii) the opportunity for participants to clarify and confirm the interpretations of the researcher; and iii) the seeking of guidance and confirmation from others by the researcher. This research met these criteria. Creswell and Miller (2000) add that credible research can be achieved through methods such as peer debriefing, triangulation, researcher reflexivity, disconfirming evidence, collaboration and member checking. Within this study, peer debriefing, triangulation, member-checking and researcher reflexivity were the methods most notably used. The process of peer debriefing with supervisors and colleagues encouraged discussions and thus allowed for critical reflection, informed discussion and, in some cases, different ‘ways of seeing’. To further enhance the trustworthiness of the research (Campbell et al., 2004, p.85), a pilot study was carried out (see Section 5.5.2) and the process of triangulation was utilised to allow for “cross checking and the gathering of differing perceptions about research”. This was achieved by using multiple methods, including
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a questionnaire, interviews and contextual data sources. Researcher reflexivity is "an ability to notice our responses to the world around us" and, in accordance with the process sociological approach, it is necessary to understand how our social interdependencies come to "impact on the ways we interpret our world" (Etherington, 2004, p.19). Throughout this research, the process of reflexivity was constant yet dynamic and it was evidenced in part by the personal biography provided in chapter one.

A framework for further reflection was provided by a study carried out on behalf of the Economic and Social Research Council, entitled "Quality in Qualitative Evaluation: A Framework of Assessing Research Evidence" (Spencer, Ritche, Lewis & Dillion, 2003). The intention of the study was to provide qualitative researchers with a tool to aid the planning, execution and analysis of credible qualitative inquiry. Consequentially, Spencer et al. (2003) provided a framework which guides the researcher through the stages of the research process (such as design, sample and analysis) by providing a number of criteria which have to be met in order for the research to achieve 'credible' status. They argue that, to be credible, research must:

- contribute to a particular field of research;
- have a defensible research design;
- be carried out in a manner which is rigorous, transparent and systematic;
- offer credible claims which offer plausible arguments.

(Spencer et al., 2003).

A copy of the 'Framework for Assessing Qualitative Evaluations' which was used within the current study can be found in Appendix B.

The objectives of inquiry that are stated within the research questions were addressed via two phases of research. Phase one involved a survey questionnaire, conducted with a sample of Physical Education teachers from secondary schools across England, and phase two comprised semi-structured interviews with a sample of twelve secondary school Physical Education teachers drawn from the original broader
sample. The research was informed by the guiding principles of process sociology that were outlined at the start of this chapter. The specific ways in which this was done are highlighted throughout the remainder of this chapter, and the procedures that were followed in both phases of the research are outlined.

5.5 Phase One: Survey Questionnaire

Questionnaires are often the most convenient and appropriate method to use for mass data collection (Bryman, 2008; Campbell, MacNamara & Gilroy, 2004; Payne & Payne, 2004). They are a “versatile data-gathering method” that are comparatively inexpensive and can yield a variety of qualitative and quantitative data (Campbell et al., 2004, p.146). After considering the various types of questionnaire, such as mail, personally administered, telephone and internet (Frazer & Lawley, 2000), the decision was made to utilise a mail questionnaire as a method of communication. Beyond issues of cost, an advantage of this method is that “it can elicit information from a respondent that covers a long period of time in a few minutes, and, with comparable information for a number of respondents, can go beyond description to looking for patterns in data” (Burns, 2000, p.567). This was of particular relevance to the present research because the intention was to uncover details about Physical Education teachers’ engagement with HRE and HRE-CPD across their life-span, and subsequently, identify patterns in teachers’ responses.

Mennell (1998) suggests that questionnaires are useful and necessary in many contexts but, as with any research method, there are a number of limitations which need to be acknowledged. Firstly, and as Burns (2000, p.568) highlights, “the attempt to produce comparable information by standard questions can lead to the obscuring of subtle differences”. Furthermore, and from a process sociological perspective, due to the nature and complexity of individuals’ values and beliefs, they are not conducive to categorisation and therefore, using questionnaires to attempt to do so can have implications for research. In recognition of this, and in order to achieve a more adequate understanding of the dynamics of the education figuration from a Physical Education teacher’s perspective, the limitations of the questionnaire method were addressed by the second phase of research which involved semi-structured interviews.
The interviews were utilised to add further depth to the research and allow for a more comprehensive and trustworthy exploration of teachers' engagement with HRE and HRE-CPD. The use of semi-structured interviews is discussed in a following section (5.6).

5.5.1 Survey Questionnaire Design

A survey questionnaire was designed (Appendix C) to establish the nature and extent of Physical Education teachers' engagement with HRE and HRE-CPD over time. It was also decided that the teachers' engagement with PE-CPD more generally should be explored in order to provide a comparison and an opportunity for discussion within the contexts of the questionnaire and the subsequent interviews. Existing literature (Alreck & Settle, 2003; Rea & Parker, 2005; Salant & Dillman, 1994) provided guidance on a range of issues concerning the design of the questionnaire including:

- how to introduce the questionnaire
- composing the questions
- composing instructions for the participants
- pre-coding the questionnaire
- organising the questionnaire into sections
- 'branching' the flow of the questions in order to direct the response flow.

The questionnaire provided working definitions of HRE\(^{17}\) and CPD\(^{18}\) at the outset in order to ensure that all teachers were clear about the focus of the questions. The questionnaire comprised four sections, with each having a different focus. Section A was entitled ‘About Yourself’ and required category and list responses in relation to gender, age and teaching experience. Section B focused on Physical Education teachers' background and experiences of HRE, and Section C focused on their PE-

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\(^{17}\) HRE was defined as the “knowledge and understanding of fitness and health” aspect of the National Curriculum for PE. It includes the teaching of knowledge, understanding, physical competence and behavioural skills, and the creation of positive attitudes and confidence associated with current and lifelong participation in physical activity.

\(^{18}\) CPD was defined as any activity, from the point of ITE that “increases the skills, knowledge or understanding of teachers, and their effectiveness in schools” (DfEE, 2000, p.3).
CPD. Following on, Section D addressed the Physical Education teachers' engagement with HRE-CPD. Most questions were closed and required 'tick-box' answers but some open-ended questions requiring written responses were included to gather qualitative data where necessary.

Where possible, the questionnaire probed teachers' past experiences and their interdependencies with others on personal (colleagues), local (CPD providers) and national (policy makers) levels of the education figuration. Thus, links were made to their Physical Education teachers whilst as school, their Initial Teacher Education (ITE) tutors, their current colleagues, their Head of Department (as applicable), senior management, policy makers and the government. This was done with the aim of locating each Physical Education teacher within a web of wider social interdependencies to thereby gain an understanding of their long-term and dynamic relationships with others within the education figuration. It was recognised that the teachers could not be understood in isolation but only as part of an ever-changing network of social relations (Elias, 1978; van Krieken, 1998). As such, the degree to which they were influenced by these interdependencies over time was explored within the questionnaire.

Whilst designing the questionnaire, it was considered important to avoid being present-centred (Elias, 1987) but to look at the teachers' engagement with HRE and HRE-CPD over time (i.e. from their own school experiences, to their experiences of ITE, to their current views of HRE and their CPD). However, the study could not necessarily claim to be, what Elias would refer to as, 'developmental'. An entirely developmental approach requires a tracing of the various social processes which have led to a particular social phenomenon over generations, such as the formalisation of HRE and the emergence of HRE and CPD as a focus of sociological study.

After designing the questionnaire, the responses were coded to allow for analysis after completion and it was piloted. Coding and data analysis is discussed in Section 5.6.3.
5.5.2 Pilot Study
Existing literature suggests that “postal questionnaires should be tried out in ‘pilot studies’ to remove ambiguity, test adequacy of response categories” and ensure that all aspects of the administration are suitable (Burns, 2000, p.568). A pilot study was carried out in order to maximise trustworthiness and ensure that the questionnaire was understandable, contained no ambiguities or leading questions and that it could be answered by Physical Education teachers relatively easily.

The sample for the pilot comprised 42 Physical Education teachers between the ages of 25 and 54 who were drawn from secondary schools in the East Midlands of England. All teachers were mentors within the Initial Teacher Education Partnership at Loughborough University. Questionnaires were distributed during a half-day Mentor Training session in June 2006 held at the University. Of the 42 questionnaires that were distributed, 21 were completed and returned (10 males and 11 females) which represented a response rate of 50%. The pilot study, and subsequent feedback, suggested the questionnaire was clear and fit for purpose and was therefore deemed appropriate for the study.

5.5.3 Sample
In order to select the sample for the study it was decided that stratification of both schools and teachers would be beneficial in order to minimise ‘sampling error’ (Bryman, 2008). It was deemed most appropriate to utilise a proportionate, stratified sampling procedure (Bryman, 2008; Burns, 2000); this increased possible accuracy and served as an attempt to ensure that all local authorities (LAs) across England were represented within the research.

The Schools’ Web Directory (www.schoolswebdirectory.co.uk) for England identified 148 LAs and each was categorised according to size\(^\text{19}\) - small, medium, large - and a proportionate number of schools were selected from each category. Based on these categories, there were two small, 121 medium and 24 large LAs. Two

\(^{19}\) Small (comprising 2-5 secondary schools), medium (6-49 secondary schools) and large (more than 49 secondary schools).
schools were selected from each small LA, three schools from each medium LA, and four from each large LA. Within each LA, schools were listed in alphabetical order and, where possible, every tenth school was selected. With LAs with less than 10 schools, every fifth school was chosen. In total, 463 schools were selected for involvement in the study. The majority (90%) were state schools, with the rest being independent. Furthermore, a number within the sample (13%) were Specialist Sports Colleges.

5.5.4 Administration
Following guidance on questionnaire administration protocol (Fink, 2005; Frazer & Lawley, 2000), each questionnaire was numbered and mailed to the Head of the Physical Education Department (HoD) from each of the 463 schools. Accompanying the questionnaire was a self-addressed envelope and a covering letter (Appendix C) requesting permission for a Physical Education teacher at the school to be involved in the study. The number of each questionnaire, together with the name and address of the school they were sent to, were recorded for follow-up purposes. Drawing upon the work of Alreck and Settle (2003), the accompanying letter provided information on a range of issues concerning the research. For example:

- What is the research about?
- Who is carrying out the research and why?
- Why have particular teachers been chosen to participate?
- Is it important research?
- Will the questionnaire be difficult to complete?
- How long will it take to complete?
- Will the teachers be identified?
- How will the teachers benefit from taking part in this research?
- When should the questionnaire be completed by?
- What do the teachers do with the questionnaire once it is completed?

As recommended by the literature (Alreck & Settle, 2003; Fink, 2005; Rea & Parker, 2005), it was requested that the questionnaire be returned to the lead researcher (Laura Ward) in the stamped addressed envelope provided, by a specified date (which was six weeks from the time of postage).
In order to reduce the risk of 'sampling error' and in recognition that teachers are not a homogenous group, teachers representing different professional life phases were included within the sample (Day et al., 2006). This was achieved by adopting a stratification procedure (Bryman, 2008). Each letter asked the HoD to ensure that a teacher of a particular sex and experience completed the questionnaire. Experience categories comprised of: i) 0-7 years; ii) 8-15 years and; iii) 16 plus years of experience and these were organised around the 'Professional Life Phases' that Day and colleagues (2006) used in their study of teachers' work and lives. Emphasising the difference between professional life phases highlights the processual nature of teaching and furthermore demonstrates an acknowledgement that people, and more specifically teachers, are dynamic, continually changing and far from homogenous (Elias, 1978; Green, 2008; van Krieken, 1998).

School surveys often have low response rates (Sturgis, Smith & Hughes, 2006) and a number of measures were therefore taken in order to try to maximise the number of questionnaires returned. Sturgis et al. (2006) carried out a research project on behalf of the Department for Education and Skills (DfES) (now the Department for Children, Schools and Families [DCSF]) to establish the most suitable methods for raising response rates in school surveys. They argue that the most common reasons for reduced school cooperation in research are:

- lack of time/excess workload;
- competing administrative requirements;
- lack of relevance/benefit for the school;
- too many questionnaires received and it is difficult to prioritise one over the other;
- schools never received feedback;
- the information requested is already available elsewhere.

Attempts were made to combat these issues and these are highlighted below.

As already mentioned, a covering letter was devised to accompany the questionnaire (Appendix C) in order to provide the teachers with a suitable degree of information about the research (Alreck & Settle, 2003). The letter briefly outlined the aim of the research and asked if they, or a colleague, would be willing to complete the
questionnaire. To encourage teachers to complete it, the letter assured that the majority of the questions required 'tick-box' style responses and that the questionnaire would “take approximately 5-10 minutes to complete”.

According to Sturgis et al. (2006), the time of year that a questionnaire is received by teachers is also a factor of influence in terms of response rate. They stated that some head teachers felt that no time of year was optimal but it was suggested that the spring term was the worst time for a school to receive a survey (due to examination preparation, amongst other issues). On this basis, the questionnaires were distributed in November because it was assumed that by this time the teachers would have settled in to the new academic year, but at the same time not be too heavily involved in assessment and examinations.

In order to maximise the response rate further, the questionnaire was presented as being relevant to the teachers and of potential benefit to their school in some way (Sturgis et al., 2006). The covering letter explained that individual feedback would be offered to each teacher, department and/or school. It was hoped that the teachers would be more inclined to complete the questionnaire if they viewed there to be a tangible outcome that would benefit them and their teaching practices.

Initially, 92 questionnaires were returned by the specified date, giving a 20% response rate. In order to achieve a higher rate, a follow-up process was initiated (Bryman, 2008). The schools that had not returned their questionnaire were contacted by telephone and the HoDs of each school were asked if a member of their staff would be willing to complete the questionnaire and return it in the stamped addressed envelope that had been provided. As a result of the follow-up, a further 21 questionnaires were returned which brought the total response rate to 25% (58 females and 54 males). According to Alreck and Settle (2003), 100 respondents is an acceptable response size for a questionnaire and it was therefore decided that the number of returns was adequate.
5.5.5 Data Analysis

Quantitative data from each of the coded questionnaires were entered into SPSS 16.0 (Statistical Package for the Social Sciences) for analysis. Different types of statistical analysis were employed, depending on the structure and nature of each question. Descriptive statistics, namely frequencies (see Appendix D), were used to analyse the demographic data (such as sex, age and years of teaching experience) and also the data from the linear, numeric scale questions. In addition, inferential statistics, namely chi-square, were used to evaluate relationships between two sets of data (Appendix E).

In order to enhance the accuracy of chi-square results, a minimum cell frequency of five is required when the total number of cells is less than ten (Alreck & Settle, 2003). In the present research, chi-square tests were used to investigate potentially significant relationships between demographic data and the data generated from other questions (for example, between age and the content areas covered within HRE lessons). If a cell frequency was less than ten, standard procedure was followed and the variables were re-coded (Kinnear & Gray, 1999). This allowed categories to be combined and, as a result, the cell frequency to be increased.

As stated earlier, some of the questions required qualitative responses. These responses were transcribed verbatim and subject to content analysis. NVIVO 8 software was used in a number of ways to facilitate the emergence of ideas, or themes from the data (qualitative or analytical coding) (see Appendix F for an outline of the ‘tree nodes’ (themes) produced from NVIVO). Using this software, coding allowed for the generation of ideas and a gathering of data by topic (Silverman, 2006), or ‘node’. Richards (2005) has recognised that there are two types of coding, both of which were utilised within this phase of the research, and the table below (Table 5.1) presents the main characteristics of each approach.

Qualitative coding will be discussed in greater depth in a following section (5.6.3) which outlines the analysis of data within the second phase of the research.
Table 5.1. Quantitative and Qualitative Coding (adapted from Richards, 2005).

<table>
<thead>
<tr>
<th>Place in research process</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is normally a single stage of coding between data collection and analysis.</td>
<td>Coding is an ongoing process throughout the research.</td>
<td></td>
</tr>
<tr>
<td>Relation to categories</td>
<td>Predetermined categories are applied.</td>
<td>Coding generates categories.</td>
</tr>
<tr>
<td>Flexibility</td>
<td>New categories are rarely added.</td>
<td>Coding is constantly revisited to assess the development of the themes (nodes).</td>
</tr>
</tbody>
</table>

Following phase one of the research, a second phase (interviews) was carried out with the intention of gaining a more complex understanding of how Physical Education teachers’ viewed the nature and extent of their engagement with HRE and HRE-CPD, and the wider-social processes which they felt had influenced that engagement.

5.6 Phase Two: Interviews

Interviews, by definition, are “interdependent relationships that involve interaction between the researcher and the participant” (Perry, Green & Thurston, 2004, p.140). Thinking in terms of ‘involvement-detachment’ (Section 5.3.1), within the present study it was important that the researcher was ‘facing both ways’ throughout the interview (Perry, Green & Thurston, 2004). In other words, the researcher was aware of the importance of seeking to manage the interview relationship such that an appropriate balance between their involvement and detachment was maintained throughout.

The semi-structured interviews were conducted with 12 Physical Education teachers drawn from the questionnaire sample. According to Wooffit and Widdicombe (2006), interviews are used widely throughout the social sciences and they can take different forms. Four main types of interview have been identified (structured, semi-structured, unstructured individual and unstructured group) and each varies depending on the extent to which the interviewers’ and the respondents’ contributions are constrained (Fielding & Thomas, 2001). In comparison to a structured interview, which is
designed to uncover ‘factual’ information, a semi-structured interview is used to elicit views of a particular issue or issues (Wooffit & Widdicombe, 2006).

Denscombe (1998, p.69) argues that it is beneficial to have an understanding of “things from the point of view of those involved”. Semi-structured interviews are a ‘conversation with a purpose’ (Burgess, 1988; Wellington, 2000) and within the context of this research, they provided a context within which ‘conversations’ could take place (Wellington, 2000) and ‘points of view’ could be established (Denscombe, 1998). Semi-structured interviews were chosen for a variety of reasons. Using this method, respondent participation is not entirely constrained by the interviewer’s questions (Wooffit & Widdicombe, 2006), rather the interviewer has the flexibility and scope to pursue and elaborate on themes which may emerge during the interview and to probe areas of particular interest if necessary (Denscombe, 1998; Seidman, 2006). Semi-structured interviews are considered beneficial because they can “provide greater breadth” of data than other types of interview due to their more qualitative nature (Denzin & Lincoln, 2005, p.705). As such, Fowler (2001) argues that semi-structured interviews can provide a more adequate basis for data analysis.

The interviews with the Physical Education teachers provided an opportunity to expand upon, clarify and add meaning to the questionnaire findings. The interviews allowed the teachers to provide their own definitions and frames of reference for their answers. The data uncovered from the interviews allowed for reflections to be made between the two stages of the research. Although it is acknowledged that Physical Education teachers cannot exist in isolation, the one-to-one interviews provided empirical data to allow for an understanding of the social processes that had influenced the nature and extent of the teachers’ engagement with HRE and HRE-CPD. Furthermore, interviews provided a means of assessing the extent to which the Physical Education teachers’ engagement with HRE and HRE-CPD were influenced by the interdependencies they had formed with others over time within the education figuration.
Despite the value of using interviews, it is important to acknowledge that they have potential limitations. Holstein and Gubrium (2004, p.141) highlight the potential for interviews to be a source of bias if suitable questions are not asked. As previously discussed, a number of precautions were taken in order to maximise trustworthiness and minimise effects of bias and, from a process sociological perspective, a 'detour via detachment' attempts to recognise and eliminate elements of bias.

5.6.1 Sample
The teachers who participated in the questionnaire survey were asked at the time to indicate whether they would be willing to be involved in the second phase of the research. Twenty eight positive responses were received and, on the basis of these, twelve teachers (6 male and 6 female) were chosen to be part of a purposive sample (Maykut & Morehouse, 1994; Wellington, 2000) of interview participants. In selecting the twelve teachers the intention was to obtain as representative a sample as possible that included an equal number of male and female teachers who taught at different types of schools (such as state, academy, independent, co-educational, single-sex and sports college). Attention in selection was also paid to geographical area and the teachers' reported engagement with HRE, PE-CPD and HRE-CPD. For example, the teachers chosen for the sample worked in various LAs across England and had varying degrees of engagement with HRE, PE-CPD and HRE-CPD. The decision to interview a sample size of 12 teachers was informed by a review of international literature that focused upon 22 studies of teachers' professional identity which revealed the average sample size to be 12 (Beijaard, Meijer & Verloop, 2004). The size of the sample was constrained by the funding available to support the research. A summary of the sample is provided in Table 5.2.
Table 5.2 Phase Two Sample

<table>
<thead>
<tr>
<th>Name (pseudonym)</th>
<th>Gender</th>
<th>Experience (years)</th>
<th>Type of School</th>
<th>HRE Engagement (school/ITE/teach)</th>
<th>PE-CPD Engagement (previous 12 months)</th>
<th>HRE-CPD Engagement (previous 12 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claire</td>
<td>Female</td>
<td>30+</td>
<td>Secondary School</td>
<td>Teach</td>
<td>18 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>Philip</td>
<td>Male</td>
<td>30+</td>
<td>Polytechnic for Boys</td>
<td>Teach</td>
<td>7 hours</td>
<td>None</td>
</tr>
<tr>
<td>Frances</td>
<td>Female</td>
<td>16-30</td>
<td>College</td>
<td>Teach</td>
<td>None</td>
<td>2 hours</td>
</tr>
<tr>
<td>Toni</td>
<td>Female</td>
<td>8-15</td>
<td>Secondary School</td>
<td>ITE Teach</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ethan</td>
<td>Male</td>
<td>8-15</td>
<td>Secondary School</td>
<td>Teach</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Fred</td>
<td>Male</td>
<td>8-15</td>
<td>Secondary School</td>
<td>Teach</td>
<td>4 hours</td>
<td>None</td>
</tr>
<tr>
<td>Joanne</td>
<td>Female</td>
<td>4-7</td>
<td>Secondary School</td>
<td>School ITE Teach</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Nathan</td>
<td>Male</td>
<td>4-7</td>
<td>Independent Co-educational</td>
<td>Teach</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sarah</td>
<td>Female</td>
<td>4-7</td>
<td>Secondary School</td>
<td>School Teach</td>
<td>6 hours</td>
<td>None</td>
</tr>
<tr>
<td>Stuart</td>
<td>Male</td>
<td>4-7</td>
<td>Sports College</td>
<td>School Teach</td>
<td>None</td>
<td>3 hours</td>
</tr>
<tr>
<td>Sophie</td>
<td>Female</td>
<td>0-3</td>
<td>Secondary School</td>
<td>School Teach</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Thomas</td>
<td>Male</td>
<td>0-3</td>
<td>Secondary School</td>
<td>School Teach</td>
<td>None</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

5.6.2 Administration

Existing literature guided the planning (Gillham, 2000; Wooffit & Widdicombe, 2006) and administration (Flick, 2007) of the semi-structured interviews. The teachers chosen to be part of the sample were contacted via letter (see Appendix G) and they were asked to indicate a suitable time for the interview to take place. Whilst awaiting responses, individual interview schedules were devised (Appendix H), on the basis of each teacher's responses to the questionnaire, as well as the more general findings.
Whilst each schedule was slightly different (see, for example, Appendix H) all interviews were organised into five sections with each section having a different focus. The first section was entitled ‘About You’ and it explored what they, as a Physical Education teacher, viewed their role to be and how they felt they were perceived by society in general. Section two probed their thoughts on their school and the extent to which external agencies influenced their engagement with HRE and CPD. The third section explored the teachers’ views of HRE, providing an opportunity to confirm and expand upon the survey findings. Areas of interest included their views on: i) the aims of HRE; ii) how HRE was addressed in their school; iii) the guidance and support they received for their HRE teaching; and vi) the importance of HRE in comparison to other areas of the Physical Education curriculum. Section four explored the teachers’ engagement with PE-CPD in order to provide a comparison for later exploration of HRE-CPD. Questions probed their views on a range of issues including: i) ‘effective’ PE-CPD; ii) influences upon their engagement with PE-CPD; iii) access to resources; and vi) the National Continuing Professional Development Strategy. The final section addressed the nature and extent of their engagement with HRE-CPD. This focused upon how the teachers viewed: i) the amount of time they spent on HRE during their ITE; ii) the need for HRE-CPD within their department; iii) factors influencing their engagement with HRE-CPD; and vi) recommendations for future HRE-CPD.

Before the interviews were carried out, all teachers were asked to provide informed consent to participate (Appendix I). The interviews were conducted in the schools in which the teachers taught because this helped to replicate the kinds of social contexts that had come to influence the nature and extent of their engagement with HRE and HRE-CPD (Payne & Payne, 2004). Where possible, interviews took place in a quiet room and were recorded with permission from the interviewees. Each progressed in a slightly different way, lasting between 52 minutes and 88 minutes in duration.

With the intention of enhancing the quality of the data and maintaining ‘good practice’, each transcript was electronically mailed to the respective teacher immediately following the interview (Holstein & Gubrium, 2004). The process of
'member checking' (Section 5.4.1) provided teachers with the opportunity to make contact with the researcher if they had any discrepancies or if they wished to add anything further. No responses were received.

5.6.3 Data Analysis
Within this phase of the research, analysis involved the process of moving from ‘raw’ interview data to evidence-based interpretations (Rubin & Rubin, 2005). Richards (2005, p.67) discusses a number of ways of analysing data in order to answer research questions and she suggests that “the most exciting and challenging processes in qualitative research require discovery and exploration of ideas from the data”. For the purpose of this analysis, the NVIVO 8 computer software package (Qualitative Solutions and Research International, n.d) was used to analyse (code) the qualitative data and facilitate the emergence of themes, or ‘nodes’.

Content analysis essentially refers to the categorisation or ‘coding’ of data. The process undertaken to analyse the interview data within the present study is outlined below.

- For each teacher within the sample, audio files were uploaded, transcribed verbatim and subject to content analysis with a particular focus upon a “search for meaning and understanding” (Arksey & Knight, 1999, p.150).
- There was a constant dialogue between the data and the context within which it was uncovered. The researcher (Laura Ward) remained abreast of literature and policy developments in order to identify influential contextual factors.
- The identification of themes, such as ‘sport’, ‘interdependencies’ and ‘CPD’, was aided by the NVIVO 8 computer programme. The ways in which this programme functioned are outlined in the following section (Section 5.6.3.1).
- Acknowledging the constant and dynamic nature of knowledge production (Elias, 1978), a constant process of reflection was deemed necessary in order to refine and compare the emerging themes from within the data. The interview transcripts were (re)read and the audio files (re)listened to over the course of 12 months.
• Adopting a process sociological perspective meant that particular attention was paid to the patterns and relationships between the different, essentially sociological, themes.

• Similarly, attention was paid to the social interdependencies which the teachers discussed when questioned about HRE and HRE-CPD.

• Contradictions within and between interview transcripts were acknowledged. For example, many teachers claimed the importance of HRE within the NCPE yet from further discussion it emerged that those same teachers did not afford much, if any, of their time to developing their pedagogies within this context.

• The main question being asked was: What is this data telling me about Physical Education teachers’ engagement with HRE and HRE-CPD?

The content analysis represented a constant dialogue between the data, process sociological theory and existing literature. The concept of ‘figuration’ and the underpinning principles of process sociology were valuable within the content analysis process. For example, process sociology encourages an appreciation of the teachers’ past experiences and interdependencies with the intention of better understanding their current practices within HRE and HRE-CPD over time.

According to Crotty (1998), it is important to be explicit in terms of the emergence of themes within content analysis. The next section therefore outlines the development of the themes facilitated by NVIVO 8.

5.6.3.1 NVIVO 8

The NVIVO 8 qualitative data analysis computer software package proved to be a valuable organisational tool in that it facilitated the importing and organisation of the data in a way that was conducive for coding and analysis. The coding structure of NVIVO is likened to that of a family tree. The ‘parent’ nodes (such as ‘professionalisation’) are at the top of the tree, with the ‘children’ nodes (such as ‘professional knowledge’ and ‘status’) towards the bottom. Initially, basic nodes such as ‘gender’ were created. Coding each participant’s transcript according to their ‘attributes’ (such as gender, age or years of teaching experience) allowed for
relationships between ‘attributes’ and other nodes (such as ‘views on CPD’) to be explored.

In reading the transcripts, some nodes (such as ‘gender’) emerged instantly, whilst others (such as ‘teachers’ philosophies’) required more detailed and theoretically informed analysis. NVIVO allowed for the development and refinement of ideas, and data were easily moved from its source (the transcript) to a node (theme) which, together with multiple nodes (including ‘interdependencies’ and ‘constraints’), came to form a data ‘tree’. A list of the nodes is presented in Appendix F.

The NVIVO tree, comprised of numerous nodes, does not represent the only way the data can be conceptualised. Rather, it provides one way of interpreting the data that, to the researcher at least, was practical and relatively easy to understand.

5.6.4 Follow-up
Following a preliminary analysis of the findings, it was apparent that one teacher (Sophie) had engaged with HRE in a different way to the other teachers in the sample. Sophie demonstrated a relatively broad understanding of HRE in comparison to the other teachers and she offered a broader range of contexts for learning about HRE. As a result, an additional follow-up interview was carried out with Sophie in order to gain a more detailed understanding of why she engaged with HRE as she did (see Section 7.4.5.

5.7 Contextual Data Sources
In order to understand Physical Education teachers, and particularly the nature and extent of their engagement in HRE and HRE-CPD, an understanding of their social context is paramount (Green, 2008; Keay, 2005b). Some authors have suggested that utilising official documents together with other qualitative methods can provide a better understanding of a particular social context or figuration (Bryman, 2008; Gay & Airasian, 2000). On this basis, official documents, or contextual data sources, informed both phases of the research. A number of authors have highlighted the importance of understanding policy in order to better ‘position’ and understand
teachers (Houlihan & Green, 2006; Keay, 2006a, 2006b; Penney & Evans, 2005) and, for the purpose of this study, contextual data sources consisted mainly of policy documents and resources originating from personal (such as departmental policies and planning documents), local (such as Local Authority initiatives) and national (such as the National Curriculum and the National CPD Strategy) levels. Accessing such data represented further potential to explore how Physical Education teachers and their colleagues viewed and interpreted the information about HRE and CPD that they had received from different levels of the education figuration. The contextual data sources are referred to within the discussion, as applicable. The semi-structured nature of the interviews meant that there was opportunity for the contextual data sources to illuminate some aspects of the ‘conversation’. Thus, contextual data sources were discussed as a result of questions asked by the interviewer and points raised by the participant (Webb & Macdonald, 2007b).

In order to record thoughts and critical reflections upon the research process, a research diary was written before, during and after every visit to a school. In the process of “observing, writing and reflecting” on research diary entries, “qualitative researchers engage in a process of evolving data analysis” (Gay & Airasian, 2000, p.214). Compiling a research diary allows a researcher to record their thoughts on the nature of the interview and the context within which it is carried out (Gay & Airasian, 2000; Ritchie & Lewis, 2003). The diary records which were written within this research contained a descriptive and a critical aspect, with the former describing what was seen and the latter providing the researcher’s thoughts or ideas about the description (Gay and Airasian, 2000). Whilst the research diary entries represented a secondary data source and reflected the personal views of the researcher, they nonetheless provided a valuable opportunity to consider thoughts that may have been useful when analysing the data.

5.8 Ethical Considerations

The present study was designed and conducted in accordance with Loughborough University’s ethical guidelines (http://www.lboro.ac.uk/admin/committees/ethical/cophp.htm). A copy of the ethical checklist can be found in Appendix J. It is
imperative in research that the participants, in this case the teachers, come to no harm (Fontana & Frey, cited in Denzin & Lincoln, 2005). Prior to the interview, the participants were given information about the topic of the research and were asked to provide informed consent (Appendix J). They were informed that they could “withdraw from the study at any time without prejudice”, that the information they provided would “be used for research purposes only and kept strictly confidential and anonymous”. The teachers were also asked if they objected to their interview being recorded on audio-tape and quoted within the thesis. Following the interviews, and as previously stated, the transcripts were electronically mailed to the teachers and they were given the opportunity to highlight any discrepancies or to add anything if they wished.

5.9 Summary
This chapter began by discussing traditional approaches to research and questioned the tendency to dichotomise research based on philosophical assumptions about reality and knowledge. It was argued that process sociology could offer a more adequate way of thinking about social life generally and social research in particular. Dichotomous epistemological approaches to social research were rejected (Mennell & Goudsblom, 1998) on the basis that they did not give credence to the dynamic complexities of social research (Elias, 1987). The concept of figuration was introduced and the sensitising concepts which guide the process sociological approach were outlined. In summary:

- Human beings can only be understood in the plural and as being part of figurations;
- Figurations can only be understood as consisting of long-term dynamic processes of multi-directional development and change;
- The long-term developments of social figurations are usually the unintended outcome of intentional human actions;
- Human knowledge is a product of figurations.
- In order to better understand a particular social phenomenon, an appropriate balance of involvement and detachment is necessary.
The latter half of the chapter introduced, explained and justified the methods of research and analyses employed within the study. The two-phase approach to the mixed-method study (Day, Sammons & Gu, 2008; Greene & Caracelli, 1997; Johnson & Onwuegbuzie, 2004) and the associated procedures that were followed throughout the research were outlined. For each phase, the following factors were discussed:

- Instrument design
- Sample
- Administration
- Data analysis

Finally, the necessary ethical considerations associated with the research were explained.

Following on, chapter six presents the findings from phase one of the research, the survey questionnaire.
6.1 Introduction
This chapter presents the findings from phase one of the research, the survey questionnaire. Findings from phase two (the semi-structured interviews) are presented and discussed in the following chapter and, where applicable, are used to clarify and expand upon the findings reported below. The survey data are organised according to the four sections that comprised the questionnaire: i) the teachers; ii) teachers' engagement with HRE; iii) teachers' engagement with PE-CPD; and iv) teachers' engagement with HRE-CPD.

6.2 The Teachers
As discussed in chapter five, the letters that accompanied the questionnaires represented a planned attempt to obtain an equal distribution of male and female respondents with varying years of teaching experience. Of the total respondents (n=112), 47% were males and 53% were females. With regards to age, a relatively small percentage of the teachers were aged under 25 (7%), most (46%) were between 25 and 34 years, and 22% were between 35 and 44 years of age. The remainder (25%) were 45 years or more. Given that males and females were more-or-less equally represented and that respondents spanned all five professional life phases (Day et al., 2006) (see Figure 6.1), the administration of the survey was considered to be relatively successful in terms of achieving the desired sample distribution.

In respect to the school context, most of the teachers (59%) worked in a state school. Just over a third (35%) worked in a specialist school/college and 14 (13%) worked in a specialist sports college. Just over half of the respondents (57%) were Heads of Department (HoD) with the rest (43%) being specialist Physical Education teachers. Some (8%) were Newly Qualified Teachers (NQTs) and 11% reported to have another role, usually that of a School Sports Coordinator (SSCo) (38%) or a Head of Year (22%).
Many (64%) of the participants felt that they, as Physical Education teachers, were perceived by the general public as being of lower status than teachers of other subjects. Moreover, 79% felt they, as teachers, were perceived as being of lower status than other professionals, such as lawyers.

### 6.3 Physical Education Teachers’ Engagement with HRE

#### School as a Pupil

Less than half (43%) of the teachers reported to have been taught HRE whilst they were at school and, of those who had, 63% felt that they had experienced the area positively. Findings suggest that most of the teacher’s were taught about HRE through cross-country running and circuit training as pupils (see Table 6.1).

### Table 6.1. Contexts for Learning about HRE as Pupils

<table>
<thead>
<tr>
<th>Activities</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Country Running</td>
<td>66</td>
<td>59</td>
</tr>
<tr>
<td>Circuit Training</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Exercise to Music</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Running (not Cross-Country)</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Weight Training</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Skipping</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Water-Based Activities</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>
Initial Teacher Education

Moving on to the next category of experience, which focused on ITE, approximately half (49%) of the teachers had engaged with HRE during their training and the majority (71%) claimed that it had included both practical and theoretical elements. Approximately a quarter of the sample felt that that the amount (24%), content (26%) and structure (27%) of their HRE-ITE, as well as the support (21%) they received was adequate. The teachers were also asked the extent to which they thought their ITE had prepared them to teach PE and HRE. Less than half felt that their ITE had prepared them to teach Physical Education (42%) and HRE (27%), meaning that 58% and 73% felt that they had been inadequately prepared by their ITE to teach PE and HRE respectively.

Teaching

Most of the teachers reported to be ‘confident’ or ‘very confident’ in the teaching of HRE (86%) and viewed it as a ‘valuable’ or ‘extremely valuable’ area of Physical Education (96%). However, one-third (33%) of teachers did not have access to a written SoW for HRE. Of those who did, 30% stated that it had been written in the current or previous year, approximately one third (34%) claimed it had been revised in the past two to five years, and a small number (8%) claimed that it had not been revised in the past five years (see Appendix K for an example of a dated SoW which was still being used at the time of the research).

In relation to the mode of teaching of HRE, a quarter (25%) of the teachers reported to use a focused approach to HRE whereby the area is taught through specific units of work. A small number (7%) used a permeated approach whereby the area is taught solely through other practical activities such as athletics, dance, games, gymnastics and swimming. Over two-thirds of the teachers (68%), however, employed a combination of approaches (Figure 6.2).
In terms of the content and knowledge base that the teachers covered within HpRE, the findings revealed that nearly all focused upon cardiovascular (CV) fitness (98%) and fitness testing (94%), with muscular strength and endurance (91%) and flexibility (88%) also being prominent content areas (see Appendix L for an extract of a SoW which focused heavily on CV fitness and fitness testing). Other areas that received some, though less, attention included relaxation (20%) and weight management (17%). The data suggest there was little difference between the content areas that males and females included within their HRE programmes. A statistically significant difference ($p<0.05$) however, was found between the number of females (95%) and males (81%) who included flexibility within their programmes.

With regard to the contexts through which the content and knowledge base was communicated within HRE lessons, the most frequently cited were circuit training (99%), exercise to music (70%) and running (not cross-country) (69%). Others included weight training (53%), cross-country running (53%), skipping (53%) and water-based activities (11%). A few teachers also incorporated other activities into HRE such as rowing and plyometrics. In terms of gender differences, there was little difference between the percentage of females and males teaching circuit training, weight training, running and water-based activities, but more female teachers taught exercise to music and skipping than males. These differences, however, were not statistically significant (See Table 6.2).
Table 6.2. Teachers' Gender and Activities Included in HRE Programmes (%).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Circuit Training</td>
<td>100</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>Exercise to Music</td>
<td>81</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Running (not Cross Country)</td>
<td>67</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Skipping</td>
<td>64</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Cross Country</td>
<td>50</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Weight Training</td>
<td>45</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Water Based Activities</td>
<td>10</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Percentages reported are of the total number of females (n=59) and total number of males (n=53).

Whilst the quantitative questionnaire responses revealed no significant differences between the activities/contexts for learning that males and females included within their HRE programmes, the qualitative responses to the open-ended questions from a number of the teachers suggested that most (72%) thought that gender did influence the process of teaching of HRE. For example, when asked what influenced the teaching of HRE, some teachers made the following comments:

How you teach HRE depends on gender and areas of expertise...I teach weights and circuits and my wife teaches aerobics. (449, male, 8-15 years of experience)

There is a definite male/female split in HRE...Males do a lot of weight training work, females do more of a mix including aerobics. (061, female, 4-7 years of experience)

Whilst exploring the variables that the teachers viewed as influential upon their engagement with HRE, a female teacher with between four and seven years of teaching experience stated “a lot of NQTs have a lot of new ideas and types of activities. Older ones in Physical Education may tend to concentrate on mainstream games and forget about the obvious benefits of HRE”. In support of this, a female teacher in her first three years of teaching claimed that “older teachers give it (HRE) less precedence and focus more on teaching the skills of sport”. The table below
illustrates a cross-tabulation of the teachers’ years of experience and the activities they taught within their HRE programme (see Table 6.3). As the table demonstrates, there are no discernable patterns to suggest that a teacher’s years of experience was particularly influential upon the types of activities they taught within their HRE programme.

Table 6.3. Cross-tabulation of Years of Experience and Activities included in HRE programmes (%).

<table>
<thead>
<tr>
<th>Activity</th>
<th>0-3 years experience</th>
<th>4-15 years experience</th>
<th>16+ years experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=14</td>
<td>n=70</td>
<td>n=5</td>
</tr>
<tr>
<td>Circuit Training</td>
<td>100</td>
<td>87</td>
<td>95</td>
</tr>
<tr>
<td>Exercise to Music</td>
<td>64</td>
<td>59</td>
<td>100</td>
</tr>
<tr>
<td>Running (not X Country)</td>
<td>86</td>
<td>51</td>
<td>74</td>
</tr>
<tr>
<td>Skipping</td>
<td>57</td>
<td>40</td>
<td>55</td>
</tr>
<tr>
<td>X Country</td>
<td>50</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Weight Training</td>
<td>50</td>
<td>44</td>
<td>50</td>
</tr>
<tr>
<td>Water Based Activities</td>
<td>7</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>16</td>
<td>21</td>
</tr>
</tbody>
</table>

Percentages reported of the total number of females (n=59) and total number of males (n=53).

6.4 Physical Education Teachers’ Engagement with PE-CPD

Most of the teachers (87%) reported that they viewed CPD to be an extremely valuable activity. Many (63%) reported to have a formal (planned) CPD programme, and 89% kept a record of their CPD activities. Furthermore, the majority had taken part in PE-CPD in the previous 12 months (86%) or previous three years (88%). The teachers tended to engage with CPD monthly (30%) or annually (30%), with fewer participating on a bi-monthly (12%), weekly (11%) and daily (3%) basis (see Figure 6.3).
The two types of PE CPD that the teachers reported to most commonly access were 'courses' (89%) and 'in-house' training (89%), whilst some (14%) engaged with e-learning. Most participated in CPD during the daytime (82%) with some also undertaking it in the evening (36%). Few committed to CPD that took place at weekends (5%) or during the holidays (3%).

Over 90% of the teachers (92%) stated that their CPD usually took place in their own school, with just over half (52%) attending a training centre and a fewer number participating in CPD at a university (16%). The majority (78%) of teachers accessed CPD that was provided by 'in-house' staff and approximately half of the teachers also accessed CPD provided by private consultants (51%) and staff from other schools (48%). In addition, for a number of the teachers, Local Authority Advisors (45%) and professional associations (43%) had provided their CPD.

Many of the teachers felt that they had an influence over their PE CPD (69%) and that their school provided them with adequate opportunities to improve their teaching skills (61%). However, whilst just over half (52%) viewed their needs as being met by their CPD, approximately a third (35%) felt that CPD tended to meet the needs of their schools as opposed to their own. Over half (56%) described the support they received from senior management as 'adequate' or 'more than adequate', whilst the
majority (82%) viewed the support they received from their department as 'adequate' or 'more than adequate'. Furthermore, over half of the teachers felt that the amount (52%) and content (59%) of their CPD was 'adequate' or 'more than adequate'.

The findings also revealed that almost half (43%) of the teachers viewed CPD as a commercial activity and approximately a third (33%) felt that it was driven by government policy. Less than half (46%) of the teachers, however, were aware of the National CPD Strategy (discussed in Sections 3.2.1, 3.7 and 7.3). Moreover, a relatively small number (7%) claimed to have accessed the National CPD Strategy. Not surprisingly, therefore, few were able to comment on the effect it had on their teaching practices. Finally, the teachers were asked the extent to which they thought the CPD they had undertaken had influenced their teaching practices and pupil learning, and the majority reported that they felt that it had influenced both 'to some extent' or 'to a reasonable extent' (76% and 77% respectively).

6.5 Physical Education Teachers' Engagement with HRE-CPD

It has already been established that approximately half of the teachers had not engaged with any form of HRE at the initial point of CPD, namely during their ITE. Furthermore, it was found that most (80%) had not taken part in any HRE-CPD in the previous 12 months and 70% had not taken part in any HRE-CPD in the previous three years. Of those who had engaged with HRE-CPD, most (70%) stated that it had been 'valuable' or 'extremely valuable'. The most common type of HRE-CPD consisted of courses which helped the teachers to teach lessons and establish Schemes of Work (SoW) for HRE. Other types of CPD reported included 'sharing good practice', 'skipping workshops' and 'learning how to use a fitness room'.

Given that many of the teachers (64%) had not participated in any HRE-CPD, these individuals were not able to answer further questions concerning the issue. Of those who were able to respond however, 30% felt that the amount of HRE-CPD they had undertaken was 'adequate' or 'more than adequate' whilst half felt that the content of their HRE-CPD was 'adequate'. With regard to the degree of support provided for HRE-CPD, 40% felt that the support they received from senior management was
‘adequate’ or ‘more than adequate’ and over half (55%) felt that the support they received from their department was ‘adequate’ or ‘more than adequate’.

Nearly a quarter of the teachers (24%) claimed to have a professional qualification, in addition to their formal academic qualifications, which they felt to be relevant to the teaching of HRE. Examples the teachers gave included National Vocational Qualifications (NVQs) in Personal Training, as well as qualifications in swimming teaching and aerobics. Some teachers also reported a range of National Governing Body qualifications they held in sports such as football, rugby and hockey to be relevant to their HRE teaching.

A summary of the Physical Education teachers’ engagement with HRE at school as a pupil, and during subsequent HRE-CPD is provided in Figure 6.4.

Figure 6.4. The Physical Education Teachers’ Engagement with HRE (%).

6.6 Summary
This chapter has presented findings from the survey questionnaire. It presented the demographic and statistical data provided by the participating teachers concerning their engagement with: i) HRE; ii) PE-CPD; and iii) HRE-CPD. In summary:
HRE

- 43% had been taught HRE at school, with cross-country running and circuit training being the most frequently stated contexts for learning.
- 49% had engaged with HRE as part of their ITE, with approximately a quarter viewing their experience as adequate or more than adequate.
- 86% were confident or very confident in their ability to teach HRE.
- 33% did not have access to a SoW.
- Over half claimed to utilise a combination approach to teaching HRE.
- Knowledge related to CV fitness, fitness testing and muscular strength and endurance were the focus for over 90% of the teachers.
- Circuit training, exercise to music and running were the most frequently stated activities through which HRE was taught.

PE-CPD

- 87% valued CPD.
- 63% had a planned CPD programme.
- Most had engaged with PE-CPD in the previous 12 months.
- Courses and ‘in-house’ training were the most frequently accessed.
- 82% felt well supported in their CPD endeavours.
- Approximately half felt the amount and content of CPD they engaged with was adequate or more than adequate.

HRE-CPD

- 80% had not engaged with HRE-CPD in the previous 12 months.
- 64% claimed to have not engaged with HRE at any point during their lives.
- 30% felt that the amount of HRE-CPD was adequate.
- Approximately half felt supported in their HRE-CPD endeavours.

The following chapter attempts to answer the research questions and draws on and discusses the questionnaire data presented in this chapter alongside the interview data from phase two. The interview data allowed for expansion, beyond the data uncovered during phase one of the research. In the following chapter, all findings are thus...
discussed with reference to the research questions and with reference to existing literature. Moreover, process sociology is used to illuminate the findings and provide a framework within which the nature and extent of Physical Education teachers' engagement with HRE and HRE-CPD can be understood.
Chapter Seven: Discussion

7.1 Introduction

Physical educators are required to teach Health-Related Exercise (HRE) and are expected to promote 'healthy, active lifestyles' as part of the National Curriculum for Physical Education (Qualifications and Curriculum Authority [QCA], 2007). As the survey findings suggest, however, approximately half of the teachers who participated in this study had not engaged with HRE whilst at school as a pupil, during their initial teacher training (ITE), or as part of their subsequent continuing professional development (CPD) before they were expected to teach the area. This therefore raises questions about the extent to which they were 'equipped' to teach HRE effectively and promote in pupils the "knowledge, understanding, physical competence and behavioural skills, and the creation of positive attitudes and confidence associated with current and lifelong participation in physical activity" (Harris, 2000, p.2). The present findings confirm some previously raised concerns (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Harris, 1997; in press; Cale et al., 2002) with regard to the teaching of HRE in schools. A number of other issues worthy of discussion (such as Physical Education teachers' limited awareness of opportunities for HRE-CPD) have also been illuminated and these are discussed. Due to the teacher-centric nature of this research, all of the data discussed in this chapter originate from the 'personal' level of the education figuration (Appendix M). It is important to acknowledge, however, that from a process sociological perspective, the wider social processes which have influenced the teachers' engagement with HRE and HRE-CPD are a result of the teachers' interdependence with others on 'local' and 'national' levels of the figuration.

Chapter six presented the data from phase one of the research (survey questionnaire) and it is now discussed in relation to the phase two (interview) data. The quantitative survey data, as well as the qualitative findings from both stages of the research are

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20 The terms 'engaged' and 'engagement' refer to a "work-related state of mind that is characterized by vigour, dedication, and absorption" (Schaufeli & Bakker, 2004: 295).
discussed with reference to the research questions, existing literature (such as Armour 
& Yelling, 2004a, 2007; Cale, 2000b; Cale & Harris, 2006a; Castelli & Williams, 
2007; Capel, 2007; Harris, 1995, 2009; Keay, 2005a, 2006a, 2007a) and process 
sociological theory (Elias, 2000). As noted previously, the interview data were used to 
expand upon the findings from the questionnaire, and the interview process provided 
an opportunity to clarify some of the teachers’ responses. Process sociology proved to 
be a valuable tool for analysing the findings and it provided a suitable framework 
within which the Physical Education teachers’ engagement with HRE and HRE-CPD 
could be understood. The guiding principles, or analytical tools, of process sociology 
are applied to this research, and the central concept of ‘figuration’ was used to 
facilitate the analysis of the complex interdependencies and wider social processes 
which appear to have both constrained and enabled the Physical Education teachers’ 
engagement with HRE and HRE-CPD.

The education figuration, as with any figuration, operates on personal, local and 
national levels (Green, 2002). The data from the present study suggest that the 
personal level of the education figuration (Appendix M) includes people who the 
teachers have ‘face-to-face’ relationships with on a daily basis (for example, teachers, 
heads of department, school staff, school managers and pupils). As the chains of 
social interdependence lengthen and become increasingly complex, ‘face-to-face’ 
relationships continue but they also become ‘entangled’ with interdependencies at the 
local level of the education figuration (including for example, members of the local 
community, commercial CPD providers and Local Authorities). At the national level, 
and as the chains of interdependence lengthen even further, the data suggest that the 
education figuration includes members of the government and organisations such as 
the QCA and National Governing Bodies for sport. Teachers are, for example, 
inescapably linked to the QCA and they are therefore constrained to teach their 
subject and assess their pupils in accordance with the National Curriculum. From a 
process sociological perspective, it is assumed that the Physical Education teachers’ 
engagement with HRE and HRE-CPD can only be understood in light of these 
broader relationships, or networks of interdependence. This discussion therefore 
explores the relative importance of the Physical Education teachers’
interdependencies, past and present, in terms of the social processes they have generated and the influence they have had on Physical Education teachers' engagement with HRE and HRE-CPD.

As stated in chapters two and three, teachers' philosophies represent an array of beliefs and ideologies, influenced primarily by their habitus and context, which inform how they engage with their subject (Green, 2003; Keay, 2005b). Within this thesis, the theoretical concept of 'philosophies' (see chapters two and three) is used to partly explain the nature and extent of the Physical Education teachers' engagement with HRE and HRE-CPD. To avoid reducing explanations to the legacy of history, however, the influence of current broader social relations is also acknowledged in order to aid future developments within this context.

This discussion is framed around the research questions:

i) What is the nature and extent of Physical Education teachers' engagement with: a) HRE; and b) HRE-CPD?

ii) Which social processes have influenced Physical Education teachers' engagement with: a) HRE; and b) HRE-CPD?

With reference to the present findings and existing literature, the first half of this chapter addresses the first research question and therefore discusses the nature and extent of the Physical Education teachers' engagement with HRE and HRE-CPD. Attention is first directed towards the teachers' engagement with HRE (Section 7.2) and, to avoid being present-centred (Elias, 1978; van Krieken, 1998), there is an exploration of their experiences (Section 7.2.1) and views (Section 7.2.2) of HRE whilst at school as a pupil, during ITE and whilst they have been teaching. More specifically, the discussion addresses how the teachers were taught HRE at school, the extent to which HRE was covered within their ITE, and the content and structure of the HRE programmes that they have taught. In addressing their views of HRE, Section 7.2.2 pays particular attention to: i) how confident the teachers felt in teaching HRE; ii) the value they attached to the area; iii) the lack of coherence between the
teachers with regard to how they viewed the aim of HRE and how it could best be achieved; and iv) the tendency for ‘fitness for sport’ to dominate within a Health-Related context.

In Section 7.3, the nature (type, location, timing, content) and extent (frequency and duration) of the teachers’ engagement with HRE-CPD is discussed in relation to their engagement with PE-CPD more generally. A number of issues which emerged from the data are discussed and particular attention is paid to issues relating to value, needs, support from others within the figuration, opportunities and influence upon teaching and pupil learning.

The latter half of this chapter (Sections 7.4 and 7.5) is dedicated to answering the second research question and therefore discusses the wider social processes and interdependencies which emerged as being influential within this context. Acknowledging the inherent complexity of this research, it was recognised that there were varying degrees of overlap with regards to the processes that appeared to have influenced the teachers’ engagement with HRE and HRE-CPD. To avoid repetition, these wider social processes are discussed together. Finally, the broader issues which emerged as relative to the Physical Education teachers’ engagement with PE-CPD (such as the impact of government policy) are discussed in order to highlight the potential impact that they may have upon the teachers’ engagement with HRE-CPD in particular.

7.2 Physical Education Teachers’ Engagement with HRE
This section focuses upon the nature and extent of the Physical Education teachers’ engagement with HRE across four “major categories of experience” (Tsangaridou, 2006a, p.487): i) at school as a pupil; ii) during their ITE; iii) during their teaching experiences; and vi) within their general life experiences. The survey questionnaire focused primarily on formal engagement (the first three ‘categories of experience’) and the interviews provided an opportunity for the teachers to discuss their engagement with HRE in more depth and, amongst other things, share their general life experiences with regards to HRE. Although the experiences and views of Physical
Education teachers are inextricably linked, with each informing the other (Elias, 1971), the two concepts are separated for the purpose of this discussion.

7.2.1 Physical Education Teachers’ Experiences of HRE
From a process sociological perspective, “every social event has been determined by events in the past and is directed towards future events” and this therefore lends weight to the need to focus on social processes over time. On this basis, the teachers’ past HRE experiences were explored in order to make sense of the nature and extent of their present engagement with the area. The survey questionnaire asked the participating teachers “Were you taught HRE/Health-Related Physical Education at school?” and “Was HRE a component of your Initial Teacher Education (ITE)?”. Although all of the teachers were teaching HRE at the time of the study, approximately half had not experienced HRE as a pupil at school (57%) or during their ITE (50%). It is important to acknowledge, however, that the teachers’ often narrow view of HRE may have led to a lack of recognition in terms of what constitutes HRE.

Within the interviews, most of the teachers said little about their past engagement with HRE and this, by omission, was interesting. Understandably, few of the teachers interviewed could remember the details of their experiences of HRE as a pupil, with those who could referring briefly to “fitness tests” (Stuart, male, 4-7 years of experience) and “aerobics and cross-country” (Sophie, female, 0-3 years of experience).

Given the Physical Education teachers’ relatively limited engagement with HRE at school or during ITE, it may be important to question the extent to which they have been encouraged, supported and guided in their engagement with this area of the curriculum. Indeed, questions could also be raised about where Physical Education teachers have acquired the knowledge, skills and understanding necessary to teach HRE effectively. With that in mind, and before exploring the above issues in greater depth, this discussion now focuses upon how the teachers engaged with the practicalities of teaching HRE on a daily basis.
7.2.1.1 The Teaching of HRE

In a number of schools, the teachers did not have access to a scheme of work (SoW) for HRE, and this may suggest a possible lack of structure, progression and coherence within the area. The National Curriculum states the content to be taught within Physical Education but does not stipulate how it should be taught. Whilst the existence of a HRE programme is not indicative of effective HRE, a progressive and coherent SoW with relevant links to the NCPE can be valuable in terms of teaching educationally sound HRE programme. The lack of a SoW for HRE in some schools reflects a generally ad-hoc attitude towards HRE, and the following quotations support and articulate this argument:

The Scheme of Work for HRE is just a list of Learning Outcomes...the NC (National Curriculum) and where it's related...I wasn’t specific about it. (Philip, male, 30+ years of experience)

We haven’t got a Scheme of Work [for HRE], as such, it [HRE] can’t be prescriptive. (Fred, male, 8-15 of years of experience)

We don’t have a unit on Health-Related issues unless they [the pupils] opt for GCSE PE. A Health-Related strand runs through all units in Key Stage Three but the topic is not set in stone. We don’t have a scheme of work. (Joanne, female, 4-7 years of experience)

It’s an easy lesson to deliver more to the point...ad hoc. (Toni, female, 8-15 years of experience).

These quotations support the findings of Harris (1994a, 1995, 1997, 2008) who argued that HRE tended to be unstructured and characterised by variations in teaching practices. Given that the teachers did not feel the need to ‘be specific’ about HRE, or ‘set in stone’ the pedagogies necessary for effective pupil learning, this raises questions about the extent to which pupils are engaging in meaningful learning experiences related to the process of HRE.

Fred (quoted above), seemed to view a SoW as prescriptive and as a constraint as opposed to an enabling factor. His quotation indicates that he did not view a SoW as
valuable in aiding his teaching of HRE and, whilst having a SoW does not guarantee effective HRE, it is arguably one way of maximising pupils’ opportunity for planned, coherent and relevant learning in relation to the process of HRE.

Within any curriculum subject, the prime concern for teachers is the effectiveness of the learning (Harris, 2000), and it is important to acknowledge that the pedagogies employed will have a positive impact upon pupil learning. Despite the statutory nature of HRE, in the past there has been limited formal guidance for physical educators with regard to the teaching of this area of the curriculum (Almond & Harris, 1997; Cale, 2000a). More recently, however, Cale and Harris (2005b, 2009a) have produced a text entitled ‘Getting the Buggers Fit’ which provides teachers with a range of practical strategies for promoting physical activity. Adapting the guidance produced by Harris (2000), they outline the advantages and disadvantages of each mode of teaching (such as permeation, focused and topic) (see Section 3.6.1.2). Acknowledging time constraints, they advise teachers to critically reflect upon how HRE is taught and to select the most appropriate approach(es) for their schools.

The survey data suggested that most teachers within this study tended to use a combination of approaches to teach HRE. Whilst all approaches have strengths and limitations, Cale and Harris (2009a) suggest that a ‘combination’ approach is the most preferable because, as Harris (2000, p.41) suggests, it “builds on the strengths of each approach” and “implies that the area is being reinforced as important” (Cale, 2000a, p.163). Arguably, a combination approach is seen as more effective because it suggests that teachers value HRE enough to teach it as a focused, planned and structured unit. Moreover, it allows the area to be reinforced and links to be made between HRE and other areas of the Physical Education curriculum via permeation, whilst also avoiding divorcing HRE from other areas of learning (Cale & Harris, 2009a).

Until the most recent revision of the secondary National Curriculum revision (QCA, 2007), the NCPE had been categorised into separate activity areas (such as athletics, games and gymnastics) and this may have contributed to the view that Physical
Education is primarily concerned with particular types of physical activity. HRE however, could play a role in broadening the view that many hold of Physical Education and it could come to represent a valuable area of learning which bonds and permeates other areas of learning. The extent to which this is happening in practice, though, is questionable. In some instances, for example, it seemed that HRE was viewed and presented to pupils as divorced from the rest of the Physical Education curriculum:

We deliver a couple of workshops a year. Those workshops are based in the gym and we have a number of stations where the kids will take part in a fun physical activity and then also put some fun food workshops on. (Stuart, male, 4-7 years of experience)

The position which Stuart has adopted arguably serves to contradict the processual and multi-levelled nature of HRE. That is to say, the nature and extent of pupils’ engagement with HRE across their lifespan is influenced by various social processes which transcend all levels of the education figuration. The intermittent teaching of ‘blocks’ of HRE does therefore neither reflect the on-going nature of HRE, nor acknowledge the multiple interdependencies (with, for example, friends, colleagues, environmental planners or policy makers) which serve to influence one’s engagement with it.

With regards to mode of teaching, the interview data contradicted the survey data to a certain degree, with most of the teachers who were interviewed choosing to address HRE solely through traditional activity areas. When asked who taught HRE at her school, Joanne (female, 4-7 years of experience) explained that “Everyone teaches HRE because we do it through sports, not as a stand-alone subject”.

Another teacher suggested the permeation mode of teaching was more enjoyable for both teachers and pupils:

I’ve enjoyed it more teaching it permeated, infiltrating into lessons where necessary as opposed to teaching a block of HRE...it [a focused block of HRE] tended to turn them [pupils] off in lessons and they became (pause) I
wouldn’t say bored but they became quite de-motivated quite quickly. (Nathan, male, 4-7 years of experience)

Of course, it is not known whether the pupils “became quite de-motivated quite quickly” due to the content of the lessons, the mode of teaching, a combination of both or indeed due to other reasons. It could be problematic if teachers are only teaching HRE through permeation because this may mean pupils are experiencing it purely through a limited range of performative activities, namely sport and competitive team games.

The findings of the present study suggest that little has changed since the early work of Harris (1994a). Amongst her findings, she claimed that a large proportion of the schools she investigated did not have a formal, written commitment to HRE, and she suggested that this could be due to two reasons: i) there had been a relatively short amount of time between the launch of the National Curriculum (June, 1992) and the time of the research (February, 1993); and ii) writing a SoW for HRE may be “considered to be less of a priority than writing SoW for the specific areas of activity” (Harris, 1994a, p.9). In terms of the present findings, the first suggestion is no longer relevant because, at the time of this research (2005-2009), the National Curriculum had been implemented for over 15 years. The findings seem to suggest, however, that the perceived priority and status of HRE continues to remain subordinate to more ‘traditional’ areas of the NCPE, namely sport and competitive team games. For example, when asked during the interviews “Which activity areas within the NCPE do you devote most time to?”, all of the teachers were clear on their focus which unsurprisingly was sport, often in the form of competitive team games:

Games. But that is partly ‘cause it’s our expertise and facilities driven. I know it shouldn’t be but it, you know, we’d like to be able to swim but we don’t have a pool and those types of things. (Kate, female, 4-7 years of experience)

Yeah we are predominantly a games school, I think most schools are. We do a lot of swimming and a lot of fitness... we mix it up. Time is precious and you have to do it quickly... (Claire, female, 30+ years of experience)
It would mainly be invasion games, probably from the old grammar school type really. Girls do netball and hockey and boys concentrate on rugby, football and cricket. (Thomas, male, 0-3 years of experience)

Approximately half of the Physical Education teachers who participated in the first phase of the study seemed to have limited experience of HRE and they tended to teach Health-Related knowledge through more ‘traditional’ NCPE activities (such as competitive team games) which they had much experience of and which they were most confident teaching (Green, 2008). It could be argued that this tendency is a manifestation of Physical Education teachers’ deeply-rooted philosophies which, as previously evidenced, tend to be preoccupied with sports generally, and competitive team games in particular (Green, 2003). How teachers teach HRE is therefore shaped by both the past (individual and social habitus), the present (context) and the amalgam of ideologies which have circulated Physical Education, to varying degrees, since its inception.

This privileging of sport within Physical Education was also evidenced in terms of the kinds of qualifications which the teachers viewed as relevant within HRE. Nearly a quarter of the teachers (24%) claimed to have a professional qualification, in addition to their formal academic qualifications, which they felt to be relevant for teaching HRE. Some of the teachers suggested that National Vocational Qualifications (NVQs) in Personal Training and qualifications in swimming teaching and aerobics were useful within this context. Most, however, claimed that National Governing Body qualifications in sports such as football, rugby and hockey were the only qualifications which they held that were relevant to their HRE teaching. This perceived relevance, however, is questionable.

Both phases of the research explored the contexts for learning (such as circuit training and aerobics) and the content areas (such as cardiovascular fitness and flexibility) that the Physical Education teachers covered within their HRE programmes. The contexts for learning and the content areas that were most heavily focused upon are now discussed.
7.2.1.2 HRE: Contexts for Learning and Content Areas

The survey data revealed that nearly all of the teachers focused upon cardiovascular (CV) fitness (98%) and fitness testing (94%) (see Appendix L for an example of a SoW which focused solely on CV fitness and fitness testing) and the interview data further confirmed this\(^{21}\) (see Table 6.1). Some of the teachers, for example, claimed that:

Implicit in all lessons, all Physical Education lessons is the fitness element...it’s gotta run through all the activities that you run, they’ve gotta have that fitness element, it has to be there. (Philip, male, 30+ years of experience)

Fitness is prioritised ...HRE is obviously to do with how fit we are. (Fred, male, 8-15 years of experience)

For HRE we usually do the multi-stage fitness test, to make sure where they are at. (Claire, female, 30+ years of experience)

The above quotations demonstrate the tendency for some Physical Education teachers to have a narrow understanding of what HRE represents and, further, for them to view HRE and fitness (testing) as synonymous. Indeed, the majority of the teachers who were interviewed seemed to think that fitness testing was the main vehicle through which to teach knowledge about HRE. A study by Hopple and Graham (1995) explored what children thought and felt about physical fitness testing and the results suggested that few children understood why they were doing the test and that they viewed it "not as a meaningful, positive experience, but as a painful, negative experience". As Harris (1994, p.10) stated, "The consensus is that, in order to be considered educational, the selected monitoring procedures should increase understanding of health and fitness concepts and promote positive attitudes towards involvement in physical activity". Cale and Harris (2009b) suggest, however, that there is little or no evidence to suggest that fitness testing has an impact upon children’s understanding of, or motivation to participate in physical activity.

\(^{21}\) At this juncture it is important to highlight that the term ‘fitness’ was not used by the researcher at any point during the research process.
Indeed, Cale et al. (2007) and Cale and Harris (2009b) suggest that if delivered inappropriately, fitness testing can be ‘counterproductive’ to physical education and the promotion of healthy, active lifestyles. Similarly, Garrett and Wrench (2008, p.21) contend that “the continuing and unproblematic use of fitness testing in schools and universities might actually contribute to narrow learning outcomes that cause more pain than pleasure”. In recognition of perhaps good intentions, Cale and Harris (2009, p.103) suggest that fitness testing within Physical Education and HRE “may well represent a misdirected effort in the promotion of healthy lifestyles and physical activity, and that Physical Education time could therefore be better spent”. They do maintain, however, that, if carried out ‘properly’, fitness testing could be valuable in terms of promoting lifelong physical activity (Cale & Harris 2009b; Cale et al., 2007).

As inferred previously (Section 3.6.2), two of the most uncritically accepted assumptions within the context of Physical Education are that: i) sport and exercise are tantamount to good health and; ii) health is synonymous with fitness (Garrett & Wrench, 2007; Green, 2008; Waddington, 2000). These assumptions are characteristic of the ideologies of health that have been associated with Physical Education since its inception (Cale, 2000a; Evans et al., 2008; Fairclough, Stratton & Baldwin, 2002; Green, 2003; Harris, 1997; Webb et al., 2008) and the findings discussed above suggest that little has changed in terms of understanding. For example, some of the teachers stated that:

For HRE we offer a block called ‘fitness’ and that’s basically going off to our off-site gym and using rowing machines etcetera and planning their own training programmes...I think it’s good to have that 10 minutes on fitness testing and/or fitness awareness which relates to that sport. (Ethan, male, 8-15 years of experience)

We try and do a number of fun tests with the kids based around the bleep test...try and make it a bit more specific to sport. (Stuart, male, 4-7 years of experience)

The data suggest that when teaching HRE, many of the Physical Education teachers focused upon ‘fitness for sport’ rather than ‘fitness for health’ and that they viewed
fitness rather than physical activity as paramount (Harris, 1994b, 2005). These findings concur with those of a number of authors (Capel, 2007; Fairclough et al., 2002; Harris and Penney, 2000) and, whilst those with a vested interest in sport (such as sports National Governing Bodies) may argue that such an over emphasis on sport within Physical Education is justified by virtue of 'London 2012 Olympics' and related government policies (such as PESSYP), other factors must be considered. One perhaps unintended consequence of such sports-focused policies is that they may undermine or 'overshadow' attempts to bolster the status and expression of health within Physical Education (Harris, in press). Further, an over emphasis on sport (usually in the form of competitive team games) may explain the focus on fitness and fitness testing within HRE which arguably serves to 'switch off' pupils who do not enjoy such activities and do not wish to participate in them across their lifespan.

Green (2003) provides an explanation for the reliance on sport within Physical Education by suggesting that, when faced with potential counteracting ideas or policies, teachers will adopt strategies with which they feel most comfortable and which 'sit well' with their existing philosophies about the nature and purpose of their subject. The present findings support those of Capel (2007), Green (2003) and Keay (2005b, 2006a, 2007a) who suggest that, for the most part, Physical Education teachers' philosophies are characterised by a preoccupation with sport.

The strong emphasis upon fitness within an area of Physical Education concerned with promoting healthy, active lifestyles, has proven to be contentious for a number of authors (Cale, 2000a, 2000b; Cale & Harris, 2006, 2009b; Corbin et al., 1995; Docherty & Bell, 1990; Garrett & Wrench, 2008; Rowland, 1995) because this inevitably means that some areas of learning (such as 'making choices about their involvement in healthy physical activity') are paid limited attention. It is not the inclusion of fitness-related activities that is the issue per se, rather it is the over emphasis upon these at the expense of devoting time to the broader, longer-term issue of physical activity across the lifespan. Although not the intention of HRE advocates, a 'product versus process' debate has developed and is concerned with the degree to which Physical Education teachers focus upon the 'product' of fitness as opposed to the 'process' of physical activity (see Section 7.4.1). In process sociological terms,
however, it is not valuable to dichotomise fitness and health as it is argued that a more adequate conceptualisation would encourage a blend of the two within a broad and balanced HRE programme.

Whilst many of the teachers seemed to view HRE, fitness testing and 'fitness for sport' as synonymous, evidence of wider HRE repertoires were apparent. For example, one female teacher (Sophie) stated:

We cover all Health-Related issues, focusing on the effects of a poor lifestyle and the benefits of a healthy lifestyle and offer a variety of Health-Related activities, reinforcing access to these outside of school. Pupils are involved in lots of research and are able to present their findings as well as experiment and experience lots of new and engaging activities such as boxercise, circuits, aerobics, pilates, stretching and toning, core stability and fitball, weight and resistance training, running - continuous, interval and fartlek - outdoor education, for example, hill walking, fitness testing... (Sophie, female, 0-3 years of experience)

Whilst it is acknowledged that HRE goes beyond physical activity, Sophie demonstrated how a HRE programme could incorporate a wide range of 'lifetime' activities that pupils can enjoy and continue to participate in across their lifespan. As a number of authors have recognised, a wide physical activity repertoire (Green, 2003) within Physical Education is likely to better reflect the changing trends in young people's leisure practices, in comparison to narrower Physical Education or HRE programmes (Green, 2002; Harris, 2009; Roberts, 2001). As findings from The Health Survey for England (2006) suggest, amongst the 7,257 children who responded, most reported their most popular activities to be active play and walking. In comparison, less than a quarter had participated in sport or exercise in five of the last seven days. If Physical Education and HRE were to more adequately reflect the leisure patterns of more young people - with less of a reliance on sport - then they would arguably be more relevant and would more effectively promote healthy, active lifestyles amongst young people (Green, 2003; Roberts & Brodie, 1992; Stratton et al., 2008).

Discussion

22 The term 'repertoire' is used to refer to the range of contexts for learning and pedagogies that PE teachers utilise when delivering PE, and HRE in particular (Capel, 2005; Green, 2003; Winsley & Armstrong, 2005).
At the same time, however, it must be acknowledged that providing a wider range of physical activities may not necessarily promote the knowledge, skills, understanding, attitudes and confidence required to participate in physical activity both now and in the future. Activities such as cycling, pilates or fitness testing merely represent a context for learning and it is pupil learning that is paramount (Harris, 1995, 2008). If Physical Education teachers are expected to promote learning about HRE, it is critical that they are themselves ‘equipped’ with the necessary knowledge, skills and understanding to do so (see Table 3.1). The present findings revealed that many of the Physical Education teachers had not engaged with HRE to any great extent, suggesting therefore that they may benefit from more guidance, support, resources and effective CPD within the area (see Section 7.2.1 and 7.3.1). This would arguably better prepare them to achieve the learning outcomes outlined by Harris (2000) which relate to HRE and encourage a broader range of content and contexts for promoting healthy, active lifestyles. Moreover, professional resources that focus on relevant and applicable pedagogies would allow teachers to provide “appropriate physical activity opportunities, information and guidance to children, and encouraging and empowering them to make informed lifestyle choices” (Cale & Harris, 2009a, p.131).

Acknowledging that more can be done in terms of promoting healthy, active lifestyles, Stratton et al. (2008) suggest a number of strategies that Physical Education teachers could be implement. Such strategies include: utilising inclusive, student-centred pedagogies which focus more upon lifetime activities; modifying teaching strategies in a way that encourages student’s ‘active’ learning; and leading whole-school approaches to physical activity promotion (Stratton et al., 2008).

The teacher quoted, Sophie, demonstrated a relatively broad understanding of HRE in comparison to the other teachers and she offered a broader range of contexts for learning about the area. Due to this, an additional interview was carried out with her in order to gain a more detailed understanding of why she engaged with HRE in such a way. A following section (7.4.5) presents further data from Sophie in the hope that
exploring particular aspects of her philosophies illuminates why she engaged with HRE as she did, and others did not.

Given how Physical Education teachers view and engage with HRE is likely to impact upon pupil learning, the following section explores and discusses how the teachers within this study viewed HRE an area of their subject.

7.2.2 Physical Education Teachers’ Views of HRE

Whilst some literature has focused upon how Physical Education teachers view HRE (Cale, 2000b; Harris, 1994a), it has mainly been present-centred. In accordance with a process sociological approach, this section reflects an attempt to trace the Physical Education teachers’ views of HRE over time, with reference to the ‘major categories of experience’ (Tsangaridou, 2006a, p.487) which were outlined in the previous section.

7.2.2.1 School and Initial Teacher Education

As stated previously, approximately half of the teachers had engaged with HRE whilst at school as a pupil (49%) and during their ITE (50%), both of which constitute categories of experience. Of the 48 teachers who reported to have been taught HRE at school, more than half (63%) felt that it was a positive experience. With regards to their ITE, less than half (42%) of the teachers felt that they had been adequately prepared to teach Physical Education, whilst just over a quarter (27%) felt they had been adequately prepared to teach HRE in particular. Most of the teachers felt that they would have benefited from more engagement with HRE during their ITE, and the quotations below are representative of most of the teachers who were interviewed:

It would have been valuable to have had some insight into HRE (during ITE)...I had to work my ass off to build my resources and knowledge around it. (Sophie, female, 0-3 years of experience)
Regarding HRE, the GTP23 (Graduate Training Programme) was pretty much bog standard. I definitely would have wanted more training on the course and info on delivery. (Stuart, male, 4-7 years of experience)

The review of literature (see chapters three and four) suggests that there is a dearth of research that has focused upon Physical Education teachers’ engagement with HRE within their ITE (HRE-ITE), and there are therefore limited opportunities for comparison. In the past there has been speculation over the amount of time dedicated to HRE within ITE, with time constraints being presented as a prime factor of influence (Fox & Harris, 2003). With reference to Fox and Harris (2003), it seems that the restricted amount of time teacher educators are afforded with trainee teachers is a factor which serves to constrain teachers’ engagement with HRE within and perhaps beyond ITE.

Although time constraints mean that ITE cannot be expected to prepare Physical Education teachers fully for the reality of their chosen profession (Fox & Harris, 2003), it would be reasonable to expect more of the teachers to have been adequately prepared to teach Physical Education and HRE following their initial training. HRE has been a statutory process within the National Curriculum since 1992 and it was therefore surprising that more teachers had not experienced it during their ITE. It is possible, however, that some had experienced HRE but had not recognised it as such because, for example, it may have been permeated through other areas of the Physical Education curriculum.

According to the survey data, most (71%) of the fifty-five teachers who had engaged with HRE-ITE had done so through both practical and theoretically based activities. More generally, approximately a quarter of the sample felt that that the amount (24%), content (26%) and structure (27%) of their HRE-ITE, as well as the support (21%) they received was less than adequate. Moreover, nearly three-quarters (73%) felt that their ITE had not prepared them to teach HRE effectively. These figures paint a relatively bleak picture in terms of the coverage of HRE within ITE. Indeed, it

23 Graduate Training Programmes (GTP) are a route into teaching which is comprised entirely of school-based training.
seems that a large proportion of the teachers did not view their experience of HRE-ITE as adequate, in any sense. Given the importance of HRE-ITE (Armour & Harris, 2008; Castelli & Williams, 2007; Harris, in press; Trost, 2006), the large proportion of teachers who had not engaged with the area during their ITE may be proving to be problematic. Indeed, this could partly explain the issues relating to the status, organisation and teaching of HRE which were discussed earlier (Section 7.2.1).

It is worth noting that the teachers within this study had chosen different routes into teaching (such as a Post-Graduate Certificate in Education [PGCE] or a Graduate Training Programme [GTP] but their commentary tended to be similar. Some representative comments are articulated below:

HRE was relatively non-existent in my GTP. The only requirement was that I had subject knowledge for each of the sports. (Stuart, male, 4-7 years of experience)

I’ve never had any training (in HRE) or anything like that. There was nothing involved in HRE in my PGCE. I’ve never had any training or anything like that. (Nathan, male, 4-7 years of experience)

In my teacher training we learnt about how to teach warm-ups and cool-downs and about heart-rates. (Joanne, female, 4-7 years of experience)

These findings further confirm the work of Cardon and De Bourdeauhuij (2002) and Harris (2003, 2005) who suggested that some Physical Education teachers may not be adequately trained to achieve the learning outcomes assigned to HRE (see Harris, 2000). In other words, teachers’ interdependencies with others, especially during their CPD, have resulted in limited knowledge production with regard to HRE. At the same time, of course, it is important to acknowledge that ITE is ‘initial’ education and cannot be expected to cover all aspects of the subject, knowledge and pedagogies in depth.

The degree of influence which ITE appears to have had on the Physical Education teachers’ engagement with HRE and HRE-CPD is discussed further within sections
7.2.2.4 and 7.4.2. The nature and extent of their engagement, in relation to their confidence in teaching HRE is now discussed.

7.2.2.2 Confidence in Teaching HRE

The survey data suggested that most (86%) teachers felt confident in their perceived knowledge and ability to teach HRE. These findings support those of Castelli and Williams (2007) who conducted a study in North America which involved testing 73 Physical Education teachers' knowledge of Health-Related Fitness (HRF)24. The findings revealed that the teachers were 'very confident' in their knowledge of HRF and their ability to teach it. Following the testing, however, it was concluded that their level of knowledge did not correlate with their degree of confidence25. Similarly, the present findings suggest that the teachers’ confidence in their own ability to teach HRE did not necessarily correlate with the extent of their past engagement with the area. Given that approximately half of the teachers had not formally engaged with HRE in any capacity prior to being expected to teach it, it is surprising that so many felt confident teaching it. This discrepancy between the teachers’ engagement with HRE and their confidence in their ability to teach the area could be explained, in part, by their philosophies and their habitus in particular.

As proposed earlier (Sections 7.2.1.1 and 7.2.1.2), many Physical Education teachers within this study demonstrated a narrow and somewhat confused understanding of HRE, and they therefore viewed it mainly as a context for fitness testing and performance enhancement. It is argued that the teachers’ narrow understanding of HRE has led them to have a false sense of confidence in relation their ability to effectively teach the area. It is further argued that the teachers within this study felt confident in their ability to promote knowledge, skills and understanding through fitness and sport related activities, but were less aware of the learning process within a HRE context.

24 HRF is the North American equivalent of HRE in England.
25 The findings of this study are discussed in greater detail in chapter 2 and a later section (7.4.4) that explores PE teachers' knowledge of HRE.
This demonstrates the tendency for school Physical Education to “retain traditions of the past” (Keay, 2005a, p.139) but it may also suggest that many Physical Education teachers are not currently being challenged in a way that could change their practices, or indeed their philosophies (Green, 2003). It could be claimed that the growing importance of HRE within the curriculum is not viewed by many Physical Education teachers as a radical change that warrants a change in practice and, therefore, status quo is perpetuated.

7.2.2.3 Value of HRE

The survey data suggested that almost all (96%) of the teachers valued HRE as a compulsory component of the Physical Education curriculum, and this strength of feeling was further reinforced during the interviews. For example, one teacher provided a fairly representative statement when he stated:

If Physical Education was a wheel, HRE would be the hub. Although it’s the smallest bit, without that everything falls apart. That’s why it’s gotta run throughout all activities that you run, they’ve gotta have that fitness element, it has to be in there. Understanding as well, we really need to push that. Later on, you hope that they will continue to do activities ‘cause they enjoy it, but also for the benefits for their body. (Philip, male, 30+ years of experience)

This statement highlights the value the teachers attached to HRE, but it also illuminates the tendency for the teachers to discuss health and fitness as though they are synonymous (see Section 7.2.1.2). This tendency has been previously highlighted by Cale et al. (2007) and it goes some way to evidencing the misunderstanding and confusion that often surrounds HRE. In terms of the value attached to HRE, the findings supported previous research by Harris (1994a) who found that Physical Education Heads of Department (HoD) viewed health promotion to be one of the most important objectives of Physical Education. Harris (1994a) also claimed that most HoDs welcomed the formal introduction of HRE (in 1992) and viewed it as an important development for PE and Health Education (now PSHE) (Harris, 1994b).

Whilst the present findings confirmed that most of the Physical Education teachers valued HRE and felt confident teaching it, according to Cale (2000b, p.167), if teachers are to be successful in promoting healthy, active lifestyles amongst young
people it will require “more than an enthusiasm for and belief in its value, importance and role”. Indeed, if the aims of HRE are to be achieved, it is necessary that teachers have a clear and broad understanding of the area and recognise the differences between terms such as health, fitness and physical activity. The findings evidenced above, however, suggest that either: i) some of the Physical Education teachers did not have a sufficient level of knowledge, skills and understanding or, alternatively, ii) their knowledge is not being applied in practice. It is important for Physical Education teachers to be encouraged to view health and fitness as separate yet interrelated concepts and, further, that they are given the necessary support and guidance needed to teach HRE effectively. This issue is discussed further in a following section that focuses upon the nature and extent of Physical Education teachers’ engagement with HRE-CPD (Section 7.3).

7.2.2.4 HRE: One Term, Many Meanings

As Harris (2000, p.2) observes, the area of Physical Education that focuses specifically upon promoting purposeful physical activity associated with health enhancement has been known by many terms, including “Health-Related fitness (HRF), Health-Related physical fitness (HRPF), Health-Related Physical Education (HRPE), health based Physical Education (HBPE), health focused Physical Education (HFPE)”. The survey findings suggested that the majority of teachers held narrow, inconsistent and at times contradictory views with regards to the aims of HRE. When asked to explain what they viewed the aim of HRE to be, for example, some teachers reported that it was:

To equip students with the knowledge of how to prepare, perform and evaluate training methods designed to promote physical fitness. (277, male, 8-15 years of experience)

To ensure that students understand warming up and cool-downs. Able to manage their own training programmes with all the components of fitness included. (82, female, 4-7 years of experience)

To educate children about healthy lifestyles, their level of fitness, ways to increase specific levels of fitness-related to specific sports etc. (21, female, 0-3 years of experience)
These teachers' views differ to varying degrees from the formally stated aim of HRE which, according to Harris (2000, p.2), is to promote "knowledge, understanding, physical competence and behavioural skills, and the creation of positive attitudes and confidence associated with current and lifelong participation in physical activity". The tendency for teachers to have a narrow interpretation of HRE is reflected in their relatively restricted view of HRE as comprising 'warm-ups', 'cool-downs', fitness-related activities and safety (Cale & Harris, 2005a; Harris, 2009). Indeed, it seems that the intended aims of HRE have been ‘lost in translation’ from policy to practice.

The above quotations also demonstrate the lack of consensus surrounding HRE and, in this respect, support the work of Cale and Harris (2009a), Green (2008) and Harris (1994, 1997) who also found that HRE meant different things to different teachers.

The interview data further confirmed the wide-ranging and disparate views that were reflected within the survey. For example, when asked what they viewed the aim of HRE to be, some teachers stated that:

The aim of HRE is to improve fitness levels. (Ethan, male, 8-15 years of experience)

HRE is a massive way of keeping people within sport. (Nathan, male, 4-7 years of experience)

[The aim of HRE is] to educate students on health and fitness and the importance of physical activity for life (Stuart, male, 4-7 years of experience).

The above quotations again demonstrate inconsistency in relation to how the teachers perceived the aims of HRE to be. Indeed, the first two quotations are significant in that they reinforce the literature, referred to earlier, that suggests a narrow understanding of HRE as well as a privileging of fitness and sport by Physical Education teachers (Capel, 2007; Penney, 1998, 2008; Smith, 2004). This is not a new issue (see for example, Cale & Harris, 2005a) and it is presented here as an indicator that little appears to have changed since the earlier work of Harris (1994a, 1997). The data suggest that the apparent slippage between policy and practice may be more deep-rooted than initial analysis suggested. A more in-depth discussion on this issue
is presented in a following section which addresses policy and progress within PE-CPD more generally (7.5.1).

Literature has suggested that Physical Education teachers’ views tend to be clouded by various ideologies (Evans & Penney, 1998; Green, 2003; Smith, 2004) which come to form part of their philosophies. Each of the above quotations demonstrate the tendency for Physical Education teachers’ views to be influenced by ideologies which, according to Green (2003, p.34) are “more-or-less mythical, more-or-less distorted” ideas. The first quotation, it is argued, represents a manifestation of an ideology of health that is underpinned by an assumption that health equates to, and is synonymous with fitness (Waddington, Malcolm & Green, 1997). In the context of this research, it seems that many of the teachers equated HRE with fitness testing and promotion, despite existing evidence to suggest that the link between physical activity and health is stronger than between fitness and health (Riddoch & Boreham, 1995). Harris (2000, p.3) adds that “For children, the link between activity levels and health appears stronger than between fitness and health...because the latter is constrained by genetic limitations, maturational status and trainability”.

The second quotation, provided by Nathan, highlights another ideology of health which is based on the assumption that: i) there is always a positive relationship between sporting participation and health (Waddington, 2000) and; ii) the aim of HRE is to promote sport. An articulation of these assumptions demonstrates a lack of understanding with regards to the relationship between the two concepts. HRE can encompass a broad range of contexts for learning, and sport can indeed be one of these. To assume that HRE is primarily concerned with sport, however, is to express a narrow view of the nature and purpose of the area (Cale, 2000b). Furthermore, while participating in some sports can have health benefits it can also have health costs. As Waddington et al. (1997) suggest, as we move along the continuum away from non-competitive physical activities and towards competitive sport, the health costs, usually in the form of injuries, increase.
Drawing attention to the third quotation, Stuart provides a relatively comprehensive understanding of HRE and appears to emphasise the importance of education in empowering young people to be physically active for life. Whilst one aim of HRE is to educate, however, there is an appreciation that knowledge alone does not necessarily influence (health) behaviours (McDonald & Scott-Samuel, 2004; Smith & Biddle, 2008).

It has already been acknowledged that ‘sport’, ‘fitness’ and ‘health’ have often been viewed by teachers as synonymous (Harris, 1994b, 2000). This misunderstanding, as evidenced earlier, is demonstrated to a certain extent by the lack of coherence between the aim of HRE and the contexts for learning that teachers often utilised to achieve the relevant learning outcomes (see Harris, 2000). Such confusion is arguably not surprising given that teachers have been presented with a number of different interpretations of HRE over the past 20 years (Armstrong & Biddle, 1992; Green, 2008; Harris, 2000, in press) and they have had limited or no engagement with HRE at school, during their ITE or within subsequent CPD (see Sections 7.2 and 7.3 and 7.4).

It could be argued that Physical Education teachers’ interpretations of the complex processes underpinning HRE have remained relatively unchallenged throughout their professional lives. In process sociological terms, this highlights the importance of the education figuration and the tendency for those within it to reinforce and reproduce the dominant ideologies and practices as opposed to challenging them. Indeed, within the NCPE, ‘fitness’ and ‘health’ have often been discussed as one and the same (Cale & Harris, 2005a) and, as such, it is not surprising that teachers tend to use one term, usually ‘fitness’, to refer to both concepts. The ideologies and common sense assumptions that seem to have infiltrated Physical Education teachers’ philosophies (Capel, 2007; Green, 2000, 2003) have arguably served to constrain the development of HRE and reduced it to the ‘production’ of physical fitness as opposed to the complex ‘process’ of lifelong physical activity (LLPA). The often complex relationship between the product of fitness and the process of physical activity is discussed further in Section 7.4.1.
After discussing the nature and extent of the Physical Education teachers' engagement with HRE, the following section discusses their engagement with CPD within that specific context. The section begins with a consideration of PE-CPD as the context within which HRE-CPD operates.

7.3 Physical Education Teachers' Engagement with HRE-CPD

The education figuration provides numerous opportunities for Physical Education teachers to engage with professional development (Keay, 2005b). In order to understand Physical Education teachers' engagement with HRE-CPD in particular it was deemed necessary to first gain an appreciation of their engagement with PE-CPD more generally. This allowed for their engagement with HRE-CPD to be contextualised and for comparisons to be made. This section therefore presents and discusses findings relating to Physical Education teachers' engagement with PE-CPD before going onto discuss their engagement with HRE-CPD in particular.

As Keay (2005b, p.3) states, "it is clear that professional learning is both constrained and enabled by the constituents of the figurations" within which Physical Education teachers are a part. Despite a number of constraints which are later highlighted, the survey findings revealed that over half of the teachers felt that their school provided them with adequate opportunities for PE-CPD (61%), and that the amount (52%) and content (59%) of their PE-CPD was adequate. The findings also revealed that, in the previous 12 months, the majority (86%) of the teachers had engaged with PE-CPD that consisted mainly of ‘courses’ and ‘in-house’ training that was carried out during the daytime, and on a monthly (34%) or annual (31%) basis.

CPD is statutory for all teachers and the high number who had engaged with PE-CPD perhaps reflected this. It seems, however, that despite a range of developments within the context of PE-CPD (see Armour & Yelling, 2007 and Keay, 2006b), and in keeping with the findings of Garet et al. (2001), most of the teachers only reported to engage with traditional forms of CPD. It could have been the case though, that some of the teachers were engaging with more informal types of CPD, such as team-teaching, but failed to recognise it as CPD. Research suggests that reflection
constitutes one component of effective CPD (Armour & Yelling 2003; DfEE, 2001; Hustler et al., 2003) and it is therefore important that teachers are encouraged, and have the time necessary to critically reflect upon their practices and recognise all types of CPD.

It is a formal requirement that all teachers in England have a planned CPD programme but, according to the survey findings, over one-third (37%) of the teachers did not possess one. Most (89%) kept a formal record of their CPD activities which suggests that they either valued CPD to some degree, or that they were required by policy - at local and national levels - to participate in and record their CPD, perhaps to gain promotion. The survey data did suggest that most of the teachers viewed CPD as a valuable activity and this was further exemplified in the interviews:

We class it [CPD] as very important, we really do class it as very important. We always start off 2 days every summer term, before any other school in (town) and do 2 CPD days. Now that could be across the board or Physical Education teaching, it just depends what we need to cover really. (Ethan, male, 8-15 years of experience)

It is highly regarded from a whole-school perspective and it’s reviewed on a regular basis. Training days have time allocated to discuss targets and set new goals for us all. (Sophie, female, 0-3 years of experience)

[CPD has] really put Physical Education on the map, if that’s the right word? (Claire, female, 30+ years of experience)

I think CPD is becoming more apparent now. (Name) who is in charge of our PD (professional development) stood up in a staff meeting and said “Look, if you apply for threshold, after being in the profession for 6 or 7 years (I think it is) and you haven’t got all your PD forms and you haven’t proved that you’ve met all your targets that’s an immediate ‘cross in the box’ which might signal why you might not be eligible for threshold, which will make your pay go up. (Thomas, male, 0-3 years of experience)

In contrast though, a few teachers held differing views which were reflected in the following comments:
If I’m gonna be totally honest with you, it’s that it’s (CPD) gonna be at the end of the year, get it done as soon as possible and out of the way (Fred, male, 8-15 years of experience).

Not many teachers seem to do CPD. It’s a bit of a hassle to be honest...getting cover etcetera. (Joanne, female, 4-7 years of experience).

Over two-thirds (69%) of the teachers who responded to the survey questionnaire felt that they had a high degree of influence over the CPD they chose to engage with. Approximately half (48%), however, felt that their needs had not been met by their engagement with CPD and this supports previous work by Armour and Yelling (2004a, p. 87) who suggested that there was a need to “rethink the nature and type of provision of CPD for Physical Education teachers to...cater more broadly for teachers’ learning needs”. For example, approximately a third of the teachers felt that their CPD was driven by government policy as opposed to their own needs. This goes some way to reaffirming the work of Campbell (2002, p.6) who claimed that much of teachers’ CPD activities, since the introduction of the National Curriculum, “have been driven by the needs of government initiatives, policy and a somewhat punitive inspection regime”. From this perspective it can be deduced that Physical Education teachers are somewhat constrained by their inevitable interdependencies with some government officials who are responsible for certain initiatives, policies and inspection. A process sociological approach allows for a better appreciation of how the complexities of the education figuration have come to direct the development of particular social processes, such as teacher CPD. In this respect, the broader the web of interdependencies, the greater the division of competing interests generated within the figuration and the more any one individual or group is ‘pulled’ in various and multiple directions (Mennel, 1992). Within a Physical Education context, which “retains the traditions of the past” (Keay, 2005a, p.139), the impact of competing interests upon the process of CPD is pertinent. With reference to the present findings it is thus argued that, as a result of the increasing complexity of the education figuration (Williamson & Myhill, 2008), some teachers (33%) felt that their needs were displaced in favour of those of the government (Campbell, 2002) (for example, with respect to the National CPD Strategy (DfEE, 2001) and the National PE and
School Sport Professional Development Programme [PESSPD] [http://www.national.pesscpd.com/home/index.htm]). Moreover, almost half (43%) of the teachers viewed CPD as a commercial activity, not a personal endeavour. These somewhat negative perceptions of commercialisation and ‘managerialization’ (Williamson & Myhill, 2008) will have arguably had an impact upon the teachers desire to engage with any form of CPD.

In order to meet teachers’ needs, as well as overcome some of the barriers towards CPD engagement, the National CPD Strategy (DfEE, 2001) actively promoted school-based professional development (Armour & Yelling, 2003). According to Keay (2005a, p.140), “In order to develop in a school-based professional development environment, and to use learning, teachers must exist in a supportive context”. Whilst the majority (82%) of the teachers felt that the support they received for PE-CPD from their department was adequate, less than half (44%) felt supported by their senior management. This discrepancy could be linked to a number of factors, not least the lack of status that some Physical Education teachers within this study felt they had in relation to teachers of other subjects. This issue has been previously referred to (see Sections 7.2.1.1 and 7.2.1.2) and is discussed in greater depth in a following section (7.4.7).

After providing an insight into the context within which the Physical Education teachers engaged with PE-CPD in general, the focus now turns to their engagement with HRE-CPD in particular. As previously discussed, the survey data suggested that most of the teachers’ ITE had provided them with limited, if any, explicit engagement with HRE. Further exploration via the interviews confirmed these findings and also suggested that many of the teachers felt that their ITE had not provided them with the knowledge, skills, understanding and support they needed to teach HRE effectively. As stated, the majority of the teachers had engaged with PE-CPD in the previous 12 months and most viewed their engagement positively. In contrast, however, the survey and interview data revealed that many of the teachers (70%) had not engaged in HRE-CPD in the previous three years. Indeed, some of the teachers reported that:
I've never been on a course for HRE... I guess that it's (HRE-CPD) just never been made readily available. (Nathan, male, 4-7 years of experience)

There hasn't been CPD to do with HRE. (Ethan, male, 8-15 years of experience)

These findings go some way to supporting those of existing research which has suggested that Physical Education teachers' opportunities for effective professional development have not been sufficient, especially with regards to HRE (Dowling Naess, 1996; Fox & Harris, 2003; Harris, 1994, in press; Trost, 2006). As a result, health and LLP A appear to be two areas which tend to be absent from Physical Education teachers' CPD profiles (Armour & Yelling, 2004b; Castelli & Williams, 2007; Harris, in press; Kulinna, McCaughtry, Martin, Cothran & Faust, 2008; Trost, 2006). In addition, however, it is important to acknowledge that the above quotations, from Nathan and Ethan, suggest that a limited awareness, as opposed to limited opportunities, for HRE-CPD had constrained some Physical Education teachers' engagement with the area (Sections 7.3.and 7.4.10). For example, HRE modules were offered as part of the National CPD Strategy (DfEE, 2001), but few teachers chose to engage with them.

Another factor which is of course important to acknowledge is that some of the Physical Education teachers did not communicate a perceived need or desire to further their knowledge, skills and understanding within the context of HRE. For example, when asked whether “you or any of your colleagues in the department need HRE-CPD?”, Nathan (male, 4-7 years of experience) stated:

Not really, I wouldn't have said so, not in HRE. We are all fairly good with the fitness testing and what it encompasses...but, like I say, we can only incorporate 10-15 minutes (of HRE) into a lesson so is it worth it spending a day on a course?

This arguably false sense of confidence in relation to HRE could arguably stem from the lack of clarity which characterises Physical Education teachers' understandings of the area. As highlighted earlier, most teachers' philosophies are heavily underpinned by ideologies of sport and healthism and they therefore understand HRE in terms of
fitness testing and its role in ‘fitness for sport’. Due to their past experiences, most Physical Education teachers are confident in their ability to disseminate fitness and sport related knowledge so when asked about their need for HRE-CPD, many did not view it as a priority (see Section 7.4.5 and Figure 7.1).

Despite this, however, the data also suggested that some of the teachers who were interviewed had a positive attitude, at the time at least, towards pursuing HRE-CPD. For example, some teachers stated:

I would really value courses in HRE, just to update us on the best ways of delivering it, the best equipment for it and also looking at activities that it can be delivered through really effectively. (Frances, female, 16-30 years of experience)

I would quite like it [HRE-CPD] to make it a bit more varied for the boys to do. (Stuart, male, 4-7 of years of experience)

For the teachers who had participated in HRE-CPD, both the survey and interview data suggested that the content had typically been concerned with fitness testing and how to use fitness equipment. This therefore reinforced their existing understanding of HRE rather than challenged what appeared to be the status quo. For example, one teacher stated:

We recently just did a four week block on fitness testing alone which was run by the Head of Department and the Key Stage Three co-ordinator, where all the kids in year seven, eight and nine did the seven main fitness tests. (Ethan, male, 8-15 years of experience)

Nonetheless, the few teachers who had engaged with HRE-CPD felt that it had enhanced their teaching of the area. This was especially true of those who had been presented with resources and practical examples of how to teach HRE. For example, one female teacher discussed her last HRE-CPD experience, in 1990, in which she:

...went to the Loughborough week-long course, HRE, where they (Jo Harris and Jill Elbourn) told us things about Action for Heart Health. They gave you lots of ‘hands-on’ ideas and lots of worksheets, practical things you can do in classes. (Claire, female, 30+ years of experience)
This quotation highlights two interesting points. Firstly, it emphasises the value attached to practical and relevant CPD, a view which was adopted by all of the teachers who were interviewed. Indeed, practicality and relevance have been considered by a number of authors to be characteristic of ‘effective CPD’ (Armour & Yelling, 2004a; Garet et al., 2001; Hustler et al. 2003; Keay, 2005a; Penuel et al., 2007). Wright, Konza, Hearne and Okley (2008) came to a similar conclusion when monitoring the impact of a professional development model in Australia. They found that Physical Education teachers tended to value practical activities, available resources, the opportunity to interact with other teachers, and the time to plan accordingly.

Secondly, returning to Claire’s quotation, it is interesting to note that it had been 18 years since she had last engaged with HRE-CPD and, further, that she did not feel it necessary to engage with any further HRE-CPD. The reasoning for Claire’s view could be rooted in her underestimation of the dynamic knowledge base associated with HRE (such as changes in physical activity guidelines), and therefore she may not have appreciated the need to keep up to date. There have been numerous developments within the education figuration, relevant to HRE in the past 18 years (such as curriculum revisions, new physical activity recommendations for young people, and the introduction of government initiatives such as ‘Healthy Schools’) and if Physical Education teachers are to be effective, then it would seem important that they are kept abreast of and up to date with such developments.

As suggested previously, if Physical Education teachers are to play a role in public health, or more specifically in physical activity promotion, it is crucial that they have the necessary knowledge, skills and understanding to be able to do so (Armour & Harris, 2008; Cale, 2000b; Cardon & De Bourdeaudhuij, 2002). A number of authors have emphasised the importance of providing teachers with guidance and support so that they can develop high quality HRE programmes that promote healthy, active lifestyles (Armour & Harris, 2008; Cale, 1996, 1997; Green, 2000, 2002a, 2004; Harris, 1997, 2005; McGinnis, Kanner & DeGraw, 1991; Sallis et al., 2006). Given the Physical Education teachers’ limited engagement with HRE, it is argued here that
effective HRE-CPD is essential in ‘equipping’ them to teach HRE as part of a broad and balanced curriculum. The findings suggest, however, that both the ‘I’ in ITE and the ‘C’ in CPD appear to have been overlooked which unfortunately, raises questions about the degree to which teachers have been prepared to teach HRE effectively.

Having discussed the nature and the somewhat limited extent of the Physical Education teachers’ engagement with HRE and HRE-CPD, the following sections discuss the wider social processes which appear to have both constrained and enabled the teachers’ engagement within this context. As previously stated, the teacher-centric nature of this research means that all of the data discussed in this chapter originate from the ‘personal’ level of the education figuration. On this basis, the teachers’ ‘personal’ philosophies have emerged as a valuable conceptual tool in terms of exploring their past experiences of HRE (habitus), and their professional context in order to better understand their engagement with HRE and HRE-CPD.

7.4 Physical Education Teachers’ Engagement with HRE and HRE-CPD: The Wider Social Processes

Most of the wider social processes and interdependencies which appeared to have influenced the teachers’ engagement with HRE were also powerful in terms of their impact upon the teachers’ engagement with HRE-CPD. A number of social processes - linked to the privileging of particular ideologies and practices within HRE, limited attention paid to HRE within degree programmes and ITE, a medico-health rationale for Physical Education, teachers’ knowledge and philosophies, gender, power, status, support, resources, relevance and awareness - are now discussed in order to provide some reasoning for the Physical Education teachers’ somewhat limited engagement with HRE and HRE-CPD across their lifespan.

It is interesting to note that despite a number of developments, initiatives and policies within PE, HRE and CPD in recent years there seems to be, what Sparkes (1989, p.60) has termed, “innovation without change”. For example, whilst ‘healthy, active lifestyles’ have been paid increased attention within the NCPE (QCA, 2007), ‘fitness for sport’ as opposed to ‘fitness for health’ appears to be continually privileged in
practice (Harris, 2005, in press). This apparent ‘slippage’ between policy and practice in Physical Education (Penney and Evans, 1999) and HRE is arguably rooted in the tendency for Physical Education teachers to rely on their philosophies, and not the curriculum, to guide their practices (Section 7.4.5). This apparent emphasis upon the ‘product’ of fitness is discussed in greater detail in the next section (7.4.1).

7.4.1 Product and Process
Harris and Cale (2005a, p.33) have highlighted that “media messages to date have tended to favour the notion of ‘getting young people fitter’ as opposed to ‘getting young people more active’”. With reference to the present findings, it could be argued that this tendency has served to reinforce the existing philosophies and practices of many Physical Education teachers. As proposed earlier, a focus upon the process of physical activity may be more valuable than a focus upon the product of fitness (Harris, 2005; Riddoch & Boreham, 1995; Stratton et al., 2008). As outlined in chapter three, whilst both physical activity and fitness can impact upon health, levels of physical activity can be controlled to a higher degree than fitness, mainly due to the influences of genetics and maturation status on fitness (Cale & Harris, 2005a; Riddoch & Boreham, 1995). Authors, such as Cale and Harris (2002) and Pangrazi (2000), have also proposed a number of behavioural reasons for focusing on physical activity as opposed to fitness, not least because physical activity can be experienced by all. From a behavioural perspective, it has been suggested that Physical Education can provide young people with the knowledge, skills and understanding required to ensure that physical activity becomes part of their lives, both now and in the future (Fairclough & Stratton, 2005; Pangrazi, 2000).

The complexity that underlies Physical Education teachers’ continued preoccupation with ‘fitness for sport’ can be explained in a number of ways. Based on the present findings, and with reference to existing literature, it is argued that the tendency for Physical Education teachers to privilege fitness and sport within HRE can be partly explained with reference to social processes and interdependencies relating to the nature of Physical Education/Sport Science degree programmes (Cale & Harris, 2009a; Colquhoun, 1994; Harris, 2009) and ITE (Fox & Harris, 2003), and the
medico-health rationale which has traditionally justified Physical Education in schools. On a personal level, the data suggest that the Physical Education teachers' HRE knowledge (Brown, 2003; Cale, 2000b; Cale et al., 2002; Castelli & Williams, 2007), their philosophies (Green, 2003) and their gender (Penney & Harris, 2002; Keay, 2005b, 2007b) also have an impact upon their propensity to engage with HRE and HRE-CPD. Each of the factors above is discussed in the following sections.

7.4.2 Physical Education and Sport Science Degree Programmes and ITE

Some authors have suggested that the emphasis on fitness and sport within HRE may be partly a consequence of the prescriptive and scientific focus of the Physical Education and Sport Science degree programmes from which teachers usually graduate (Cale & Harris, 2009a; Colquhoun, 1994; Harris, in press). Similarly, McNamee (2005) has expressed his concerns over the degree programmes from which Physical Education teachers typically graduate and questions whether the scientific focus within those programmes can promote effective teaching and learning in Physical Education. The findings from the present study, which revealed that over half of the teachers (58%) did not feel that they had been prepared to teach HRE, seem to reaffirm McNamee’s (2005) concerns.

The relatively limited attention found to be paid to HRE within ITE has, it is argued, contributed to the narrow view that many of the teachers held of the area. The constraints placed upon initial teacher educators have been previously noted (see Sections 4.10 and 7.2.2.1), and the present findings support those of Fox and Harris (2003) who suggest that the structure and funding of ITE often results in limited opportunities for pre-service teachers to engage with HRE as part of the Physical Education curriculum (for example, Stuart commented, “There was no focus on HRE in my GTP”). Within a North American context, Trost (2006, p.184) has confirmed the findings of Fox and Harris (2003) and has subsequently called for teacher training programmes to “bring a legitimate public health perspective to their students”.

Fox, Cooper and McKenna (2004) explain that the current training of new teachers in the UK consists mainly of working in schools under the supervision of experienced
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teachers. They argue that this system “restricts exposure to changes in educational thinking and techniques and is likely to perpetuate existing methods and values, as well as inhibit innovative approaches” (Fox et al., 2004, p.351). If this is accepted, then the limited extent to which HRE (in practice) has developed over the past 15 years can be understood in terms of limited opportunity for innovation. On the basis of the present findings, and with reference to existing literature (Fox et al., 2004; Keay, 2007b; Green, 2003), it is argued that Sparkes’ (1989, p.60) notion of “innovation without change” is once again prevalent in this context. More specifically, it is argued that innovative methods of teacher training do not necessarily impact upon Physical Education teachers’ practices because their philosophies are often tied to the past (Curtner-Smith, 1999; Keay, 2005b; Green, 2003). Although “learning through doing” allows for an easier transition into qualified teaching, “there is a need to address how to optimise the capacity to generate new physical activity promotion ideas in time-pressed department offices” (Fox et al., 2004, p.351) which are more-often-than-not inclined to maintain the status quo.

Based on the findings discussed thus far, the extent to which the aims of HRE are achieved is questionable. Despite this, however, HRE and Physical Education more generally continue to be justified on the basis of a medico-health rationale which is now discussed.

7.4.3 HRE: A Medico-Health Rationale

As previously stated within this thesis, there is a long-standing expectation for schools (Cale & Harris, 2009a; Cothran, McCaughtry, Hodges Kulinna & Martin, 2006; Garrett & Wrench, 2008; Penney & Jess, 2004; Welk, Eisenmann & Dollman, 2006) and Physical Education teachers in particular to promote healthy, active lifestyles (Cale & Harris, 2005a; Green, 2002, 2008; Johns, 2005; Shepherd & Trudeau, 2000; Stratton et al., 2008; Webb & Quennerstedt, in press; Webb et al., 2008). Physical Education has traditionally been viewed as “an arm of the School Medical Service” (Kirk, 1992, p.129) and its long association with health (Gard, 2004a; Gard & Wright, 2001) is based on an ideology that is concerned with the “monitoring and regulation of the body that began with posture, and later drew attention to Health-Related Fitness
(HRF), and more recently has focused on body size and shape” (Johns, 2005, p.70). Indeed, it is argued that Physical Education remains a crucial site for the production and reproduction of health ideologies and thus is an important location through which health and healthy bodies are constructed (Evans et al., 2008; Webb & Quennerstedt, in press).

The findings from the present study suggest that ideologies of health have infiltrated the philosophies of many of the Physical Education teachers and, as a result, the regulation of health is being encouraged within a HRE context. For example, a male teacher with seven years of experience responded to the survey by stating that the aim of HRE was “To improve pupils’ general fitness levels and to help in the nation’s pursuit of reduction in numbers of obese youngsters.” (223). To further support this view, some teachers stated in the interviews that:

...the government have kind of moved in on it (PE) a bit with these obesity levels and all that and how unfit kids are. (Philip, male, 30+ years of experience)

...with current trends in obesity and lack of children taking up sport outside of school it’s become a little bit more important to try and make sure that we have participants that are connected to clubs outside of school. (Stuart, male, 4-7 years of experience)

...if kids are obese, we get the blame. If kids aren’t doing sport, we get the blame. All we can do at the moment is to use the two hours contact time we have and try and get them to clubs, to after-school teams. Like I say, if kids are obese, it’s our [PE teachers] fault but four McDonalds a week, eight hours of Playstation a day etc...these are the barriers we are against at the moment. (Ethan, male, 8-15 years of experience)

...we are trying to force everybody through Physical Education and sport and give them some sort of knowledge of health and fitness, possibly in the hope of bringing the NHS bill down in the future...they [pupils] are weighed and I think some of them have even had their body composition measured with the electrolysis machine. (Fred, male, 8-15 years of experience)

These quotations reflect an acceptance of the medico-health rationale that has traditionally been associated with Physical Education (Green, 2003; Harris, 1997;
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Johns, 2005; Kirk, 1992) and reinforce the work of Evans et al. (2008) and Gard and Wright (2005, p.121) who have highlighted the tendency for Physical Education to be viewed as both the cause and the cure of the alleged ‘obesity epidemic’. Current pressures from the government (see HM Treasury, 2007) and the media (see Batty, 2008) have served to perpetuate the notion that Physical Education teachers are responsible for improving public health (Webb & Quennerstedt, in press). Given the centrality of the human body within Physical Education (Webb & Macdonald, in press; Webb & Quennerstedt, in press), the link to health issues such as obesity is perhaps not surprising. As some of the above quotations demonstrate, however, Physical Education teachers are not necessarily willing or able to monitor and regulate their pupils’ bodies in an attempt to fulfil an ideological justification for their subject and, as Evans et al. (2008) rightly state, nor should they be expected to.

From a slightly different perspective, Fairclough and Stratton (2005) highlight that teachers are indeed fundamental in helping young people to achieve physical activity goals. Welsman and Armstrong (2000) remind us, however, that whilst Physical Education teachers have a key role in physical activity promotion, they cannot be expected to ensure that participation in Physical Education will provide necessary and sufficient amounts of activity to promote health. Indeed, it is argued that the pressure upon Physical Education teachers to “force everybody through Physical Education” and bring “the NHS (National Health Service) bill down” (Fred, male, 8-15 years of experience) may have compelled them to act in particular ways in an attempt to meet the expectations of government and the media. In this context, and as this and previous research suggests (Capel, 2007; Green, 2003), many teachers seem to be addressing this issue in the ways they feel most comfortable and confident, usually through fitness and sport related contexts for learning.

Physical Education teachers’ practices are based on a range of ideologies (Johns, 2005) and, according to Rich, Holroyd and Evans (2004, p.178), they “remain wrapped in an ideology of healthism” in particular. Prescribing to an ideology of healthism usually suggests a tendency to ignore the broad spectrum of factors which may influence health (such as the environment and socio-economic status) and
thereby to view individuals as solely responsible for their own health and making healthy choices. Moreover, government policies such as ‘Choosing Health’ (DoH, 2004) have demonstrated, and arguably reinforced, a tendency to individualise health, based on the assumption that everyone can ‘choose’ to be healthy or not. According to Webb et al. (2008), however, the ‘circulation’ of healthism is likely to encourage ‘victim blaming’ (Colquhoun, 1989, 1990, 1991) whereby if expectations with regards to health and physical activity are not met, blame is placed on individual pupils (Evans et al., 2008). This, it seems, would be an unintended consequence of attempts to promote health and physical activity.

As previously stated, most teachers within this study interpreted HRE in terms of fitness testing and this reflects the tendency to reduce the multi-dimensional concept of health to fitness. The use of fitness testing within HRE is perhaps testament to the ‘circulation’ of healthism within Physical Education (Webb et al., 2008) and, as the data suggest, the inclusion of fitness testing within HRE is based on the implicit and simplistic assumption that pupils will “see how fit they are” (Thomas, male, 0-3 years of experience) and change their behaviours on the basis of test results. The findings of the present study support, to some degree, the work of Webb et al. (2008) who explored the ‘discourse’ of healthism and suggested that it continues to circulate through school Physical Education. It seems that the teachers within the present study used fitness testing more as a way of regulating pupils (Webb et al., 2008) than as an educational tool and this, according to Cale and Harris (2009b), is not likely to promote learning or lifelong physical activity. Acknowledging broader networks of relations (with policy makers and the media, for example) can aid an understanding of how prevailing ideologies such as healthism have come to inform Physical Education teachers’ philosophies and practices.

Within the context of a school, and beyond teachers, there are three important elements which can serve to influence the promotion of healthy, active lifestyles: i) the curriculum; ii) the environment; iii) the wider community (Cale, 2000a). With reference to the Active School model (see Figure 4.2), a deeper level of analysis illuminates an array of factors within each of these headings (such as an active travel
policy and access to facilities and services) which can influence an individual's physical activity levels. Given the complex nature of social life, a mono-causal explanation for physical activity behaviour is inadequate and the presence of healthism within school Physical Education is therefore not always appropriate or necessary. In this respect, and drawing on the Active School model, HRE could be used as an opportunity for young people to explore their interdependencies and the influences upon their physical activity levels, whilst also acknowledging barriers and exploring ways of overcoming them within their local community.

If teachers are expected to play a role in physical activity and health promotion then it is imperative that they have the knowledge to do so. The following section presents and discusses findings that provide an insight into the nature and extent of the Physical Education teachers’ HRE knowledge.

7.4.4 Physical Education Teachers’ HRE Knowledge

Although it is acknowledged that “teacher knowledge can never be absolute” (Rossi & Cassidy, 1999), the relatively limited expression of health (Cale & Harris, 2009a; Harris, in press) as well as the narrow focus of HRE (Cale, 2000a, 2000b) which has been recognised within Physical Education has been partly attributed to limited teacher knowledge (Brown, 2003; Cale, 2000b; Cale et al., 2002; Capel, Hayes, Katene & Velija, 2009; Castelli & Williams, 2007). Armour and Yelling (2004a, p.79) posed the question: “where and how are teachers developing their professional knowledge in promoting lifelong learning about physical activity for health...?”.

Within the context of the present study, many of the Physical Education teachers claimed that they had not engaged with HRE before they were expected to teach pupils about the area. This therefore raises questions about the nature and acquisition of the Physical Education teachers’ HRE knowledge.

With regards to the context within which HRE knowledge was acquired, one teacher stated during the interviews “A lot of my HRE knowledge comes from personal

26 It is acknowledged that there are various types of knowledge (Rovegno, 1992; Shulman, 1987) but an exploration of them is beyond the scope of this thesis.
interest - magazines, websites, DVDs etc.” (357, male, 16-30 years of experience). Although magazines, websites and DVDs can provide useful information, they may not always be wholly accurate, reliable and appropriate. Within this context it is suggested that the resources Physical Education teachers draw upon should be specific to HRE and in keeping with the National Curriculum requirements. It would seem beneficial for teachers to engage with CPD which allows and encourages them to access a range of resources to support their teaching of HRE. As the following sections explain (7.4.8 and 7.4.10), however, the present findings suggest that the teachers were rarely aware of appropriate resources that could support and guide their teaching of HRE. As a result, and as reflected in the teacher’s quotation above, some teachers felt it was necessary to acquire ‘professional’ knowledge from outside of the education figuration.

The interviews carried out within this study provided an opportunity to understand the contexts within which the Physical Education teachers had acquired their knowledge of HRE. The teachers were asked: “Where and when do you feel that you acquired the knowledge to teach HRE effectively?” In a similar vein to the teacher quoted in the previous paragraph, most of the responses suggested that the teachers relied on knowledge that they acquired through ‘life experiences’ as opposed to through more formal and standardised experiences such as CPD (O’Sullivan, 2005). For example, some of the teachers stated:

Because I worked in the health and fitness industry for six years before I trained to be a teacher, I was put through so many different courses. I feel that has put me in good stead to deliver perhaps stuff that I shouldn’t be delivering if I’m honest. For example, I haven’t got an exercise to music qualification but I’ll happily take aerobics. (Toni, female, 8-15 years of experience)

In terms of HRE I wouldn’t say I’ve really learnt, it’s gone on my experience of training and coaching...When I was playing sport as a participant, a lot of the things we did were related to HRE so I’ve had experience of doing it myself. (Stuart, male, 4-7 years of experience)

The only way I ever really picked up new ideas is from colleagues or from trying things out myself really...I think most of my knowledge, if I’m honest,
just comes from as I’m teaching, I think of new ideas. (Nathan, male, 4-7 years of experience)

I have to say that an awful lot of our HRE I’m winging it or I’m going on what I’ve learnt along the way, by chance, rather than ever been given it. (Frances, female, 16-30 years of experience)

These quotations suggest that many of the teachers, such as Toni, were relying on experiences and knowledge gained outside of the professional context. This may provide further explanation for the lack of consensus that has surrounded HRE in the past (Harris, 1997). Utilising process sociology, this lack of consensus can also be explained by viewing Physical Education teachers’ knowledge as being derived through multiple interdependencies, some of which are beyond the education figuration and thus, are not standardised in any way.

Stuart (male, 4-7 years of experience), quoted above, claimed that he learnt most about HRE from his “experience of training for and coaching rugby”. On this point, it is worth noting that children are not miniature adults (Garrett & Wrench, 2008; Harris & Cale, 2007; Hopple & Graham, 1995; Rice, 2007) and that the sport related activities that Stuart enjoyed as an adult may not represent the kinds of experiences that young people would enjoy and wish to pursue. Perhaps of particular concern was the approach to HRE that Frances adopted where she reported to ‘wing it’. The tendency to ‘wing it’ within the context of HRE could reflect the perceived low status of the area and the ad-hoc way in which it is often taught (Section 7.3). As Toni demonstrates, HRE is “quite a versatile lesson…and it’s an easy lesson to deliver more to the point, ha ha ha, ad hoc.” (Toni, female, 8-15 years of experience).

These findings thus seem to suggest that whilst many teachers are confident in their ability to teach (what they perceive to be) effective HRE, many do not have the specific and necessary knowledge required to do so. This supports the work of Castelli and Williams (2007), referred to earlier, who concluded that Physical Education teachers were very confident about their HRE knowledge but when tested they did not meet the standard of achievement expected of a ninth-grade (equivalent
of Key Stage three) student. In practical terms, this raises questions about whether Physical Education teachers are acquiring the subject knowledge they need to teach HRE effectively and in the terms that policy define. On the basis of findings, it is suggested that any discrepancies in the Physical Education teachers’ HRE knowledge are likely to be linked to their lack of prior engagement with HRE (Section 7.2.1) and HRE-CPD (Section 7.3). Trost (2006, p.184) identifies a need for Physical Education teachers to be ‘tuned-in’ to current health and physical activity related issues, and to be “critical consumers of scientific information pertaining to youth physical activity and public health”. He adds that

there is an urgent need for physical educators to know and understand health behavioural change theory (for example, social cognitive theory) and how to plan, implement and evaluate theory-based strategies to promote physical activity behaviour in school Physical Education. (Trost, 2006, p.184).

From a process sociological perspective, Physical Education teachers’ knowledge is conceptualised as an aspect of their social interdependencies and therefore their historically-rooted philosophies. The concept of philosophies is now discussed with reference to the findings from the present study and the relevant literature.

7.4.5 Physical Education Teachers’ Philosophies

Subsumed within Physical Education teachers’ philosophies are amalgamations of value-laden beliefs, informed by habitus and context, which represent various ideologies including sporting, health and academic ideologies (Green, 2003). The findings of the present study suggest that the Physical Education teachers often relied upon their philosophies to guide their practices within HRE. Indeed, it seems that the teachers moulded HRE in a way that reflected their historically-rooted philosophies which, for the most part, stemmed from valued and successful sporting biographies. This finding supports existing research which has suggested that Physical Education teachers tend to modify, adapt and re-create the NCPE so that is aligns closely with their often sport-orientated philosophies (Armour & Jones, 1998; Curtner-Smith & Meek, 2003; Evans, 1992; Green, 2000, 2002, 2003; Keay, 2005b, 2006a, 2007a). For example, a teacher who has experienced life-long success in sport and competitive team games may want and find it easier to focus upon these kinds of activities within
their Physical Education programmes. This then presents the basis for a persistent cycle whereby sport is privileged within Physical Education and areas such as HRE are marginalised (Mills, 1997).

Whilst one teacher (Sophie) proved to be an anomaly, the findings suggest that the sporting ideology more so than others had a significant influence over the Physical Education teachers' practices within HRE. This supports the work of Green (2003, p.116) who, following his research on Physical Education teachers' philosophies, suggested that “sport in general, and team games in particular, were seen as a sine qua non of the Physical Education curriculum for many, if not all”. As previously noted, whilst sport may have a valuable role to play within HRE, an over emphasis on sport-related contexts for learning - at the expense of activities which are more likely to be pursued across a lifespan (Green, 2003) - may be doing more harm than good in terms of attaining the aim of HRE (Cale & Harris, 2009b; Cale et al., 2007; Evans, 2006; Garrett & Wrench, 2008). Indeed, as Keay, (2005a, p.154) suggests, the sporting “traditions of the past may not be appropriate for the needs of the future”.

The findings suggest that the teachers' philosophies have led them to view HRE in a narrow sense, usually in terms of ‘fitness for sport’. Given the nature of their philosophies, it was perhaps not surprising to find that most of the teachers valued and were confident in their ability to teach fitness and sport related activities. The paradox, though, is that because the teachers viewed HRE in terms of ‘fitness for sport’ (Harris, 2005) and they felt confident in their ability to teach fitness and sport related activities, when asked if they needed HRE-CPD, many of them did not perceive it as a priority. Many did therefore not engage in any form of HRE-CPD. If Physical Education teachers' understandings of HRE are to be broadened, this persisting cycle (see Figure 7.1) within Physical Education needs to be disturbed. It seems ironic, however, that in order to disturb the common sense assumptions about the nature of HRE, HRE-CPD is arguably necessary.
As inferred earlier, data analysis suggested that one teacher (Sophie) was an anomaly with regards to her engagement with HRE. Following an initial interview with Sophie (female, 0-3 years of experience) it could be seen that, in relation to the other teachers, her philosophies and practices were not as heavily circumscribed by sporting ideologies. Indeed, a follow-up interview (see Section 5.6.4) confirmed that, in comparison to the other teachers, she had a broader HRE biography and HRE featured more heavily within her philosophies. After competing in gymnastics at regional level, Sophie suggested that her current engagement with HRE was:

mostly down to working in the gym at university. After my boss forced me to deliver classes I learned I actually loved it and so I brought that into school with Fit ball and Boxercise lessons. I also enjoy doing the Pump It Up DVDs 'n stuff like that at home so I like challenging the kids with the routines I pick up. (Sophie, female, 0-3 years of experience)
Firstly, it is interesting to notice that the experiences which Sophie valued and which had prepared her most to teach HRE tended to be from general 'life experiences' (O'Sullivan, 2005; Tsangaridou, 2006a) as opposed to experiences gained at school, during her ITE or whilst teaching. This issue is discussed in greater depth in a previous section (7.4.4).

In comparison to the other teachers within this study, Sophie’s previous experiences of Health-Related activities, some of which are described above, had enabled her to enjoy and feel confident in teaching HRE. Drawing upon principles of process sociology, this finding also highlights the multi-directional nature of power. Whilst Sophie may have been constrained in numerous ways by others within the education figuration, she had a sufficient degree of power to act as an agent of change within her department and school. This supports the work of Keay (2006a) who suggests that new teachers have both a lot to learn, and a lot to offer. She also suggests that new teachers should be encouraged to challenge the status quo within Physical Education, as well as contribute positively to the profession (Keay, 2006a).

As this section has demonstrated, the processual development of Physical Education teachers’ philosophies over time can be influential in terms of the extent to which teachers engage with HRE. Acknowledging that gender comes to influence, to varying degrees, Physical Education teachers’ experiences and therefore philosophies, the following section discusses the relationship between gender and Physical Education teachers’ engagement with HRE.

7.4.6 HRE and Gender

Harris and Penney (2000) have suggested that the ways in which teachers understand and interpret health and physical activity within Physical Education can often be influenced by their gender. Whilst the findings did not suggest that there was an explicit link between the teachers’ gender and their engagement with HRE-CPD, the data did suggest that their gender had impacted upon their understanding and
interpretation of HRE. The following section addresses the process of gender-relations in terms of the impact it appeared to have upon Physical Education teachers’ engagement with HRE.

HRE has often been regarded as a gendered component of Physical Education within which ‘gender appropriate’ forms of exercise are encouraged for boys and girls (Harris & Penney, 2000). Whilst the quantitative data presented no major differences between male and female teachers’ teaching of HRE, the qualitative findings from the survey supported those of Harris and Penney (2000) and indicated that many of the teachers felt gender to be an important factor with regards to how the area was taught. It was often claimed that female teachers tended to focus on exercise to music, whilst males focused more upon fitness-related contexts for learning such as circuit training (see Appendix L for an example of a fitness-focused Scheme of Work). In response to the survey questionnaire, for example, some teachers suggested that:

How you teach HRE depends on gender and areas of expertise...I teach weights and circuits and my wife teaches aerobics. (449, male, 16-30 years of experience)

There is a definite male/female split [in HRE]...Males do a lot of weight training work, females do more of a mix including aerobics. (061, female, 4-7 years of experience)

The interview data further confirmed those views, with some of the male teachers stating that:

I find myself, in my lessons with the lads, focusing upon cardiovascular fitness and how well your fitness can impact your performance within your sport...I seem to neglect what the female staff seem to hold as their top priority, which is being body conscious. I'm not sure if they would hold fitness and its impact on sport as high as I do...The younger teachers and the younger girl teachers hold HRE in more value than other staff. (Nathan, male, 4-7 years of experience)

Females are more comfortable teaching exercise to music, definitely. (Ethan, male, 8-15 years of experience)

Similarly, some of the female teachers stated that:
I think male teachers are more interested in teaching Physical Education as a way to win games as opposed to promoting health. (Joanne, female, 4-7 years of experience)

I mean the male teachers have been much more fitness orientated and ‘right let’s do this fitness test and let’s do that fitness test’, where as the girls, I think, don’t really care less. They just want to have a bit more fun I guess. (Toni, female, 8-15 years of experience)

It could be argued that the Physical Education teachers’ gendered views of HRE, as evidenced here, have their roots in the past and continue to be reinforced within the education figuration. For example, such a gender-orientated approach towards the expression of health within Physical Education can be traced back to the 1950s. In the middle of the 1900s, and following the introduction of the 1944 Education Act, Physical Education was beginning to be characterised by two distinct approaches (Harris, in press; Kirk, 1992; McIntosh, 1968). One approach emanated largely from private girls’ schools and was underpinned by the notion that health was strongly linked to the “harmonious development of the whole body” (McIntosh, 1968, p.120). According to Kirk (2002, p.28), “educational gymnastics was the rising star of Physical Education in the 1950s” but its strong association with the education of females, however, “probably ruled it out of contention for the men” (Kirk, 2002, p.28). Boys’ Physical Education largely consisted of activities such as circuit training and weight training and this was, in part, a reflection of the prevailing view that the body was a machine that needed to be maintained (Kirk, 1998).

Further, the findings of the present study provided limited evidence of teachers’ willingness to challenge the boundaries of ‘gender appropriateness’ within Physical Education (Rich, 2001; Welch & Costa, 1994). This supports the work of Keay (2007b, p.211) who suggested that “little has changed in the last decade” and that few Physical Education teachers “disrupt or challenge dominant and stereotypical forms of masculinity”. More specifically, Harris and Penney (2002, p.123) argue that, whilst HRE has the potential to challenge gendered stereotypes within Physical Education, it “may be as likely to express and promote stereotypically gendered attitudes and images as sex differentiated games settings”. Indeed, on the basis of the data,
presented here, it seems that HRE serves as another context within which Physical Education teachers can and do, perhaps unintentionally, promote gendered attitudes and behaviours (Webb & Macdonald, 2007a, 2007b).

It is acknowledged that teachers are often constrained to act in certain ways (Keay, 2007a) but from a pupil perspective, and in terms of equity, it could be argued that all pupils should be able to learn via HRE-based pedagogies, regardless of gender. Evidence from this study, however, reveals that this may not always be the case. Acknowledging the multi-directional nature of power within the education figuration, whilst teachers may have a relatively high degree of power over the methods they use to teach HRE, the pupils also have a degree of power over the extent to which they comply (Cothran & Ennis, 1997; Webb & Macdonald, 2007b). For example, some of the teachers justified their practices in terms of pupils’ needs and one female teacher stated that, “I think girls are girls and boys are boys and there are fundamental differences.” (Claire, female, 30+ years of experience). A male teacher expanded upon a similar point and claimed that:

The boys come down and think “right! fitness, performance-based activities and tangible rewards”, whereas the girls are thinking about image and body consciousness...A lot of girls are worried about going outside obviously, and worried about getting their hair wet and things like that and a lot of them are conscious about fitness and things. (Nathan, male, 4-7 years of experience)

These rather generalised and stereotypical views which most likely have formed over time may have come to shape the teachers’ HRE programmes to the possible detriment of some pupils and the benefit of others. This is of relevance because, according to Wortley (1994), the elimination of gender bias and the provision of a wide physical activity repertoire for all pupils is a prerequisite for the successful development of healthy, active lifestyles. Wright (1999, p.194) concurs with this view and suggests that if teachers were to challenge the “narrow constructions of gender” within Physical Education, it may “provide different groups of boys and girls with the opportunities to participate in Physical Education environments which are safe, supportive and which give them pleasure”.

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Keay (2007b, p.212) recognises that "Physical Education exists in a masculinised form" but draws upon the work of Kirk (2002) to suggest that "there are spaces for teachers to practice alternative forms". HRE can provide teachers with the opportunity to express and promote alternative forms of Physical Education, yet the findings here suggest that these opportunities were not being taken by many of the teachers. It is interesting to note, however, that the female teachers tended to be more receptive than their male colleagues to trying new ideas for the benefit of their pupils. For example, when asked about the contexts for learning they utilised within their HRE programmes, the female teachers reported to provide broader and more balanced HRE programmes than the male teachers with some, for example, including:

Boxercise, circuits, aerobics, pilates, stretching and toning, core...hill walking, fitness testing, research activities on computers, quizzes, videos. (Sophie, female, 0-3 years of experience)

Another explained:

We’ve had judo, boxing, we had some cheerleaders in. We had (Town) football club work with us last year. (Toni, female, 8-15 years of experience)

Whilst a broad and balanced HRE curriculum is beneficial, it is of course the pedagogies employed which are important in terms of pupil learning.

In contrast, the male teachers tended to respond to the same question by citing a list of sports and opportunities for fitness testing:

CV (cardio-vascular) fitness is prioritised...whether they are focusing on football, hockey, netball, swimming, they should have a fitness test within that lesson to prove if they are getting fitter. (Fred, male, 8-15 years of experience)

Within the context of Physical Education, females have been constrained in a number of ways (see Keay, 2007b) and existing literature has suggested that female Physical Education teachers are often marginalized on the basis of their gender (Dowling Naess, 2001; Keay, 2007b; Sparkes & Templin, 1992). Yet, the findings suggest that HRE may provide a context within which females can have a greater degree of power in comparison to their male colleagues because they feel they can promote learning through a broader range of contexts. Moreover, it seems that females are more likely than men to have participated in a wide range of non-competitive, Health-Related...
physical activities (such as aerobics and street dance) which are often deemed ‘gender-appropriate’ (Welch & Costa, 1994) for females but not for males. It could be that the female Physical Education teachers in this study had a higher degree of power in comparison to their male counterparts in that they seemed more able, or perhaps prepared, to utilise a wider range of contexts for learning about HRE. The call for more emphasis on HRE therefore connects with the literature addressing gender issues in Physical Education which asks for more diverse definitions of what constitutes ‘Physical Education’ (Webb & Macdonald, 2007a).

Linked to the notion of power, discussed above, the following section discusses the notion of power and status within the context of HRE. It explores the varying degrees of power and status which the Physical Education teachers viewed themselves to have and it also explores the perceived status of HRE in relation to other areas of Physical Education.

7.4.7 Power and Status
Shifting balances of power are an inherent component of human interdependence and there are number of sociological perspectives from which to theorise power. Whilst it is beyond the scope of this thesis to explore the numerous theories of power, using a process sociological perspective directs those who utilise it towards an acknowledgment of the balances of power which characterise the interdependencies within the education figuration. Acknowledging the multi-directional nature of power, the findings suggest that the ‘weaker’ members of the figuration (such as pupils) do still have some degree of control in as much as the teachers still had to consider them when making decisions. Pupils, for example, as a relatively weak member of the education figuration can still demonstrate power by withholding compliance in particular physical activities (see the quotation from Thomas below) (Cothran & Ennis, 1997; Webb & Macdonald, 2007b).

Depending on whether teachers are being viewed from a personal, local or national level, the degree of power or status that they are seen to have is likely to vary. On a personal or local level, for example, the teachers appeared to have a relatively large
degree of power over how they taught HRE. With reference to broader levels of the education figuration, however, the Physical Education teachers were interdependent with a wider range of people (such as colleagues, pupils and parents, OFSTED inspectors, Physical Education advisors, senior management and governors) and thus their thoughts and actions appeared to become increasingly constrained. Thomas (male, 0-3 years of experience), for example, articulated some interesting points on this issue when interviewed, stating:

You hear in the press a lot that teachers want more power etcetera. We haven’t got the power first and foremost to have any major impact on any student’s life... Kids know that they are in charge. They are in charge and they know they are in charge, and the parents know it as well. It is running out of control really. I don’t think we are doing our jobs properly as teachers anymore because of that, and because of the laws which are stopping us from doing so many things. I don’t want to come across in a negative way, in that sense, and I think that a lot of people wouldn’t share my view anymore, and there is a lot of staff who are scared to do the right thing because they don’t want the comeback, does that make sense? (Thomas, male, 0-3 years of experience)

The above quotation is noteworthy in that it highlights the tendency for teachers to view themselves as part of a group and therefore as having a ‘social habitus’ (Elias, 1991; Mennell, 1992). As outlined in chapter two, Elias (1991) referred to social habitus as “the level of personality characteristics which individuals share in common with fellow members of their social groups” (Mennell, 1992, p.30). With reference to Thomas’s comment, although teachers are not a homogenous group, they are nevertheless inextricably linked to a wider network of interdependence with others on personal, local and national levels of the education figuration. This may explain why Thomas discusses issues of power and control in terms of his ‘we-identity’ as opposed to his ‘I-identity’ (Mennell, 1992). Further, his comments suggest that within the school context, the balance of power is in favour of others within the education figuration (such as pupils and parents) as opposed to teachers. He implies that the power relations between teachers and others are constraining, or “stopping” teachers “from doing so many things” (Thomas, male, 0-3 years of experience).

The issue of status was found to be a common theme throughout this research. As alluded to earlier (Section 7.2.1.1), for example, most (79%) of the teachers felt that
they were perceived by the general public as being of lower status than other professionals, such as lawyers. Furthermore, many (64%) felt that Physical Education teachers were perceived as being of lower status than teachers of other subjects. These findings support previous international literature that has suggested that the status of the teaching profession (Hoyle, 2001; Webb, 2006) and the status of Physical Education as a subject within the curriculum (Evans & Penney, 1998; Johns, 2005) are contested. However, it has been suggested that these issues of status have been challenged by presenting Physical Education as instrumental in public health (Harris, in press; Tinning & Kirk, 1991). Indeed, more recently it has been argued that if Physical Education is viewed as having a role in health promotion, it may revive the “flagging” Physical Education profession by proving its legitimacy and relevance as an area of the curriculum (Johns, 2005, p.70).

Given the moral panic over ‘obesity’ levels, it may be reasonable to assume that Physical Education and particularly HRE would be regarded as important areas of the curriculum. Rather though, the present findings seem to support previous research which suggests that HRE is afforded less status than other areas of Physical Education (Harris, 1994, 1995, 1997, 2005). This was evidenced by, for example, the teachers’ relative lack of engagement with CPD in the area as well as the less adequate support and guidance they reported to receive in comparison to PE-CPD more generally. Further, and as highlighted earlier, one of the teachers believed she could simply ‘wing’ her HRE teaching. This view may also explain why so many of the teachers did not have access to a written scheme of work for HRE.

Indeed, although the status of HRE has been raised as an issue in existing literature, little has been said about how a lack of status may influence Physical Education teachers’ engagement of CPD in the area. It is suggested here that the Physical Education teachers’ limited engagement with HRE-CPD could, at least in part, be a consequence of the lack of status that HRE has been seen to have, at least at a practical level. The findings suggest that most of the Physical Education teachers have engaged with CPD but, for the most part, their focus is not on Health-Related issues but on more tangible goals such as sporting achievements. It could be argued that this
is linked to Physical Education teachers' inevitable interdependencies with others and
the subsequent pressures upon them to meet academic and sport-related targets. As
Webb and Quennerstedt (in press) highlight, such pressures are linked to cultures of
performativity which to a certain extent serve to regulate Physical Education teachers' 
behaviour by, for example, presenting them with a range of performance targets.

Given the pressures of performativity which appear to be placed upon Physical
Education teachers, it is necessary that they are supported, guided and have access to
relevant resources and CPD which will aid their teaching and pupil learning within
the context of HRE. The following section therefore highlights and discusses the issue
of relevance.

7.4.8 Relevance
If the process of HRE-CPD is going to be of value to Physical Education teachers, it
is imperative that they view it to be relevant (Armour & Yelling, 2004b). It appears,
however, that some of the teachers' engagement with HRE-CPD had been constrained
by the perceived lack of relevant opportunities available to them. Claire, for example,
was an extremely confident Physical Education teacher with over 30 years of
experience. She was representative of many of the teachers in that she had not
engaged with any recent HRE-CPD. Describing one of her most recent experiences of
more general CPD, she stated:

I mean, you'd probably guess the type of character I am (laughs) and I was
sent on an assertiveness course, and this was all professionals, not just
teaching and I was with a group of women who if you shouted at them they'd
cry and I was like “what what why???” and I was like “what have you sent me
on this course for?” (Claire, female, 30+ years of experience).

Another teacher's recent experience of HRE-CPD, Thomas' (male, 0-3 years of
experience), had consisted of “a day off site at the university. He explained “We
looked at HRE and got given ideas for activities...talked about posture and stretching
and stuff”. For him, however, the experience was irrelevant as he couldn't see himself
“doing those things and using those ideas” when he was teaching. Thomas did not
view particular kinds of HRE knowledge as relevant and this, it is argued, is rooted in
a common misunderstanding with regards to the aim of HRE and how it can best be achieved.

7.4.9 Support, Guidance and Resources
In order for teachers to develop professionally it is imperative that they are supported and guided on personal, local and national levels (Keay, 2005a). As noted though, in comparison to PE-CPD generally, the majority of the teachers viewed the support they received for HRE-CPD to be less than adequate. One teacher in particular represented the typical views of all who participated when he suggested that, “I think it would be nice, first and foremost, if teachers had more support (for HRE-CPD).” (Nathan, male, 4-7 years of experience).

The findings suggest that a lack of perceived support for HRE-CPD (in terms of funding and guidance, for example) may be constraining many teachers and proving to be a barrier to innovation and informed practice. A number of authors have highlighted the importance of providing teachers with guidance and support so that they can develop high quality HRE programmes (Armour & Harris, 2008; Cale, 1996; 1997; Green, 2000, 2002a, 2004; Harris, 1997, 2005, in press; McGinnis, Kanner & DeGraw, 1991; Sallis et al., 2006). Despite this recognition, however, some of the teachers still felt that they had not received the support they needed. If the area of HRE is to develop in a positive and sustainable manner, then it is imperative that Physical Education teachers have, and are aware of, an infrastructure that supports them in achieving their professional goals. As highlighted earlier (7.3), however, the findings suggest that most of the teachers within this study were unaware of the support that was potentially there for them with respect to HRE.

In addition, a lack of financial support and available time for HRE-CPD are issues that have been raised by Cale (2000), Fox and Harris (2003) and more recently Day et al. (2006). Since 2002, large government investment has been directed towards PE and PE-CPD, as part of PESSYP, but whilst Health-Related modules have featured, the area was paid relatively little attention (Cale & Harris, 2005a). Given that “health promotion as a key goal of Physical Education” has remained “neither universally...
accepted nor well understood” (Cale & Harris, 2005a, p.165), it would seem reasonable to suggest that further financial support and guidance is needed to aid its development.

With regards to teaching resources, research suggests that high quality, relevant and accessible resources are one component of effective CPD (Good & Weaver, 2003; Penuel et al., 2007). As highlighted in chapter three and with respect to HRE, there are a number of resources available. Indeed, the curriculum resource entitled ‘Health-Related Exercise in the National Curriculum at Key Stages 1-4: Guidance Material’ (Harris, 2000) was awarded a Kitemark® in recognition of its contribution to teachers’ knowledge. Unfortunately, however, the teachers within this study did not appear to be aware of the resource. Indeed, the majority of the teachers within the present study were unaware of any resources produced in the past ten years that would aid and support their teaching of HRE. Admittedly, resources and opportunities for CPD in HRE have been relatively limited in comparison to those in other areas of Physical Education but there are now a range of resources (see Sections 4.10.1 and 7.4.8) and opportunities for HRE-CPD which, for the most part, do not seem to be being utilised. In the general absence of knowledge and awareness of resources, not surprisingly, few were accessed.

Most of the Physical Education teachers rarely accessed any resources to aid their teaching of HRE. If resources were utilised, they tended to be more fitness-related than Health-Related. For example, some of the male teachers stated that:

The only thing I use is the OCR books and all the fitness tests and what sports they are used for. (Ethan, male, 8-15 years of experience)

We’ve got a couple of packages for sport-related fitness but that’s mainly for GCSE and it’s mainly geared towards answering exam questions and stuff like that. (Philip, male, 30+ years of experience)

As far as I’m aware, what people are using is what I’ve made available to them and that’s my activities that I’ve put within the Key Stage guide that I give out at the start of the year. It’s things like how to use the Cooper Run, when the themes can be addressed within the lesson and what different
activities you can use to promote health and fitness. (Nathan, male, 4-7 years of experience)

One female teacher referred to a Health-Related resource produced by the British Heart Foundation which she felt was valuable in helping her teach HRE. She explained that:

We went on the Jump Rope for Heart course, we've got loads of resources from them with all the different ideas and I've just laminated them and made circuits and it's a really good lesson, they find it really interesting. We'd probably only do it a few times. I've done it quite a lot in Outdoor Education lessons when it's been nice outside. It's quite a versatile lesson...and it's an easy lesson to deliver more to the point, ha ha ha, ad hoc. (Toni, female, 8-15 years of experience)

Thus, it seems that despite a number of HRE resources being available, the findings of the present study suggest that awareness of, and access to them is an issue.

Encouragingly, most of the teachers who were interviewed were keen on accessing resources. For example, one teacher suggested that “A structured programme would be useful, either to teach through sport or as a stand-alone topic” (Joanne, female, 4-7 years of experience). Another teacher suggested that he would value “a free document where you can select activities related to a particular area of fitness which you are going to address” (Ethan, male, 8-15 years of experience). Whilst providing teachers with such ‘convenient’ resources may improve HRE development in the short-term, it is unlikely to encourage them to develop HRE, or themselves as professionals, in the long-term. A ‘free document’ or ‘one-off’ course may result in superficial, but not deep-rooted change in Physical Education teachers’ philosophies and practices (Cale et al., 2002), thus providing another example of “innovation without change” (Sparkes, 1989, p.60). Indeed, in this respect, it is worth noting the findings of Cale and colleagues (2002) who evaluated the impact of the HRE guidance produced by Harris (2000). Whilst the resource was found to have a positive impact on teachers’ knowledge and understanding of HRE, as well as on their planning, content, organisation and evaluation of the area, it was less successful in influencing teachers’ philosophies and methods of teaching. This demonstrates the deep-rooted nature of
teachers’ Physical Education philosophies and highlights how they are often tied to the past (Curtner-Smith, 1999; Green, 2003; Keay, 2005b). Thus, it seems that Physical Education teachers perhaps want resources that will guide their practices as well as ‘sit’ with their beliefs and philosophies about their subject.

7.4.10 Awareness of Opportunities for HRE-CPD

Irrespective of the other constraints that have already been identified, many of the Physical Education teachers were unaware of, and yet asked for opportunities to develop their knowledge and understanding of HRE in order to better develop pupils’ knowledge of this area. This issue has been raised previously by Easton, Whitby and Harris (2003) who suggested that attention should be given to the types of strategies that could make teachers more aware of CPD opportunities.

The perceived lack of HRE-CPD opportunities may be a consequence of the relatively marginalised position of health within the curriculum which was discussed earlier (Cale & Harris, 2005a; Penney & Evans, 1999; Templin et al., 1988). In other words, the comparatively low status of HRE, as well as the teachers’ lack of prior engagement with the area, may have contributed to the limited awareness that the teachers seemed to have of HRE-CPD and of the National CPD Strategy in particular. Opportunities for HRE-CPD seemed to be ‘off their radar’, so to speak. Further, given the constantly changing landscape in education these days, and the numerous initiatives and policies with which teachers are faced, such as the new Secondary Curriculum (QCA, 2007), Every Child Matters (www.everychildmatters.gov.uk), and 14-19 Reform (www.dcsf.gov.uk/14-19), other professional needs may be perceived by teachers as being more pressing.

As noted previously, many of the Physical Education teachers who participated in this research had not engaged with HRE before being expected to teach the area to pupils. This lack of engagement can be explained in part by the lack of prominence that HRE seems to have within many teachers’ philosophies. On this basis, it is argued that some teachers’ philosophies have constrained their engagement with HRE and they have been therefore less likely to actively seek HRE-CPD opportunities. Indeed, as the findings suggest, issues relating to ‘fitness for sport’ seemed to feature most
prominently within teachers’ interview responses, with little attention being paid to ‘fitness for health’. An asserted effort to increase the profile of Health-Related physical activity within relevant degree programmes and during ITE would arguably be beneficial in terms of making Physical Education teachers more aware of HRE and the ways in which it could be effectively taught in schools.

Having discussed what emerged as influential social processes with regard to Physical Education teachers’ engagement with HRE and HRE-CPD, the following section presents some pertinent findings in relation to PE-CPD more generally. Whilst the Physical Education teachers’ engagement with PE-CPD was not the focus of this study, it was important to explore these issues in terms of the possible effect they may have upon the teachers’ engagement with HRE-CPD in particular.

7.5 Physical Education Teachers’ Engagement with PE-CPD: Impact upon HRE-CPD?

Whilst analysing the wider social processes which appeared to have influenced the Physical Education teachers’ engagement with HRE and HRE-CPD, it was apparent that there were a number of broader issues which were related to the process of PE-CPD more generally. These issues relate broadly to: i) policy; ii) the teachers’ narrow view of PE-CPD; iii) teachers developing teachers; iv) the cost and availability of suitable supply teachers; and v) age and experience. Although not the focus of the study, a discussion of these broader findings is nonetheless valuable in terms of understanding the teachers’ propensity to engage with PE-CPD and HRE-CPD.

7.5.1 Policy and Progress

In the past it has been argued that Physical Education has often been “pushed to the periphery” in terms of government policy (Penney, 2008, p.34). On the basis of extensive government investment into Physical Education via the PESSCL strategy (now the Physical Education and Sport Strategy for Young People [PESSYP]), it is claimed that this is no longer the case and that the ‘policy space’ that Physical Education occupies has become increasingly ‘crowded’ and ‘openly contested’ (Penney, 2008). Increasing numbers of individuals and groups are becoming more
involved in the development, interpretation and implementation of Physical Education policy. From a process sociological approach, this can be explained in terms of lengthening chains of social interdependence within the education figuration.

Over the past one hundred years, Physical Education teachers seem to have become increasingly entangled in lengthening chains of social interdependence. Developments such as the Education Reform Act (ERA), and the introduction of government policies (such as PESSCL and PESSYP) have meant that teachers' actions have become increasingly affected by those of others within the education figuration. The findings of the present study suggest that the increasing degrees of interdependence have both enabled and constrained Physical Education teachers' engagement with HRE and HRE-CPD. To expand this point further, reference to the interview data suggests that PESSCL and PESSYP enabled some of the Physical Education teachers to enhance their teaching and provision of opportunities for their pupils within the NCPE. As some teachers commented:

The School Sports Coordinator (SSCo) brings in quite a lot of outside coaches. We've had judo, boxing, we had some cheerleaders in. We had (town) football club work with us last year. It's started happening since we got the money last year from the SSCo programme. (Toni, female, 8-15 years of experience)

If I'd gone to a school where Physical Education wasn't as high profile I wouldn't have been aware of PESSYP. It wouldn't have had an impact upon me. I wouldn't have had the opportunities to take the kids to their local club and I think my relationships with my pupils would have been severely affected, severely affected if I hadn't been in PESSYP. Having kids after school and having kids at local clubs, I can't stress enough how important that is. (Nathan, male, 4-7 years of experience)

At the same time, however, some teachers were less positive about their interdependencies more generally:

The profession is changing a lot. A lot this calendar year has made me think, 'Am I doing the right thing?', 'Am I having the impact that I once had?' 'Am I gonna continue to have the impact?' and it's because of those constraints of the curriculum that are coming in. (Kate, female, 4-7 years of experience)
We have had to change. Our curriculum has changed over the years, for different reasons (pause), mainly the government. (Claire, female, 30+ years of experience)

As discussed in chapter two, human interdependencies are rarely harmonious and are often characterised by contradictions and tensions (van Krieken, 1998). From a process sociological perspective, the denser the web of interdependencies, the greater the division of competing interests generated within the figuration (van Krieken, 1998). With respect to this research, an exploration of the Physical Education teachers' social interdependencies illuminated some issues relating to power balances within the education figuration. The teachers quoted above (Claire and Kate), for example, did not feel that the National Curriculum was guiding their practices in a positive way but instead perceived it as a 'constraint'.

Physical Education teachers' engagement with CPD was one area of inquiry within this research and the teachers' engagement with the National CPD Strategy was therefore explored. The survey findings revealed that nearly half (46%) of the teachers were aware of the programme but only a relatively small number (7%) had actually accessed it. Given the extensive amount of government investment directed towards this programme, it perhaps would have been reasonable to have expected more teachers to have engaged with it. Of those teachers who did access the National CPD Strategy, most (91%) stated that it had influenced their teaching practices and the interviews provided an opportunity to better understand how. Unfortunately, however, none of the teachers who were interviewed were able to provide any practical examples and, as such, this cast doubt over the extent to which their practices had actually been influenced. The reasons underpinning the teachers' lack of engagement with the National CPD Strategy can be partly explained with reference to the wider social processes and interdependencies which were discussed in Section 7.4 (for example, access, awareness, cost and perceived relevance).

7.5.2 Teachers' Narrow View of PE-CPD

The interviews provided an opportunity for a deeper exploration of the teachers' engagement with HRE-CPD and, as a result, it was possible to gain a better
appreciation of what they viewed ‘effective’ PE-CPD in general to be. A definition of CPD was given to the teachers but many still appeared to demonstrate a relatively narrow view of the process. In reporting and discussing their own CPD experiences some failed, it seems, to recognise less formal or informal modes of CPD (such as unplanned discussions with colleagues). For example, most of the teachers reported only their participation in more formal CPD opportunities such as courses and ‘in-house’ CPD. For example, most of the teachers viewed the “lack of funding for courses” (Frances, female, 16-30 years of experience) as a factor which was constraining their engagement with PE-CPD. A broader view of CPD, however, would include school-based activities which would not necessarily require funding. Informal CPD may have been occurring, but the teachers may not have recognised it as such and this may have affected the findings. Equally, as Capel (2007) argues, if teachers do not recognise and critically engage with their participation in CPD, potential is not being maximised. On this basis, it seems that the Physical Education teachers in this study may have constrained their own engagement with HRE-CPD by not reflecting critically on their practices.

In this respect, the findings of the present study also support those of Hustler et al. (2003) who, in a report published on behalf of the Department for Education and Skills (DfES) (now the Department for Children, Schools and Families [DCSF]), stated that most teachers (of all National Curriculum subjects) viewed CPD in the traditional sense and usually in terms of individual courses, conferences and training days. Similarly, Keay (2005a) found that some Physical Education teachers did not identify ‘informal’ activities as being opportunities for CPD. She proposed that, “possibly they did not realise what they were learning, or indeed that they were learning” in informal situations such as “discussion” or “team teaching” (Keay, 2005a, p.145).

Knight (2002) argues that the importance of less formal learning is insufficiently appreciated and this appeared to be true for many though not all of the teachers in this study. The failure of both teachers and CPD providers to acknowledge the potential of informal learning may serve to limit the extent to which professional development can
occur (Becher, 1999) and to which CPD policies can be effective (Knight, 2002). For a number of authors (Armour & Yelling, 2007; Becher, 1999; Lloyd & Beard, 1995), collaboration is a fundamental element of CPD but, as Keay (2006b) highlights, if teachers are to benefit from such opportunities, there may need to be changes in both rhetoric and reality, within CPD.

For Armour and Yelling (2007), 'traditional' types of CPD have only limited effect and more informal CPD is favourable. They argue that traditional forms of CPD "offer little opportunity or support to enable teachers to integrate new learning with practice, and so are often ineffective." (Armour & Yelling, 2007, p.100). Whilst traditional 'one-off' courses are often criticised in terms of effectiveness (see Armour & Duncombe, 2004), the present findings, discussed in the following section, suggest that they do nonetheless have some merit.

The value attached to collaboration by teachers, as evidenced in the following section (7.5.3), supports the work of authors such as Keay (2005a, 2006b), Lloyd and Beard (1995) and Tillema and van der Westhuizen (2006) who concluded that teachers often viewed more informal CPD activities as a valuable component of their CPD. This, as Keay (2005a, p.128) notes, can involve “teachers developing teachers”.

7.5.3 Teachers Developing Teachers
Although the teachers within this study tended to view CPD in a traditional sense and did not use the term ‘informal CPD’, the interview data suggested that certainly some recognised the value of more informal modes of CPD and appreciated in particular the opportunity to engage with other Physical Education teachers. For example, some of the teachers stated that:

We could all run courses for each other...What would be productive would be an opportunity for teachers in your own borough to get together and ask, for example, 'Has anyone got a trampoline syllabus? We are struggling'...The only way you develop as a person, as a teacher, is by increasing your contact with other teachers. (Claire, female, 30+ years of experience)
I think that teachers give you the best resources, the best ideas. The last course I was on to do with the AS A2 A-levels, I effectively learnt how to teach the whole module from the other teachers and not necessarily from the course leaders. (Stuart, male, 4-7 years of experience)

I might have a colleague of mine that is doing something slightly different so I might steal some ideas and then change them as appropriate. (Fred, male, 8-15 years of experience)

Some of the teachers had engaged in other less traditional forms of CPD and demonstrated a pro-active approach to their professional development. One particular teacher, Philip (male, 30+ years of experience), for instance, discussed his recent experiences of peer-coaching and he explained that:

We also do peer-coaching, it’s such a tool, such a powerful tool. The skill is in asking the right questions, to make them understand why they (the teacher) are doing something... We are trying to get that (peer-coaching) programme running more explicitly in the school, that’s what I’m trying to do. There’s about 4 or 5 interested teachers in the school. No one need know about it in some respects, you just need to ask someone to come and watch your lesson. Someone you trust and stuff like that. It doesn’t have to be some boss, it could just be someone that’s good at a particular thing. That’s just as valuable as going off on some course at a posh hotel. (Philip, male, 30+ years of experience)

Peer coaching, and other types of ‘reform’ CPD (Garet et al., 2001) can be conducted within a teacher’s own professional context and this can be beneficial for a number of reasons. Firstly, it can occur whilst at work and there is no need to take time away from teaching commitments. Contextualising teachers’ CPD within their own schools can also serve to ground their experiences in the complexities of their everyday professional lives. Further, the school context can provide teachers with more, and continuing support in comparison to more traditional off-site CPD (Garet et al., 2001). As highlighted in chapter four, Hustler and colleagues (2003) suggest that, for CPD to be effective, it has to be relevant and applicable to teachers’ individual contexts. On this basis, such ‘in-house’ CPD is likely to be effective because it allows a strong relationship to be established between teacher CPD and teacher practice (Garet et al., 2001). As such, it could prove to be a valuable and sustainable way for teachers to engage with HRE-CPD in their own school context and within school-time.
(2005a) warns, however, that the process of 'teachers developing teachers' can have both intended and unintended consequences. She argues that "The foundation for this type of professional learning needs to be based on practice that has been reviewed and has demonstrated improved learning experiences for pupils" (Keay, 2005a, p.147). Moreover, if practices are not critically reflected upon, "the voices and actions" of teachers "will be questionable" (Keay, 2005a, p.151) and may be 'inward-facing'. From this perspective, the process of CPD has the capability to perpetuate ineffective as well as effective practices. Although the benefits of "school-based" (inward-facing) CPD are acknowledged, it could "lack the challenge and creativity that external (off-site) sources may offer" (Keay, 2005a, p.140).

It was noted in the previous section that, whilst the traditional 'one-off' approach to CPD could be subject to criticism, it may provide some valuable opportunities for teachers to develop professionally. The teachers quoted earlier (Claire, Stuart and Fred) provided an insight into the potential benefits of 'one-off' courses, with some claiming that they valued the opportunity to share good practice, "the best ideas" and "the best resources" with other Physical Education teachers. Whilst 'one-off' courses, per se, may not be the most effective approach towards CPD, it would seem that many of the teachers benefitted from the opportunity for interaction and collaboration with other teachers and valued the contribution they made to their CPD profiles. Bolam (1993) recommends considering various types of CPD activities but, on the basis of the findings of the present study, it seems that the Physical Education teachers tended to engage with more formal CPD, if only for the opportunity to discuss professional matters with fellow teachers who worked in similar contexts.

7.5.4 Supply Teachers

As explained before, as part of the National CPD Programme, Physical Education teachers are offered 'free' modules that include 'Learning about health in Physical Education: Are your pupils healthy, active and fit?' and 'Does your school promote healthy, active lifestyles?' (afPE, 2008). It is important to acknowledge, however, that whilst the National CPD Programme modules are offered as 'free', this relates to the course fee and any costs incurred by employing supply teachers to cover teachers'
Absences are not. These are issues which the present findings, as well as existing research (Armour & Duncombe, 2004), suggest are constraining teachers' engagement with CPD and HRE-CPD in particular.

Within the interviews, most of the teachers stated that their engagement with CPD was constrained by the cost and availability of suitable supply teachers. This issue was exemplified by some of the teachers who commented that:

It's difficult. It really is difficult to get any time, especially with the constraints of cover. Even when you are getting it paid for, you've still got to get that cover person in. (Philip, male, 30+ years of experience)

The biggest thing is having good cover teachers for Physical Education. It's really difficult to get good cover teachers. If I know that a course is on a day when we've got really difficult year 10's timetabled then I would try desperately to release them but you are always thinking "How am I going to cover their group?" and we always try to keep the kids active. We don't like to stick them in a classroom so it's getting good Physical Education cover teachers and they're just not out there. (Frances, female, 16-30 years of experience)

It is important to acknowledge the above issues because it allows for a better understanding of why the teachers felt constrained to act, or not act, in particular ways. The findings support those of Tall and Smith (1997) and lead to the suggestion that CPD may be more likely to occur if there are opportunities within the school context. This links to the previous argument (Section 7.5.3) which suggested that less formal types of CPD may be valuable, provided activities are critically reflected upon by teachers. Instead of perpetuating the false dichotomy between formal and informal CPD, it is argued here that a blend of the two is required, depending on each teacher's needs.

7.5.5 Age and Experience

This thesis has acknowledged from the outset that there is a difference between age and years of teaching experience (Day et al., 2006). Most of the teachers who participated within this study, however, had typically entered the profession in their early twenties and thus their age tended to correlate with their years of experience. On
this basis, the findings relating to age and years of experience are presented and discussed together.

The concept of ‘professional life phases’, presented by Day and colleagues (2006), served as a useful tool for categorising the teachers in terms of their years of experience (see Section 4.7). According to Day and colleagues (2006), teachers who have been teaching for over 30 years have declining motivation, are less able to cope with change and are looking to retire. However, the interview data from the present study suggests that this was not the case (see quotation below). Whilst it was recognised that only two of the teachers interviewed had been teaching for over 30 years, it is interesting to note that they demonstrated none of the attributes suggested above. One of those teachers stated that:

CPD is Essential. You cannot say ‘I learnt how to do this in 1972’...luckily I don’t think many Physical Education teachers are like that...you need to learn new things, course you bloody do. Look, I’m 53 now, I like my job but my goodness you wouldn’t believe the difference between now and my first school in 1976...I’m very pleased with what I’ve got and there’s a lot to be said for that. (Philip, male, 30+ years of experience)

With regards to HRE-CPD in particular, however, age appeared to have no impact upon the nature and extent of teachers’ engagement.

Although the concept of ‘professional life phases’ can prove valuable, it is often "based on the assumption that progression is logical and that all teachers develop, to a greater or lesser extent, along some sort of continuum" (Keay, 2006b, p.371). Teacher development, however, is a ‘messy’ process and it is important to acknowledge this in any attempt to understand it. Whilst a teacher’s age has been presented by some authors as a constraining factor with regards to their engagement with CPD, the findings of the present study suggest that this is not always the case. Indeed, given the value attached to ‘teachers developing teachers’, more experienced teachers could be instrumental in their own development as well as that of others.
7.6 Summary

In answering the first research question, the findings revealed most of the teachers who participated in the study to have had limited engagement with HRE and HRE-CPD. Approximately half had not engaged with HRE whilst at school as a pupil (57%), or during their ITE (50%) before they were expected to teach it. Moreover, the majority (70%) had not engaged with HRE-CPD in the three years prior to the research. It is argued that this relative lack of engagement has contributed to a lack of coherence and clarity within HRE which meant that, for many of the teachers, their teaching of HRE was characterised by a narrow focus upon ‘fitness for sport’ and fitness testing. Such a narrow focus, it is argued, can prove problematic in terms of achieving the learning outcomes associated with HRE, as stated in Harris (2000).

After establishing the nature and extent of the Physical Education teachers’ engagement with HRE and HRE-CPD, the second research question required an exploration into the social process which had constrained and, to a lesser extent, enabled the teachers’ engagement. From a process sociological perspective, the usually limited extent of the Physical Education teachers’ engagement with HRE and HRE-CPD could be explained with reference to a number of social, historical and political processes operating at personal, local and national levels of the education figuration. The most influential processes appeared to relate to: the privileging of ideologies relating to ‘fitness for sport’ within Physical Education and HRE; the limited attention paid to HRE and ‘lifetime’ activities within Physical Education and Sport Science Degree Programmes and ITE; a medico-health rationale for Physical Education which is rooted in ideologies of healthism and which stems from a need to control and regulate the human body; teachers’ limited knowledge and narrow understanding of HRE; teachers’ philosophies; teachers’ gender and the gender of their pupils; power and status; the perceived relevance of HRE-CPD; support for the teaching of HRE; and availability of accessible resources and HRE-CPD. In summary, the present findings suggest that the learning outcomes associated with HRE (Harris, 2000) have been ‘lost in translation’, and that the Physical Education teachers’ engagement with HRE and HRE-CPD did not demonstrate ‘a healthy profile’.
Chapter Eight: Conclusions, Limitations and Recommendations

8.1 Introduction

The purpose of this research was to explore the nature and extent of Physical Education teachers’ engagement with Health-Related Exercise (HRE) and continuing professional development (CPD) within the area (HRE-CPD). Physical educators are required to teach HRE and are expected to promote ‘healthy, active lifestyles’ as part of the National Curriculum for Physical Education (NCPE). It is therefore important that they have the relevant and necessary support, guidance, knowledge, skills and understanding to do so. Research suggests, however, that there are continuing concerns over the status, organisation and teaching of HRE (Almond & Harris, 1997; Cale & Harris, 2005a; Cale, 1996; Harris, 2009), and questions have been raised over Physical Education teachers’ knowledge of HRE, and the extent to which HRE features within their CPD profiles (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Cale, Harris & Leggett, 2002; Castelli & Williams, 2007; Harris, 1997). The reasons underpinning these concerns remained relatively unexplored and this thesis represents a contribution towards understanding the socio-historical and political processes which have served to influence the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD.

In response to an extensive and critical review of literature, the research questions which guided this study were:

i) What is the nature and extent of Physical Education teachers’ engagement with: a) HRE; and b) HRE-CPD?

ii) Which social processes have influenced Physical Education teachers’ engagement with: a) HRE; and b) HRE-CPD?

This chapter summarises the previous seven chapters and serves to draw conclusions with respect to the research questions stated above.
8.2 The Research Process: A Summary

Following the introductory chapter, chapter two presented process sociology as the theoretical framework within which this research was located. The central concept of 'figuration' was introduced and defined as a "network of interdependencies formed by individuals" (Elias, 2000, p.482). Acknowledging that Physical Education teachers cannot be understood without first exploring their relationships with others, the notion of interdependency was utilised in order to encourage a conceptualisation of complex and dynamic social relations, such as those that characterise the education figuration (see Appendices M and N).

The literature review, presented in chapters three and four, focused on two main areas of inquiry, each representing a central concept of the study. The first part of the review, presented in chapter three, explored the historically-rooted relationship between Physical Education, health and HRE. The initial emergence of Health Education (HE), the recognition of multiple dimensions of health, and the emergence of the health movement were discussed. With reference to more recent developments, the formalisation of HE (now Personal, Social, and Health Education [PSHE]), the introduction of the National Curriculum and the NCPE were explored, as were some relevant policies and initiatives which exist within the Physical Education context. Existing literature was drawn upon in order to highlight that schools offer a logical site for the promotion of healthy, active lifestyles (Cale & Harris, 2009a; Fardy, Azzollini & Herman, 2004; Harris, in press; Harris & Cale, 1997; Johns, 2005; Keay, 2006a; O'Sullivan, 2004; Salmon et al., 2007; Trost, 2006; Welk, Eisenmann & Dollman, 2006). More specifically, HRE was introduced as the component of Physical Education which is primarily responsible for promoting purposeful physical activity associated with health enhancement (Cale & Harris, 2009a). In this respect, existing research findings relating to HRE were presented and discussed to provide an insight into how the Physical Education teachers engaged with HRE on a day-to-day basis. In summary, the key findings from the literature revealed that:
• Health based Physical Education remains subordinate to more ‘traditional’ forms of Physical Education which are usually concerned with sporting performance (Capel, 2007; Garrett & Wrench, 2007; Green, 2003);
• There have been many changes in terminology within the context of HRE (Harris, 2009b);
• The terms ‘health’ and ‘fitness’ tend to be used interchangeably as though they are synonymous (Garret & Wrench, 2007; Harris, 1995) and HRE tends to be interpreted in a narrow sense (Cale, 2000a, 2000b; Cale & Harris, 2009a);
• The status, organisation and teaching of HRE within Physical Education continue to be questioned (Cale, 2000a, 2000b; Cale et al., 2007; Harris, 1995, 1997, 2008);
• Wide-ranging teaching practices are evident within HRE (Cale, 2000a; Harris, 2005; Harris & Penney, 2000);
• HRE programmes taught in schools often lack relevance, consistency, progression, coherence and equal opportunities (Harris, 1995);
• Many teachers do not follow a planned, structured and coherent scheme of work (SoW) for HRE (Harris, 1995);
• A number of initiatives have been introduced in order to improve the status, organisation and teaching of HRE in schools (Harris, in press);
• A resource written by Harris (2000) which aimed to guide and support the teaching of HRE was found to positively impact the teaching practices of those who accessed it (Cale et al., 2002).

Chapter four presented the second part of the literature review which was concerned with teacher CPD within the education figuration. For the purpose of this thesis, CPD referred broadly to any activity, from the point of initial teacher training (ITE), which “increases the skills, knowledge or understanding of teachers, and their effectiveness in schools” (DfEE, 2000, p.3). Existing literature which focused upon CPD, PE-CPD and, to a lesser extent, HRE-CPD was drawn upon in order to gain an understanding of Physical Education teachers’ engagement with HRE-CPD within the education figuration. With regards to teacher CPD in general, it was found that:
• There is an element of inconsistency with regard to what constitutes a profession and whether teachers are regarded as professionals (Day & Sachs, 2004; Hoyle, 2001);

• Teachers have been unsure of the knowledge that distinguishes them from other professions (Cassidy, Jones & Potrac, 2009; Keay, 2006a, 2007a);

• There have been strict notions of what constitutes CPD and there has often been a ‘one size fits all’ approach to CPD (Hustler et al., 2003);

• Teachers’ engagement with CPD has begun to be seen as a prevalent political issue (Campbell, MacNamara & Gilroy, 2004);

• There has been extensive government investment in teacher CPD (for example, the National CPD Strategy [Department for Education and Employment, 2001]);

• Teacher CPD has become more systematic, planned and strategic (Aspland & Brown, 1993; Duncombe, 2005).

Within the specific context of PE-CPD, the key findings from the literature suggested that:

• Participation in CPD is “essential if we are to defend the place of Physical Education teachers in schools” (Keay, 2006a, p.370);

• An increasing number of resource initiatives and government investment have been targeted at PE-CPD in recent years (Armour & Harris, 2008; Armour & Makopoulou, 2006; Armour & Yelling, 2007; Keay, 2007a);

• In order to be effective, Physical Education teachers’ CPD experiences must be relevant, practical, well-delivered, challenging, and provide opportunities for reflection (Armour & Duncombe, 2004). Moreover, CPD is more likely to be effective if it is longer-term, if sufficient resources are available, and if there is a focus on student learning (Penuel et al., 2007).

Whilst a number of authors have alluded to concerns regarding Physical Education teachers’ engagement with HRE-CPD, inclusive of HRE-ITE, there has been limited
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There has, nevertheless, been some discussion around this issue and the existing findings suggested that:

- Concerns have been raised about the extent to which Physical Education teachers are 'equipped' to effectively teach HRE (Harris, 1995, 2005; Castelli & Williams, 2007);
- Health and lifelong physical activity are two areas which have been absent from Physical Education teachers' CPD profiles (Armour & Yelling, 2004b; Brown, 2004; Castelli & Williams, 2007; Fox & Harris, 2003; Kulinna, McCaughtry, Martin, Cothran & Faust, 2008; Trost, 2006);
- Health-Related CPD can “inform, motivate and renew teachers and teaching”, whilst also enhancing students’ experiences (Macdonald & Penney, in press, p.256). Indeed, research suggests that CPD can contribute in a positive way towards the quality of teaching in schools (Armour & Yelling, 2007);
- HRE-CPD may prove valuable in addressing some of the issues relating to the status, organisation and teaching of HRE discussed previously (Armour & Harris, 2008; Castelli & Williams, 2007; Kulinna et al., 2008).

In order to better understand the nature and extent of the Physical Education teachers’ engagement with HRE and HRE-CPD, a two-phase, mixed-method (Day, Sammons & Gu, 2008) research project was carried out. As outlined in chapter five, phase one of the research involved a survey questionnaire conducted with a sample of Physical Education teachers from secondary schools across England, and phase two comprised semi-structured interviews with a sample of twelve secondary school Physical Education teachers drawn from the original broader sample.

Chapter six presented the findings from phase one of the research (survey questionnaire). It presented the demographic data about the participating teachers, as well as the quantitative and qualitative survey data that represented their engagement with HRE throughout three of their “major categories of experience” (Tsangaridou, 2006a, p.487): i) whilst at school as a pupil; ii) during ITE; and iii) whilst teaching. The fourth category of experience, ‘life experiences’, was addressed in the second
phase of the research and is discussed in chapter seven. The remainder of the chapter presented statistical data relating to the nature and extent of the teachers' engagement with PE-CPD and HRE-CPD respectively.

Within chapter seven, the data were discussed with reference to the research questions, relevant literature and process sociological theory. Below is a summary of the findings which emerged following an investigation of each research question.

8.3 Research Question One

a) Physical Education Teachers' Engagement with HRE

The findings revealed that many of the teachers who participated in the study had engaged with HRE to a very limited extent. The findings also suggested that the status, organisation and teaching of the area continued to be marred by a lack of coherence and clarity. Other key findings included:

- Most of the teachers claimed to value HRE;
- The majority of the teachers claimed to have a high degree of confidence in their ability to teach effective HRE programmes;
- There was a degree of confusion amongst the teachers regarding the aim of HRE and how it could be taught most effectively. The intended aims of HRE appear to have been somewhat ‘lost in translation’ from policy to practice;
- Almost all of the teachers who were interviewed claimed to prioritise sport within their lessons;
- HRE was often taught with an over-emphasis on ‘fitness for sport’, perhaps at the expense of more ‘lifetime’ physical activities;
- The majority of the teachers who were interviewed seemed to think that fitness testing was the key vehicle through which to teach knowledge about HRE. The limitations of this approach have been highlighted by Harris (2005) and more recently by Cale & Harris (2009b);
Conclusions, limitations and recommendations

- HRE appears to be a gendered component of Physical Education within which 'appropriate' forms of physical activity and knowledge are encouraged for boys and girls.

b) Physical Education Teachers' Engagement with HRE-CPD

In order to understand Physical Education teachers' engagement with HRE-CPD, it was deemed necessary to first gain an appreciation of their engagement with PE-CPD more generally. This allowed for their engagement with HRE-CPD to be contextualised and for comparisons to be made. A summary of the findings relating to the Physical Education teachers' engagement with PE-CPD is provided below.

- Most of the teachers claimed that they viewed CPD as an 'extremely valuable' activity;
- The teachers often viewed the process of CPD in a narrow sense and usually in terms of 'courses' and 'conferences';
- The majority had taken part in PE-CPD in the previous 12 months (86%) or previous three years (88%);
- Some of the teachers, however, had engaged with less formal modes of CPD within their own school context (such as peer coaching) and their experiences were viewed positively.

With regards to HRE-CPD in particular, the findings suggested that many of the teachers who participated in this study had not engaged with HRE to any extent before they were expected to teach the area effectively. In summary:

- Approximately half of the teachers had not engaged with HRE during their ITE or within subsequent HRE-CPD;
- Most teachers had not engaged with HRE-CPD in the previous 12 months (80%) or 3 years (70%);
- Of those who had engaged with HRE-CPD, most (70%) stated that it had been 'valuable' or 'extremely valuable';
• Of those same teachers, however, less than half felt that the amount, content and support within their HRE-CPD was ‘adequate’.

These findings raise questions about the extent to which the teachers were ‘equipped’ to teach HRE effectively. They also provide support for the concerns cast by a number of authors (Almond & Harris, 1997; Armour & Harris, 2008; Cale, 2000b; Castelli & Williams, 2007; Harris, 1995; Cale, Harris & Leggett, 2002; Trost, 2006) with regards to Physical Education teachers’ knowledge of HRE.

Following analysis, it emerged that the Physical Education teachers’ engagement with HRE and HRE-CPD may have been constrained, to varying degrees, by a number of social processes and interdependencies operating on various levels of the education figuration (see Appendices M and N). In answering the second research question, these processes are summarised in the following section.

8.4 Research Question Two
Physical Education Teachers’ Engagement with HRE and HRE-CPD: The Wider Social Processes
A number of social processes and interdependencies were identified as being influential upon the nature and extent of the Physical Education teachers’ engagement with HRE and HRE-CPD. In summary:

• The findings indicated that the teachers viewed HRE to be of lower status in comparison to other more ‘traditional’ areas of the NCPE. This may have influenced the extent to which the Physical Education teachers engaged with HRE and HRE-CPD;
• Physical Education teachers’ philosophies appeared to have guided their interpretations of HRE in a particular way, and mainly in terms of ‘fitness for sport’;
• Most of the teachers focused upon particular activities as opposed to learning about the dynamic processes underpinning health and physical activity promotion;
Conclusions, limitations and recommendations

• Some of the teachers did not view particular kinds of HRE knowledge (such as "posture and stretching and stuff" [Thomas, male, 0-3 years of experience]) as relevant.

• The qualitative data from both phases of the research suggested that many of the teachers felt gender to be an influential factor. It was often claimed that female teachers tended to focus on exercise to music, whilst males focused more upon fitness-related contexts for learning such as fitness testing;

• The Physical Education teachers perceived HRE-CPD to be less adequate in comparison to PE-CPD in terms of the amount, content and support available;

• The tendency for the Physical Education teachers to interpret CPD in narrow terms may mean that they are disregarding opportunities to participate in HRE-CPD, and CPD more generally, in their own department, school or local authority;

• Many of the Physical Education teachers felt there had been limited opportunities to engage with HRE during their ITE;

• The findings suggest that with respect to HRE, the ‘I’ in ITE, and the ‘C’ in CPD have been overlooked;

• Some of the teachers appeared to have a misguided sense of confidence and therefore did not perceive a need for HRE-CPD;

• Most of the teachers who were interviewed demonstrated mixed views towards pursuing HRE-CPD;

• Despite a number of HRE resources being available, the Physical Education teachers showed a relative lack of awareness of these either did not access them or did not know how to access them;

If the teachers within this study were representative of Physical Education teachers more broadly, the barriers to engagement which have been identified within this thesis (such as awareness of, and access to HRE-CPD opportunities) need to be addressed and overcome. Indeed, it may also be useful for ITE and HRE-CPD providers, amongst others, to begin to problematise some of the assumptions and ideologies.
which underpin many teachers’ philosophies and which have characterised HRE since its inception.

Physical Education teachers’ philosophies go some way to helping them make sense of their world and their place within it (Green, 2003). In this context, the teachers’ philosophies were not ‘philosophical’ but, rather, they represented an amalgamation of their prior engagement with HRE (which for many of the teachers was limited), their values and beliefs about PE and HRE (which often revolved around ‘fitness for sport’), and the dominant ideologies which continue to prevail within PE and HRE (which also tends to privilege ‘fitness for sport’). The findings of the present study suggest that most of the teachers’ philosophies were underpinned by historically-rooted ideologies of sport. This, it is argued, may have led them to view HRE in a narrow sense, and usually in terms of ‘fitness for sport’. Whilst ‘fitness for sport’ may have a role to play within HRE, an over emphasis on fitness and sport - at the expense of a multidimensional approach to lifelong physical activity (Stratton et al., 2008) - may be doing more harm than good in terms of attaining the learning outcomes associated with HRE, as suggested by Harris (2000).

Given the existing literature suggesting that Physical Education teachers tend to privilege sport (Capel, 2007; Green, 2003; Keay 2005a), it was not surprising to find that most of the teachers viewed HRE in terms of ‘fitness for sport’ (Harris, 2009) and that they were confident in their ability to teach HRE via sport- and fitness-focused activities. The conundrum, though, is that because the teachers viewed HRE in this way, and they felt confident in their ability to teach about sport and fitness, when asked if they needed HRE-CPD, many of them did not perceive it as a priority (see Figure 8.1). If Physical Education teachers’ understandings of HRE are to be broadened, this persisting cycle within Physical Education clearly needs to be disturbed. It seems ironic, however, that in order to disturb the common sense assumptions about the nature of HRE, it is arguably necessary that Physical Education teachers engage with HRE-CPD. Given the privileging of sport, fitness and performance within many Physical Education teachers’ philosophies, however, encouraging them to engage in more HRE-CPD remains a challenge.
Conclusions, limitations and recommendations

Figure 8.1 The HRE-CPD Conundrum

The 'conundrum', and this thesis more broadly, highlights the complexity which underpins the teaching of Physical Education and, more specifically, the socio-historical processes which have come to constrain and enable the ways in which the physical educators engaged with HRE and HRE-CPD. Utilising process sociology, and the concept of 'education figuration' in particular, the interdependencies (past and present) which impacted upon the teachers' views and actions with regard to HRE were made explicit.

8.5 Limitations

Whilst this research is deemed 'trustworthy' and it produced a number of findings worthy of discussion, it is acknowledged that there were some limitations. For example:

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Conclusions, limitations and recommendations

• Due to financial constraints, the sample size for the research was restricted from the outset;

• The issue of sample size was further exacerbated by the limited, though acceptable (Alreck & Settle, 2003), response rate (25%) to the survey questionnaire. In support of Sturgis, Smith and Hughes (2006), it is acknowledged that the response rate was limited due to the persisting and often conflicting pressures and responsibilities that teachers have to deal with on a daily basis;

• A number of measures were taken to maximise the possibility of a representative sample. The relatively limited response rate, however, may have limited the extent to which the findings can be representative of all Physical Education teachers. In addition, the participants of both phases of the research were partially self-selected and, therefore, may have had particular motives for volunteering (for example, they may have thought they were particularly good at teaching HRE, or they may have been particularly disgruntled with their HRE-CPD opportunities). Consequently, the findings may have been skewed somewhat.

• The methods used could only probe verbal behaviour (Goudsblom, 1977). As Mennell (1998, p.268) argues that,

> the problem of opacity in social figurations is such that, even if questionnaires yielded full evidence of all individuals' perceptions of the figuration into which they are woven, that evidence would not necessarily add up to produce an adequate understanding of the dynamics of the figuration.

There may have been a difference between what teachers claimed they did and what they actually did, with respect to their engagement in HRE and HRE-CPD;

• The survey included working definitions of the key concepts (HRE and CPD) being investigated but the ways in which these were understood and interpreted by the teachers was unknown;
• As with any research which contains a qualitative element, there is the potential for data to be missed or misinterpreted;

• The lead researcher (Laura Ward) did not have Qualified Teacher Status (QTS) and this proved to be both advantageous and limiting. In one respect, it allowed the research to be approached from a relatively detached perspective and it was therefore not ‘clouded’ by involvement and emotional attachment. Whilst the researcher had worked in both primary and secondary schools, however, her lack of QTS and experience as a full-time teacher meant that she lacked specific knowledge, skills and understanding of specific pedagogies and the HRE curriculum, at least at the outset.

• Related to the previous point, the researcher acknowledges that her understanding and interpretation of pedagogy and the curriculum developed over time and, as such, if the research were to be carried out again, slight adjustments would be made. For example, the survey which was distributed to teachers focused upon activities that were usually associated with HRE (such as circuit training and exercise-to-music). This arguably served to reinforce a common view of HRE and did nothing to challenge it or explore alternative approaches. Whilst phase two of the research tackled this issue, it would have been valuable if the survey had better explored the processes through which the Physical Education teachers had promoted learning through purposeful physical activity and effective pedagogies.

• Given the teacher-centric nature of this study, it is recognised that the findings largely reflect the perceptions of the participating teachers, whereas there are other perspectives to be considered within the education figuration.

Whilst process sociology proved to be a valuable framework, it is important to acknowledge that there is one aspect of this research which goes beyond the scope of process sociology. Some process sociologists (such as Green, 2006) use social theory to make sense of particular social phenomenon but, for them, it is beyond the scope of sociology to suggest how society ‘ought to be’. Indeed, Green (2006, p.652) criticises a focus upon “empirical study in the search of practical strategies to bring about change” and argues that striving for a “deeper and more fundamental sociological
understanding” of particular social phenomena is more valuable. It is argued, however, that this perspective can be limiting and if sociological research has no implications for practice, then what is it worth? Arguably, this thesis provides a deeper sociological understanding of Physical Education teachers’ engagement with HRE and HRE-CPD, whilst also contributing towards a foundation upon which strategies for change could be formulated. The following section draws upon the findings of the present study to present recommendations for future research, with the long-term goal of contributing towards practical developments within HRE and HRE-CPD.

8.6 Recommendations for Future Research

The process of this research, together with the research findings, have highlighted issues which can be addressed by future research. It is recommended that:

- Whilst an acceptable response size was attained (Alreck & Settle, 2003), future research would benefit from a larger sample size. With further funding in the future, data could be collected from more teachers in order to further expand understanding in this area of study;
- Research which focuses specifically on teachers’ engagement with HRE within their ITE would be useful if the intention is to improve HRE-CPD opportunities for teachers from the outset of their professional lives;
- Future research is recommended to explore how to overcome Physical Education teachers’ barriers to engagement in HRE and HRE-CPD;
- Further research is needed on the sources of information and resources Physical Education teachers use and how they can be supported in accessing the guidance, resources and opportunities available for HRE and HRE-CPD;
- Research into HRE-CPD could be developed in a way that builds on existing findings. An opportunity to construct a HRE-CPD programme and explore in depth how Physical Education teachers engage with it may be valuable;
- An internet survey may prove useful in future research and would be more cost effective and may yield better response rates than a postal survey;
Conclusions, limitations and recommendations

- The extent to which definitions of CPD and HRE are understood and interpreted by teachers could be explored;
- Further insights could be gained from longitudinal observation. This would allow for a comparison to be made between the teachers' views and their actions. In both stages of this research, for example, the teachers reported the nature and extent of their engagement with HRE, but little is known about the relationship or degree of 'slippage' between their views and actions. In other words, what people say they do and what they actually do is not always the same (Green, 2008);
- To date, there have been limited attempts to explore Physical Education teachers' engagement with HRE and HRE-CPD and as a result there has been limited opportunity to trace the nature and extent of their engagement over time. Further and longitudinal research is warranted which would enable the above to be better understood;
- An exploration into Physical Education teachers' engagement with whole school Health-Related policies would be useful in terms of understanding the link between policy and practice and how, in turn, that might impact upon pupil learning and related health behaviours;
- This thesis has intentionally focused upon Physical Education teachers but in order to gain a more comprehensive understanding of this issue it would be useful to gain the perspective of others within the education figuration (such as pupils and CPD providers);
- It is possible that some teachers had experienced HRE whilst at school and during ITE but had not recognised it as such because, for example, it may have been permeated through other areas of the Physical Education curriculum. This issue requires further exploration;
- With reference to the 'HRE conundrum' (see Figure 8.1), it would be valuable if future research could investigate ways in which teacher educators and CPD providers could begin to disturb or challenge the ideologies of sport and healthism which appear to be privileged within Physical Education teachers'
philosophies. Some preliminary ideas, with a view to beginning this process are outlined in the next section.

8.7 Implications for Practice
A number of interrelated implications for practice stem from this research, the most pertinent of which are now presented.

8.7.1 Awareness
Before change can occur, it is imperative that members of the education figuration (such as those within government, policy makers, school managers, teachers and CPD providers) are aware of and value the findings of this research. Awareness is most necessary with respect to: i) Physical Education teachers’ limited engagement with HRE and HRE-CPD; and ii) existing and future opportunities for teachers to engage with HRE-CPD. Physical Education teachers’ limited engagement with HRE and HRE-CPD, and the enabling and constraining processes impacting upon their engagement, need to be communicated effectively across the education figuration with the intention of informing policy, practice and removing barriers to engagement.

It is imperative that each of the barriers to HRE-CPD engagement that were identified within this research is addressed at multiple levels. For example, in order to promote access to HRE-CPD it is recommended that opportunities are widely marketed and promoted via a range of mediums (such as post and internet) across the figuration, and that teachers have the opportunity to engage with a long-term programme of HRE-CPD which can include face-to-face contact, communities of practice, teaching resources and web-based support (including forums and the sharing of resources).

8.7.2 Policy Development
There are apparent and significant implications for policy relating to PE-CPD and HRE-CPD, with a view to impacting upon Physical Education teachers’ knowledge, skills, understanding and pedagogies. Acknowledging, of course, that policy developments do not necessarily lead to changes in practice, it is argued that effective HRE pedagogies would be more likely if multi-level policy were to challenge and
Conclusions, limitations and recommendations

1. Develop teachers' philosophies about Physical Education and HRE (at various points across their professional lives). This recommendation places inevitable pressure on CPD (inclusive of ITE) providers to be aware of and challenge historically-rooted ideologies, as well as address other barriers (such as lack of support for engagement with HRE-CPD) which continue to limit teachers’ pedagogies within HRE.

In an attempt to maintain professional standards, and linked to notions of accountability, it is suggested that policy should compel educators to attend certified and effective CPD relating to all elements of curriculum, including HRE. This could be based on needs assessment or a rotation structure whereby teachers are encouraged and supported to engage with CPD concerning all aspects of Physical Education and teaching (including content, curriculum knowledge and pedagogy).

8.7.3 Broadening Understandings of CPD

The findings revealed that Physical Education teachers usually interpret CPD narrowly, and define it in terms of conferences and workshops. It is argued that such narrow views can limit the nature and number of perceived opportunities for CPD, and it is therefore important for teachers to recognise that CPD extends beyond traditional, dis-connected, one-off workshops. It is acknowledged that some teachers in the study cited other forms of CPD they had engaged with and Philip (male, 30+ years of experience), for example, highlighted his use of peer-coaching.

It's such a tool, such a powerful tool. The skill is in asking the right questions, to make them understand why they (the teacher) are doing something... We are trying to get that (peer-coaching) programme running more explicitly in the school, that's what I'm trying to do. There's about 4 or 5 interested teachers in the school. No one need know about it in some respects, you just need to ask someone to come and watch your lesson. Someone you trust and stuff like that. It doesn't have to be some boss, it could just be someone that's good at a particular thing. That's just as valuable as going off on some course at a posh hotel.

Teachers need to value CPD, be aware of different forms of CPD and broaden the range of CPD they engage in. It is recommended that initial teacher educators discuss with pre-service teachers the complex and dynamic nature of CPD, with the aim of
raising their awareness of opportunities for CPD in the future. While it is acknowledged that teacher educators are already heavily constrained by time (Harris, 2009), it seems that ITE is an ideal context for pre-service teachers' understandings of CPD to be developed in broad and comprehensive ways, from the outset.

Once an awareness of the issues pertaining to HRE and HRE-CPD is heightened, relevant policy is implemented, and broader understandings of CPD have been encouraged, there is then an opportunity for a focused group of people, spanning all levels of the education figuration, to address issues discussed within this thesis. The following section explores this idea further.

8.7.4 HRE Task-Force

As previously noted, this thesis demonstrated that Physical Education teachers tended to demonstrate narrow and incoherent understandings of HRE. It is therefore evident that the development and dissemination of clear, coherent and common understandings about the importance, nature and purpose of HRE and HRE-CPD are necessary. In 1997, there was an attempt to address these issues via the ‘HRE Working Group’ which comprised representatives from schools, higher education, the advisory service and prevalent Physical Education, sport and health organisations (Cale & Harris, 2005). The Working Group aimed to support physical educators in their teaching of HRE and produced good practice guidelines for them in the form of a curriculum resource. Whilst the Working Group achieved some success and should be applauded for the progress they did make, their efforts do not appear to have led to widespread and sustainable change in the long-term, with the cycle of incoherence continuing to persist within HRE.

In order to address the issues which have been identified within this research, it is suggested that a ‘HRE Task Force’ be established along similar lines to that of the HRE Working Group in 1997. Before doing so, however, it is imperative that further research is carried out in order to uncover why the earlier Working Group was not as effective as was hoped. The HRE Task Force would be responsible for, amongst other things, planning and implementing HRE-CPD across all levels of the education
figuration (with links being made between school pupils, university students, pre-service teachers, qualified teachers, ITE and CPD providers). The aim being to ensure that (future) teachers are provided with opportunities to develop their knowledge, skills, understanding and pedagogies related to HRE, at different points throughout their lives (at school, university, during ITE, and whilst teaching).

This thesis discussed 'effective CPD' and it is now necessary to apply the 'typology' of effective CPD to HRE-CPD in particular. It is recommended that the HRE Task Force, together with ITE and HRE-CPD providers, need to provide HRE-CPD which offers:

- the provision of effective resources;
- support networks across all levels of the education figuration;
- the opportunity to participate in high quality CPD and work-based learning;
- time for reflection;
- formally stated objectives;
- recognition and commitment from all stakeholders;
- a focus upon the priorities of individual teachers, the school and Government strategies;
- a combination of formal and informal CPD opportunities;
- the development of professional learning communities;
- able to provide ideas and practices;
- relevant and applicable experiences;
- practical experiences;
- well delivered experiences;
- opportunities for collaboration and reflection;
- challenging and thought provoking experiences.

The challenge is to promote a culture within the education figuration, from the bottom-up, which values HRE as an area of learning, and which recognises the dynamic nature of knowledge production and necessitates the need to keep abreast of ongoing developments. Encouraging an ethos within the education figuration which values HRE and CPD would arguably increase the likelihood of a supported, more coherent and effective approach towards HRE and HRE-CPD.
8.7.5 Responsibility

Finally, the findings of this study revealed that some of the teachers viewed CPD as something which should be ‘given’ or ‘done’ to them, with Frances (female, 16-30 years of experience) stating, for example, that:

“I have to say that an awful lot of our HRE I’m winging it or I’m going on what I’ve learnt along the way, by chance, rather than ever been given it.”

(emphasis added)

It appears that teachers, as well as ITE and CPD providers, need to be empowered and encouraged to take a suitable degree of responsibility for, and ownership of, their professional development. As the Professional Standards for Teachers (TDA, 2007) state, teachers must demonstrate professional attributes and, more specifically, take responsibility for their ‘personal professional development’. Thus, all members of the education figuration must, to varying degrees, recognise their responsibility in terms of maintaining professional standards for teachers. Cultivating and supporting a culture which values HRE and CPD, as proposed above, could go some way towards trying to achieve this.

8.8 Final Thoughts

This thesis contributes towards an understanding of the social processes which can serve to influence the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD. Whilst existing literature has highlighted concerns about Physical Education teachers’ teaching and knowledge of HRE and the extent to which they engage with CPD in the area (HRE-CPD) (Armour & Harris, 2008; Armour & Yelling, 2004a; Cale, 2000b; Cale, Harris & Leggett, 2002; Castelli & Williams, 2007; Fox & Harris, 2003; Harris, 1994; Trost, 2006), the social processes underpinning these concerns have not previously been addressed. In summary, the findings suggest that Physical Education teachers’ engagement with HRE and HRE-CPD was influenced by:

- the privileging of ideologies relating to ‘fitness for sport’ within Physical Education and HRE;
• a medico-health rationale for Physical Education which is rooted in ideologies of healthism and which stems from a need to control and regulate the human body;
• their limited knowledge and narrow understanding of HRE;
• their philosophies which, more often than not, were hallmarked by a preoccupation with sport and competitive team games;
• their gender and the gender of their pupils;
• power and status of teachers, Physical Education and HRE;
• the limited attention paid to HRE and ‘lifetime’ activities within Physical Education and Sport Science Degree Programmes and ITE;
• the perceived relevance of HRE-CPD;
• available support for teaching of HRE;
• availability of accessible resources and HRE-CPD.

Having identified the above social processes which, together, appear to be influencing the nature and extent of Physical Education teachers’ engagement with HRE and HRE-CPD, it is argued that they can be utilised in attempts to promote pupil learning associated with HRE and Physical Education more generally.

Whilst it is acknowledged that a multi-layered approach to this complex issue is necessary, it is argued that effective HRE-CPD could play an important role in challenging, clarifying and broadening Physical Education teachers’ views and practices within HRE and thus, go some way to disturbing the persisting cycle of incoherence which has characterised HRE to date. In order to disturb the ‘HRE conundrum’ (see Figure 8.1), it may be necessary for HRE-CPD, inclusive of ITE, to challenge the ideologies of sport and healthism which continue to be privileged within many Physical Education teachers’ philosophies and practices. To conclude, the present findings suggest that the learning outcomes associated with (Harris, 2000) have been ‘lost in translation’, and that the Physical Education teachers’ engagement with HRE and HRE-CPD did not demonstrate ‘a healthy profile’.
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References


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Appendix A

A Figuration of Interdependent Individuals
From a process sociological perspective it is important to see 'figuration' as a dynamic concept that is continually in flux and that is characterised by numerous, multi-directional processes and balances of power. According to Murphy et al. (2000, p.92), Elias' concept of figuration allows for the processual nature of societies to be emphasised and for human beings to be viewed as *hominis aperti*, or "people bonded together in dynamic constellations".

_Elias (1978, p.175) states that “For simplicity’s sake only the most elementary types of people’s needs for each other, and of their corresponding bonds with each other, are shown in this diagram”. He suggests that the diagram above (Figure A) serves to, facilitate the reorientation of sociological models and concepts, which becomes possible if one stops viewing human beings, including oneself, as completely autonomous units and perceives them instead as semi-autonomous units needing each other, dependent on and bonded to each other in a great variety of ways. The diagram indicates that unstable power balances and related trials of strength are among the basic properties of all human relationships, whether they are relatively simple relationships between two people...or multi-member figurations such as towns or states, formed by great numbers of people._
Appendix B

Framework for Assessing Qualitative Evaluations
<table>
<thead>
<tr>
<th>a) Appraisal questions</th>
<th>b) Quality indicators (possible features for consideration)</th>
<th>c) Notes on study being appraised</th>
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<tbody>
<tr>
<td>How credible are the findings?</td>
<td>Findings/conclusions are supported by data/study evidence (i.e. the reader can see how the researcher arrived at his/her conclusions; the ‘building blocks’ of analysis and interpretation are evident)</td>
<td>Data from two phases of research are presented.</td>
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<td>Findings/conclusions ‘make sense’/have a coherent logic</td>
<td>The sources of all evidence are stated.</td>
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<td></td>
<td>Findings/conclusions are resonant with other knowledge and experience (this might include peer or member review)</td>
<td>Teachers were asked to confirm that the interview transcription accurately represented their views at the time of the interview.</td>
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<td></td>
<td>Use of corroborating evidence to support or refine findings</td>
<td>The findings and conclusions were subject to review on a number of occasions.</td>
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<td>Links are made to existing research findings.</td>
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<tr>
<td>How has knowledge/understanding been extended by the research?</td>
<td>Literature review (where appropriate) summarising knowledge to date/key issues raised by previous research</td>
<td>Prior to the field work being initiated, an extensive and critical review of literature was carried out. This allowed for the research to be contextualised and justified on the basis of a 'gap' in the literature.</td>
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<td></td>
<td>Aims and design of study set in the context of existing knowledge/understanding; identifies new areas for investigation</td>
<td>A discussion of findings demonstrated the unique contribution to the fund of knowledge. The conclusions that were drawn enabled suggestions to be made.</td>
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<td></td>
<td>Credible/clear discussion of how findings have contributed to knowledge and how understanding might be applied to new policy developments, practice or theory.</td>
<td>Utilising a socio-historical perspective, characteristic of process sociology, allowed for a unique insight into physical education teachers engagement with HRE and HRE-CPD.</td>
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<tr>
<td></td>
<td>Findings presented or conceptualised in a way that offers new insights/alternative ways of thinking</td>
<td>Limitations were highlighted.</td>
</tr>
<tr>
<td></td>
<td>Discussion of limitations of evidence and what remains unknown/unclear or what further information/research is needed</td>
<td></td>
</tr>
<tr>
<td>3. FINDINGS</td>
<td>How well does the evaluation address its original aims and purpose?</td>
<td>Clear statement of study aims and objectives; reasons for any changes in objectives</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Findings clearly linked to the purposes of the study – and to the initiative or policy being studied</td>
<td>The research questions were answered and the conclusion of the thesis reflected this.</td>
</tr>
<tr>
<td></td>
<td>Summary or conclusions directed towards aims of study</td>
<td>The limitations were highlighted and suggestion were made for future research.</td>
</tr>
<tr>
<td></td>
<td>Discussion of limitations of study in meeting aims</td>
<td></td>
</tr>
<tr>
<td>Scope for drawing wider inference</td>
<td>Discussion of what can be generalised to wider population from which sample is drawn/case selection has been made</td>
<td>The likelihood that the results were representative of English PE teachers more widely was increased by the representative sampling procedure used.</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Detailed description of the contexts in which the study was conducted to allow applicability to other settings/contextual generalities to be assessed</td>
<td>It was acknowledged that this research represents a 'snap-shot' of one point in time.</td>
</tr>
<tr>
<td></td>
<td>Discussion of how findings may relate to wider theory.</td>
<td>The socio-historical and political context within which the study was set was discussed.</td>
</tr>
<tr>
<td></td>
<td>Evidence supplied to support claims for wider inference (<em>either from study or from corroborating sources</em>)</td>
<td>Wider theory used to explain the findings.</td>
</tr>
<tr>
<td></td>
<td>Discussion of limitations on drawing wider inference</td>
<td>Quotes from the teachers provided evidence for claims.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The limitations were highlighted where necessary.</td>
</tr>
<tr>
<td>5. FINDINGS</td>
<td></td>
<td>6. DESIGN</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>How clear is the basis of evaluative appraisal?</td>
<td>Discussion of how assessments of effectiveness/evaluative judgements have been reached (<em>i.e. whose judgements are they and on what basis have they been reached?</em>)</td>
<td>Involvement and detachment were discussed in relation to reflexivity. Personal experiences and values were identified within a personal biography. Interpretations were acknowledged.</td>
</tr>
<tr>
<td>How defensible is the research design?</td>
<td>Discussion of how overall research strategy was designed to meet aims of study</td>
<td>Appropriate research strategies were implemented in order to answer the research questions.</td>
</tr>
<tr>
<td></td>
<td>Discussion of rationale for study design</td>
<td>A rationale was provided for the research design.</td>
</tr>
<tr>
<td></td>
<td>Convincing argument for different features of research design</td>
<td>Constraining and enabling factors relating to the research methods were outlined.</td>
</tr>
<tr>
<td></td>
<td>Discussion of limitations of research design and their implications for the study evidence</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix B: Framework for Assessing Qualitative Evaluations

<table>
<thead>
<tr>
<th>7. Sample</th>
<th>8. Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How well defended is the sample design/target selection of cases/documents?</strong></td>
<td><strong>Sample composition/case inclusion</strong></td>
</tr>
<tr>
<td>Description of study locations/areas and how and why chosen</td>
<td>Detailed profile of achieved sample/case coverage</td>
</tr>
<tr>
<td>Rationale for basis of selection of target sample/settings/documents</td>
<td>Discussion of access and methods of approach and how these might have affected participation/coverage</td>
</tr>
<tr>
<td>Discussion of how sample/selections allowed required comparisons to be made</td>
<td>The sampling procedures were outlined and justified.</td>
</tr>
<tr>
<td></td>
<td>Teachers working within a variety of schools in a number of Local Authorities were chosen.</td>
</tr>
<tr>
<td></td>
<td>Similarities and differences were discussed where necessary.</td>
</tr>
<tr>
<td></td>
<td>The sample for both phases of research is outlined.</td>
</tr>
<tr>
<td></td>
<td>Potential reasons for a lack of response are discussed.</td>
</tr>
<tr>
<td>How well was the data collection carried out?</td>
<td>Discussion of:</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>• who conducted data collection</td>
</tr>
<tr>
<td></td>
<td>• procedures/documents used for collection/recording</td>
</tr>
<tr>
<td></td>
<td>• checks on origin/status/authorship of documents</td>
</tr>
<tr>
<td>Audio or video recording of interviews/discussions/conversations</td>
<td></td>
</tr>
<tr>
<td>Description of conventions for taking field notes.</td>
<td></td>
</tr>
<tr>
<td>Discussion of how fieldwork methods or settings may have influenced data collected</td>
<td></td>
</tr>
<tr>
<td>The research conducted all of the research.</td>
<td></td>
</tr>
<tr>
<td>The collection of data was discussed in depth with peers.</td>
<td></td>
</tr>
<tr>
<td>Interviews and conversations were audio-recorded.</td>
<td></td>
</tr>
<tr>
<td>A research diary was compiled throughout the research process.</td>
<td></td>
</tr>
<tr>
<td>The influence of methodologies and methods upon the data collected was discussed.</td>
<td></td>
</tr>
<tr>
<td>How well has the approach to, and formulation of, the analysis been conveyed?</td>
<td>Description of form of original data (e.g. use of verbatim transcripts, observation or interview notes, documents, etc.)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Clear rationale for choice of data management method/tool/package</td>
</tr>
<tr>
<td></td>
<td>Evidence of how descriptive analytic categories, classes, labels etc. have been generated and used (i.e. either through explicit discussion or portrayal in the commentary)</td>
</tr>
<tr>
<td></td>
<td>Discussion, with examples, of how any constructed analytic concepts/typologies etc. have been devised and applied</td>
</tr>
<tr>
<td>Contexts of data sources – how well are they retained and portrayed?</td>
<td>Description of background or historical developments and social/organisational characteristics of study sites or settings perspectives/observations placed in personal context</td>
</tr>
<tr>
<td>How well has diversity of perspective and content been explored?</td>
<td>Discussion of contribution of sample design/case selection in generating diversity</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Description and illumination of diversity/multiple perspectives/alternative positions in the evidence displayed</td>
</tr>
<tr>
<td></td>
<td>Evidence of attention to negative cases, outliers or exceptions</td>
</tr>
<tr>
<td></td>
<td>Typologies/models of variation derived and discussed</td>
</tr>
<tr>
<td></td>
<td>Examination of origins/influences on opposing or differing positions</td>
</tr>
<tr>
<td></td>
<td>Identification of patterns of association/linkages with divergent positions/groups.</td>
</tr>
<tr>
<td></td>
<td>A representative sampling procedure was used in order to generate diversity.</td>
</tr>
<tr>
<td></td>
<td>Similarities and differences were highlighted throughout the findings and the discussion.</td>
</tr>
<tr>
<td></td>
<td>Reasons for difference centered around a combination of individual and social habitus, present context and the ongoing circulation of ideologies (i.e. PE teachers' philosophies).</td>
</tr>
<tr>
<td>13 - ANALYSIS</td>
<td>How well has detail, depth and complexity of the data been conveyed?</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Unpacking and portrayal of nuance/subtlety/intricacy within data</td>
</tr>
<tr>
<td></td>
<td>Discussion of explicit and implicit Explanations</td>
</tr>
<tr>
<td></td>
<td>Detection of underlying factors/influences</td>
</tr>
<tr>
<td></td>
<td>Presentation of illuminating textual extracts/observations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14 - REPORTING</th>
<th>How clear are the links between data, interpretation and conclusions?</th>
<th>Clear conceptual links between analytic commentary and presentations of original data</th>
<th>Original data was included within each ‘theme’ and links to the conclusion were made explicit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discussion of how/why particular interpretation/significance is assigned to specific aspects of data – with illustrative extracts of original data</td>
<td>Display of negative cases and how they lie outside main proposition/theory/hypothesis etc</td>
<td>An anomaly was highlighted and reasons were provided as to why they were different.</td>
</tr>
</tbody>
</table>
### Appendix B: Framework for Assessing Qualitative Evaluations

<table>
<thead>
<tr>
<th>How clear and coherent is the reporting?</th>
<th>Demonstrates link to aims of study/research questions.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provides a narrative/story or clearly constructed thematic account</td>
</tr>
<tr>
<td></td>
<td>Has structure and signposting that usefully guide reader through the commentary</td>
</tr>
<tr>
<td></td>
<td>Provides accessible information for intended target audience(s)</td>
</tr>
<tr>
<td></td>
<td>Key messages highlighted or summarised</td>
</tr>
<tr>
<td></td>
<td>The aims (research questions) were reiterated throughout.</td>
</tr>
<tr>
<td></td>
<td>The chapters and sections were presented in a logical order and links between them were highlighted.</td>
</tr>
<tr>
<td></td>
<td>The information is accessible for the intended audience.</td>
</tr>
<tr>
<td></td>
<td>Key messages and conclusions were summarized.</td>
</tr>
<tr>
<td>16. Reflexivity &amp; Neutrality</td>
<td>Discussion/evidence of the main assumptions/hypotheses/theoretical ideas on which the evaluation was based and how these affected the form, coverage or output of the evaluation.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Discussion/evidence of the ideological perspectives/values/philosophies of research team and their impact on the methodological or substantive content of the evaluation <em>(again, may not be explicitly stated)</em></td>
</tr>
<tr>
<td></td>
<td>Discussion of how error or bias may have arisen in design/data collection/analysis and how addressed, if at all</td>
</tr>
<tr>
<td></td>
<td>Reflections on the impact of the researcher on the research process</td>
</tr>
<tr>
<td>What evidence is there of attention to ethical issues?</td>
<td>Evidence of thoughtfulness/sensitivity about research contexts and participants</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Documentation of how research was presented in study settings/to participants</td>
</tr>
<tr>
<td></td>
<td>Documentation of consent procedures and information provided to participants</td>
</tr>
<tr>
<td></td>
<td>Discussion of confidentiality of data and procedures for protecting</td>
</tr>
<tr>
<td></td>
<td>Discussion of how anonymity of participants/sources was protected</td>
</tr>
<tr>
<td></td>
<td>Discussion of any measures to offer information/advice/services etc. At end of study (i.e. where participation exposed the need for these)</td>
</tr>
<tr>
<td></td>
<td>The teachers’ volunteered to participate in the research.</td>
</tr>
<tr>
<td></td>
<td>The presentation of the research to the teachers is documented.</td>
</tr>
<tr>
<td></td>
<td>The consent procedures are documented.</td>
</tr>
<tr>
<td></td>
<td>All data was declared confidential and their anonymity was ensured.</td>
</tr>
<tr>
<td></td>
<td>The teachers were asked if they would like a copy of the report.</td>
</tr>
</tbody>
</table>
## How adequately has the research process been documented?

<table>
<thead>
<tr>
<th>18. AUDITABILITY</th>
<th>Discussion of strengths and weaknesses of data sources and methods</th>
<th>The strengths and weaknesses were discussed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Documentation of changes made to design and reasons; implications for study coverage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Documentation and reasons for changes in sample coverage/data collection/analytic approach; implications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reproduction of main study documents <em>(e.g. letters of approach, topic guides, observation templates, data management frameworks etc.)</em></td>
<td>Included within the appendices.</td>
</tr>
</tbody>
</table>

Appendix B: Framework for Assessing Qualitative Evaluations
Appendix C

Survey Questionnaire
A Survey of Physical Education Teachers' Experiences, Training and Continuing Professional Development in Health Related Exercise

Dear colleague,

I am currently conducting research on PE teachers' experiences, training and continuing professional development (CPD)\textsuperscript{27} in health related exercise (HRE)\textsuperscript{28}. In order to enhance policy and practice in physical education it is important to gain a better understanding of you, as a PE teacher. I would therefore be very grateful if you could find the time to complete this questionnaire as fully and as accurately as possible.

The majority of the questions are 'tick-boxes' and they will take approximately 10 minutes to complete. Upon completion, please return the questionnaire in the SAE provided by Friday December 15\textsuperscript{th} 2006. \textit{The information you provide will be treated with the strictest confidence and neither yourself, your colleagues nor your school, will be identified in the research.}

If you have any questions regarding this research project, please do not hesitate to contact me. \textit{Any comments are gratefully received.}

Thank you very much in anticipation.

Laura Ward
School of Sport and Exercise Sciences
Loughborough University
Loughborough
LE11 3TU
Email: L.G.Ward@lboro.ac.uk
Tel. (01509) 228451

\textbf{For the purpose of this questionnaire:}
\textsuperscript{27}CPD refers broadly to any activity, from the point of ITT that “increases the skills, knowledge or understanding of teachers, and their effectiveness in schools” (DfEE, 2000, p.3).

\textsuperscript{28}HRE relates to the "knowledge and understanding of fitness and health" aspect of the National Curriculum for PE. It includes the teaching of knowledge, understanding, physical competence and behavioural skills, and the creation of positive attitudes and confidence associated with current and lifelong participation in physical activity.

316
### Section A: About Yourself

**Please tick the appropriate response for you.**

<table>
<thead>
<tr>
<th>I am:</th>
<th>□₁ Female</th>
<th>□₂ Male</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>I am aged:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□₁ Under 25 years</td>
</tr>
<tr>
<td>□₂ 25-34 years</td>
</tr>
<tr>
<td>□₃ 35-44 years</td>
</tr>
<tr>
<td>□₄ 45-54 years</td>
</tr>
<tr>
<td>□₅ 55 + years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I have been teaching for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□₁ 0-3 years</td>
</tr>
<tr>
<td>□₂ 4-7 years</td>
</tr>
<tr>
<td>□₃ 8-15 years</td>
</tr>
<tr>
<td>□₄ 16-30 years</td>
</tr>
<tr>
<td>□₅ 30 + years</td>
</tr>
</tbody>
</table>

**Please tick all that apply to you.**

**Currently I am:**

| □₁ an NQT                  |
| □₂ a Specialist PE Teacher |
| □₃ a Head of Department/Faculty |
| □₄ an Advanced Skills Teacher |
| □₅ an Induction Tutor       |
| □₆ an Initial Teacher Training Mentor |
| □₇ Other (please specify)   |

**My School is:**

| □₁ State                   |
| □₂ Independent             |
| □₃ Specialist College      |
| (please specify the specialism below) |

<table>
<thead>
<tr>
<th>□₄ Other (please specify below)</th>
</tr>
</thead>
</table>

---

317
Section B: About Your Background and Experiences of HRE

B1. Were you taught HRE/health related PE at school?
Yes  □ 1
No   □ 2 If no, please go to Question B4.
Undecided  □ 3 If undecided, please go to Question B4.

B2. What types of activities were included in the HRE component of your PE whilst you were at school? (please tick all that apply)

- Exercise to music   □1
- Circuit training   □2
- Weight training   □3
- Skipping           □4
- Running (not cross-country) □5
- Cross-country running □6
- Water-based exercise □7
- Other (please specify) □8

B3. In general, how would you rate your experiences of HRE whilst you were at school?

<table>
<thead>
<tr>
<th>Extremely positive</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
<th>Extremely negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>

B4. Approximately how many years experience do you have of teaching HRE?

- 0-3 years □1
- 4-7 years □2
- 8-15 years □3
- 16+ years □4
Appendix C: Survey Questionnaire

B5. Other than your formal academic qualifications, do you hold any other professional qualifications that you feel are relevant to the teaching of HRE?

- Yes [ ] 1
- No [ ] 2
- Uncertain [ ] 3

If yes or uncertain, please provide details in the space below:


B6. How confident do you feel delivering HRE?

- Very confident [ ] 5
- Confident [ ] 4
- Neutral [ ] 3
- Not very confident [ ] 2
- Not at all confident [ ] 1

B7. To what extent do you view HRE as a valuable component of the PE curriculum?

- Extremely valuable [ ] 5
- Valuable [ ] 4
- Neutral [ ] 3
- Not very valuable [ ] 2
- Not at all valuable [ ] 1

B8. Which approaches do you use in your delivery of HRE?

- Focused (taught through specific focused units of work within PE) [ ] 1
- Permeation (taught through the PE activity areas such as games, dance, swimming) [ ] 2
- Combination (taught through a combination of approaches) [ ] 3

B9. If HRE is taught via a focused approach, how would you describe the practical/theory balance of the units?

- Mostly practical with all lessons taken in a practical area [ ] 1
- Mainly practical with some lessons taken in a classroom [ ] 2
- An even split between practical and classroom-based theory lessons [ ] 3
- Mainly classroom based with some lessons taken in a practical area [ ] 4
- Mostly theory with all lessons taken in a classroom [ ] 5
B10. Who do you currently teach HRE to? (please tick all that apply)
  Girls only □ 1
  Boys only □ 2
  Girls and boys in separate lessons □ 3
  Girls and boys in mixed lessons □ 4

B11. Does your department currently have a written scheme of work for HRE?
  Yes □ 1
  No □ 2
  Uncertain □ 3

If yes, when was this written/revised?
  More than 5 years ago □ 1
  2-5 years ago □ 2
  During this or the previous academic year □ 3

B12. Which content areas do you cover in HRE?
  Stamina or cardiovascular/cardio respiratory health □ 1
  Muscular strength and endurance □ 2
  Suppleness/flexibility/stretching □ 3
  Following/planning/designing exercise programmes □ 4
  Measuring/monitoring/fitness testing □ 5
  Relaxation/stress management □ 6
  Weight management □ 7
  Others (please specify) □ 8
                              □ 9
Appendix C: Survey Questionnaire

B13. What types of activities do you include in HRE?

- Exercise to music □ 1
- Circuit training □ 2
- Weight training □ 3
- Skipping □ 4
- Running (not cross-country) □ 5
- Cross-country running □ 6
- Water-based exercise □ 7
- Other (please specify) □ 8

B14. In your opinion, do different teachers (for example, according to sex, years of experience) adopt different approaches in their delivery of HRE?

If yes, please explain your answer in the space below.

B15. In your opinion, do different teachers (for example, according to sex, years of experience) deliver different types of activities in HRE?

B16. In your experience, how do you think pupils in your school view HRE?

<table>
<thead>
<tr>
<th>Extremely Positive</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
<th>Extremely Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>
Appendix C: Survey Questionnaire

B17. Was HRE a component of your Initial Teacher Training (ITT)?
   Yes   □ 1
   No    □ 2   If no, please go straight to Section C.
   Uncertain □ 3   If undecided, please go straight to Section C.

B18. Did the HRE component of your ITT comprise of:
   Practical sessions only □ 1
   Theoretical sessions only □ 2
   A mix of practical and theoretical sessions □ 3

B19. To what extent do you feel that your ITT prepared you to teach Physical Education?

<table>
<thead>
<tr>
<th>Extensively</th>
<th>To a reasonable extent</th>
<th>To some extent</th>
<th>To a limited extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>

B20. To what extent do you feel that your ITT prepared you to teach Health Related Exercise?

| □ 5 | □ 4 | □ 3 | □ 2 | □ 1 |

Please answer question B21 on a scale of 5 (more than adequate) to 1 (inadequate).

B21. When you were completing your ITT, how adequate did you perceive the following:

<table>
<thead>
<tr>
<th>More than adequate</th>
<th>Adequate</th>
<th>Neutral</th>
<th>Less than adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>

   a) the amount of HRE you received?
   □ 5 □ 4 □ 3 □ 2 □ 1

   b) the content of the HRE component?
   □ 5 □ 4 □ 3 □ 2 □ 1

   c) the structure and delivery of HRE?
   □ 5 □ 4 □ 3 □ 2 □ 1

   d) the support available for HRE?
   □ 5 □ 4 □ 3 □ 2 □ 1

   e) the amount of HRE teaching experience you gained?
   □ 5 □ 4 □ 3 □ 2 □ 1
Section C: About Your CPD

C1. Do you have a formal (planned) CPD programme?
   Yes □ 1
   No □ 2
   Uncertain □ 3

C2. Do you keep a record of your CPD activities?
   Yes □ 1
   No □ 2

C3. Approximately how much formal CPD have you undertaken in the last 12 months?
   □□ hours OR □□ courses

C4. Approximately how much formal CPD have you undertaken in the last 3 years?
   □□ hours OR □□ courses

C5. What forms of formal CPD, if any, have you or do you currently access? (please tick all that apply):
   Courses (e.g. one day) □ 1
   ‘In-House’ (e.g. school/department sessions) □ 2
   e-learning (e.g. web based distance learning, CD-ROMS) □ 3
   Other (please specify below) □ 4

C6. When does most of your formal CPD take place?
   Daytime □ 1
   Evening □ 2
   Weekends □ 3
   Holiday □ 4
Appendix C: Survey Questionnaire

C7. How frequently do you generally engage in formal CPD?
   Daily □ 1
   Weekly □ 2
   Bi-monthly □ 3
   Monthly □ 4
   Annually □ 5
   Other (please specify) □ 6 __________________________

C8. Where do you, or have you accessed your formal CPD? (please tick all that apply)
   School □ 1
   Training Centre □ 2
   University □ 3
   On-line □ 4
   Other (please specify) □ 5 __________________________

C9. Who provides, or has provided your formal CPD? (please tick all that apply)
   School Staff (please specify) □ 1 __________________________
   Staff from other schools □ 2
   University Staff □ 3
   LEA Advisors □ 4
   Private sector consultants □ 5
   Local Delivery Agent □ 6
   Professional Association □ 7
   Other (please specify) □ 8 __________________________
To what extent do you agree or disagree with the following statements:

<table>
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<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10. My needs are met through CPD.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C11. CPD tends to meet the needs of the school as opposed to my personal needs.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C12. I feel that I have an influence upon the CPD I undertake.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C13. My school provides me with adequate opportunities to improve my teaching skills.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C14. I feel that most CPD is driven by government policy.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C15. Senior management are supportive of me attending CPD.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C16. CPD providers view professional development as a commercial activity.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C17. CPD is extremely valuable to a teacher's development.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix C: Survey Questionnaire

Please answer questions C18 on a scale of 5 (more than adequate) to 1 (inadequate).

C18. With reference to your PE-CPD, how adequate do you perceive the following:

<table>
<thead>
<tr>
<th>More than adequate</th>
<th>Adequate</th>
<th>Neutral</th>
<th>Less than adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>

a) the *amount* of PE-CPD you have undertaken?

b) the *content* of the PE-CPD you have undertaken?

c) the *structure and delivery* of the PE-CPD you have undertaken?

d) the *support* for your PE-CPD to be from:
   i) the department?
      □ 5               □ 4       □ 3        □ 2          □ 1
   ii) the school?
       □ 5               □ 4       □ 3        □ 2          □ 1

C19. Are you aware of the National PE-CPD Programme?
   Yes  □ 1
   No   □ 2  If no, please go straight to Question C23.
   Undecided  □ 3  If undecided, please go straight to Question C23.

C20. To what extent have you accessed the National PE-CPD Programme?

<table>
<thead>
<tr>
<th>Extensively</th>
<th>To a reasonable extent</th>
<th>To some extent</th>
<th>To a limited extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 5</td>
<td>□ 4</td>
<td>□ 3</td>
<td>□ 2</td>
<td>□ 1</td>
</tr>
</tbody>
</table>

C21. To what extent do you feel that the National PE-CPD Programme has influenced your teaching practices?

□ 5  □ 4  □ 3  □ 2  □ 1
C22. To what extent do you think that the National PE-CPD Programme contributes to achieving its aims of:

<table>
<thead>
<tr>
<th>Extensively</th>
<th>To a reasonable extent</th>
<th>To some extent</th>
<th>To a limited extent</th>
<th>Not at all</th>
</tr>
</thead>
</table>

a) raising the quality of teaching and learning in PE?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

b) improving understanding of how high quality PE can be used as a tool for school improvement?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

c) improving understanding of how high quality PE can support healthy lifestyles?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

d) helping schools develop the PE programme of study in more innovative ways?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

e) developing a whole-school approach to improvement?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

C23. To what extent do you think that your CPD has influenced your teaching practices?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

C24. To what extent do you think that your CPD has influenced your pupils' learning?
   - [ ] 5
   - [ ] 4
   - [ ] 3
   - [ ] 2
   - [ ] 1

C25. How do you feel the general public perceive the status of PE teachers in comparison to teachers of other subjects?

<table>
<thead>
<tr>
<th>Substantially Higher</th>
<th>Higher</th>
<th>Equal</th>
<th>Lower</th>
<th>Substantially Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] 5</td>
<td>[ ] 4</td>
<td>[ ] 3</td>
<td>[ ] 2</td>
<td>[ ] 1</td>
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</table>

C26. How do you feel the general public perceive teachers' status in comparison to other professions (e.g. lawyers)?

<table>
<thead>
<tr>
<th>Substantially Higher</th>
<th>Higher</th>
<th>Equal</th>
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<td>[ ] 3</td>
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<td>[ ] 1</td>
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</table>
Section D:
About Your HRE-CPD

D1. Approximately how much formal HRE-CPD have you undertaken in the last 12 months?
☐☐ hours OR ☐☐ courses

D2. Approximately how much formal HRE-CPD have you undertaken in the last 3 years?
☐☐ hours OR ☐☐ courses

If you have not undertaken any HRE-CPD, please go to Question D6.

D3. What does the content of your HRE-CPD usually consist of?


D4. In general, how valuable do you perceive HRE-CPD to be?

<table>
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<tr>
<th>Extremely valuable</th>
<th>Valuable</th>
<th>Neutral</th>
<th>Not very valuable</th>
<th>Not at all valuable</th>
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<tbody>
<tr>
<td>☐ 5</td>
<td>☐ 4</td>
<td>☐ 3</td>
<td>☐ 2</td>
<td>☐ 1</td>
</tr>
</tbody>
</table>

D5. With reference to your HRE-CPD, how adequate do you perceive the following:

- a) the amount of HRE-CPD you have undertaken?
  ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

- b) the content of the HRE-CPD you have undertaken?
  ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

- c) the structure and delivery of the HRE-CPD you have undertaken?
  ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1

- d) the support for your HRE-CPD to be from:
  i) the department?
    ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1
  ii) the school?
    ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1
D6. In your opinion, what should HRE strive to achieve?

END OF QUESTIONNAIRE

Do you have any Feedback?
If you have any feedback or comments in relation to any aspect of this questionnaire, please write all comments in the space below:

Are you willing to be involved in a short interview to discuss some of your responses?

The benefits of participating in this research are:
- You will be contributing to the enhancement of PE and HRE policy and practice.
- You will be helping to address a gap in existing research.
- Your comments will lead to feedback and recommendations which will hopefully encourage improved HRE delivery in your school.

If so, please provide your contact details below:

Name:
Address:
Phone number:

Please return the questionnaire in the SAE to:
Laura Ward, School of Sport and Exercise Sciences, Sir John Beckwith Centre for Sport, Loughborough University, Leicestershire, LE11 3TU

THANK YOU FOR YOUR TIME
Appendix D

An Example of SPSS Data Output (Descriptive Statistics)
### HRE CPD Content

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<td>.9</td>
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### HRE CPD Structure

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### HRE CPD Support (dept)

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### HRE CPD Support (sch)

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Appendix E

An Example of SPSS Data Output (Chi Square Calculations)
## Appendix E: Chi Square Calculations

### Crosstabulation

$\$Activit (tabulating 1) by A1, Sex

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Percents and totals based on respondents

112 valid cases; 0 missing cases

Abbreviated $\$Activit

Extended Name

$\$Activities

Crosstabs
## Appendix E: Chi Square Calculations

### Case Processing Summary

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#### Chi-Square Tests

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<th>Exact Sig. (1-sided)</th>
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a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.91.
### Crosstab

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### Chi-Square Tests

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a. No statistics are computed because CT is a constant.

### WT * Sex

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a. No statistics are computed because WT is a constant.

### SK * Sex

335
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### Chi-Square Tests

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a. No statistics are computed because SK is a constant.

#### R * Sex

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### Chi-Square Tests

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a. No statistics are computed because R is a constant.

#### CCR * Sex
### Crosstab

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<tr>
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### Chi-Square Tests

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<th>Value</th>
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<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

a. Computed only for a 2x2 table  
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.04.

**WB * Sex**
### Appendix E: Chi Square Calculations

#### Crosstab

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<td>Std. Residual</td>
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<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1 Count | 8 | 7 | 13
|        | 6.7 | 6.3 | 13.0
| % within WB | 46.2%  | 53.8%  | 100.0% |
| % within Sex  | 10.3%  | 13.0%  | 11.6% |
| % of Total    | 5.4%  | 6.3%  | 11.6% |
| Std. Residual | 3     | 3     |       |

Total Count 58 | 54 | 112
Expected Count 58.0 | 54.0 | 112.0
% within WB 51.8% | 48.2% | 100.0%
% within Sex 100.0% | 100.0% | 100.0%
% of Total 51.8% | 48.2% | 100.0%

#### Chi-Square Tests

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<th>Exact Sig.</th>
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<tr>
<td>N of Valid Cases</td>
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a. Computed only for a 2x2 table
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.27.

#### Crosstabs

**Case Processing Summary**

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<td>N</td>
<td>Percent</td>
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#### Count

**Sex * Activity Crosstabulation**

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### Crosstabs

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### Case Processing Summary

**Sex * Activity Crosstabulation**

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*a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.08.*
Appendix F

An Example of NVIVO Data Output (Nodes)
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Appendix G

Phase Two Letter
Appendix G: Phase Two Letter

Physical Education Teachers' Experiences, Training and Continuing Professional Development in Health Related Exercise

22nd February 2007

Dear ________________________ .

Firstly I would like to thank you for participating in the above research project by completing the survey that was sent to you last term. In addition, many thanks for volunteering to take part in the second phase of the research. As you know, the aim of the study is to explore PE teachers' experiences, training and professional development in health related exercise (HRE) and, in order to do this, your continued help will be invaluable.

The survey that you completed provided some interesting preliminary information. The next stage of the research will involve an interview which will include a few further questions and give you the opportunity to expand on some of the information you have already provided. The interview can be arranged at a time that is convenient for you, ideally sometime during the summer term. In this respect, please can you complete and return the attached reply-slip before Friday 30th March (or email me on the address provided) indicating any dates, days or times which would, or would not be convenient for me to visit.

Thank you once again, your help is greatly appreciated.

Yours Sincerely,

Laura Ward

School of Sport and Exercise Sciences
Loughborough University
Loughborough
LE11 3TU
Email: L.G.Ward@lboro.ac.uk
Tel. (01509) 228451
Appendix G: Phase Two Letter

Name: ..........................................................................................................................

Contact No: ..............................................................................................................

School: .....................................................................................................................

Address: ....................................................................................................................

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

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

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

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

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

Email: ..........................................................................................................................

Please circle the days/times of the week when you would most likely be available for interview:

Mon a.m  Tues a.m  Wed a.m  Thurs a.m  Fri a.m  Sat a.m

Mon p.m  Tues p.m  Wed p.m  Thurs p.m  Fri p.m  Sat p.m

Please indicate any dates/days when you would not be available for interview:

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

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

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

THANK YOU FOR YOUR TIME AND CO-OPERATION!
Appendix H

Example of an Interview Schedule
Appendix H: Interview Schedule

About you

1. What were the main factors which led you to becoming a PE teacher? Was it your first choice as a career?

2. What do you think your role, as a PE teacher, is?

3. What do you think others see as your role/s?

4. Do the roles that others see you as having, have an affect on you, either professionally or personally?

About your school

5. Is your school working towards Healthy School status? If so, how long have you been doing this? How?

6. Within your school, how would you describe the general attitude towards teacher CPD? How is it perceived/recognised?

7. Is your school and/or department linked with external agencies in order to support you in your delivery of PE and/or HRE? And your CPD? What are they? How do they support you? Is their input effective?

About HRE

8. In your school, how do you address health related issues? Are any aspects of health prioritised? In what ways specifically?

9. Does your department and/or school have any policies in place that address health and physical activity? If so, what policies are in place?

10. In the questionnaire you stated that you have/don’t have a scheme of work for HRE. What are the main objectives of the scheme? Is it adhered to? OR Do you intend on writing a SoW for HRE in the near future?

11. Do you feel that you receive adequate support in relation to your HRE planning/delivery? From whom/where?

12. In relation to HRE, what do you think about its:
   - Delivery?
   - Content?

13. Do you think HRE should be an activity area in its own right within the NCPE?
14. How do you rate the importance of HRE compared to other aspects of the curriculum? Which subject areas, within the NCPE, do you and your department devote most time to? Which subject areas do you think are most important?

15. Do you think the time spent on HRE in the curriculum is adequate?

16. Who currently teaches HRE in your school?

17. Which methods, or combination of methods do you use to deliver HRE in your school? (specific units/ through other activity areas/in other areas of the curriculum etc). Why is HRE approached/delivered in this way? How effective is this method?

18. Do you and/or your colleagues use any published texts/resources to assist in the teaching of HRE (excluding texts which are used for examination courses)? What are they? Do you access these? How do these resources help?

19. How adequate do you think your department’s/school’s resources for the teaching of HRE are?

20. Are you, or your colleagues, aware of any other resources which may help you with your HRE delivery? What are they? Have you accessed these? How do these resources help?

21. Some of the questionnaires I received suggested that male and female teachers delivered HRE differently. From your experiences, what extent do you believe this to be true? In what way/what are the differences? Why do you think this is the case?

About your PE-CPD

22. What do you view CPD to be? How would you start to define it?

23. Do you think your PE-CPD has been useful? Relevant? Of high quality? Effective? In what ways? Why? What are your general views on your CPD? Why?

24. In your eyes, what is effective CPD?

25. What type of CPD do you prefer? Why?

26. What has influenced the type and amount of CPD you have taken part in? Why?

27. In the past, what has influenced your decision to participate, or not participate in CPD?

28. What could be done to encourage you to participate in CPD, or more CPD?

29. Are there any barriers to your participation in CPD? What? Who? Can anything be done to remove or minimise these barriers?

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30. Do you think that you or any of your colleagues in the department need further PE-CPD? If so, in what areas? Do you/they want more CPD? If so, why/why not?

31. Are the funding and resources available to support PE-CPD in your school adequate? Are there any priority areas? If so, what are they?

32. In the questionnaire you said you were/weren’t aware of the National CPD strategy. If applicable, do you think the introduction of the policy has affected you, or developed you as a teacher? How? You said that you accessed/didn’t access the NCPD strategy, why?

33. What impact do you feel the PESSCL strategy has had on PE teachers’ professional development generally? How? Why? How does this affect you?

34. Are you a member of the School Sports Partnership programme? Have you taken part in any training?

35. Are you aware of the National PE and School Sport Professional Development Programme within PESSYP? If so, have you accessed it? Which aspects/courses? Has it provided support? To what extent has it met you needs?

36. Based on your experiences and needs, what recommendations do you have for teacher educators or CPD providers, for the future development of PE-CPD opportunities?

37. What do you see as your future career directions?

About your HRE-CPD

38. How adequate was the amount of time spent on HRE in your ITT?

39. Do you think that you or any of your colleagues in the department need HRE-CPD? Why/why not? Any particular focus?

40. Why have you not taken part in (more) HRE-CPD?

41. Is there anything which would help you teach HRE more effectively? Training? Resources?

42. Does your department provide adequate support for HRE-CPD? (scale of 1-10)?

43. Based on your experiences and needs, what recommendations do you have for teacher educators or CPD providers, for the future development of HRE-CPD opportunities?
Appendix I

Consent Form
Appendix I: Consent Form

Consent Form

I, __________________________, state that I am over 18 years of age and that I voluntarily agree to participate in a research project conducted by Laura G. Ward, a researcher working under the supervision of Dr Lorraine Cale and Dr Louisa Webb in the School of Sport and Exercise Sciences at Loughborough University.

I understand that this research is the basis of a Ph.D. thesis and that it is intended to contribute to the fund of knowledge on Physical Education (PE) teachers' experiences and continuing professional development (CPD) in PE and health related exercise (HRE).

My participation in this study requires me to participate in an interview (lasting approximately 1 hour) and respond to a series of questions relating to my experiences an CPD in PE and HRE.

I acknowledge that Laura G. Ward has explained the task to me fully and has: informed me that I may withdraw from the study at any time without prejudice; has offered to answer any questions that I might have concerning the research process; has assured me that any information that I give will be used for research purposes only and will be kept strictly confidential and anonymous. I understand that some of the transcripts of the interview may be used in research documents and may be published in education journals.

I understand that if I so wish I may have a copy of the transcript.

SIGNATURE OF RESEARCHER

SIGNATURE OF PARTICIPANT

Researcher Contact Details:

Laura G. Ward
SSES
Loughborough University
Loughborough
Leicestershire
LE11 3TU

Supervisor Contact Details:

Dr Lorraine Cale
SSES
Loughborough University
Loughborough
Leicestershire
LE11 3TU
Appendix J

Ethics Checklist
Ethical Clearance Checklist

(To be completed for all investigations involving human participants)

All staff wishing to conduct an investigation involving human participants in order to collect new data in either their research or teaching activities, and supervisors of students who wish to employ such techniques are required to complete this checklist before commencement. It may be necessary upon completion of this checklist for investigators to submit a full application to the Ethical Advisory Committee. Where necessary, official approval from the Ethical Advisory Committee should be obtained before the research is commenced. This should take no longer than one month.

If your research is being conducted off campus and ethical approval for your study has been granted by an external ethics committee, you may not need to seek full approval from the University Ethical Advisory Committee. However, you will be expected to provide evidence of approval from the external ethics committee and the terms on which this approval has been granted.

If you believe this statement applies to your research, please contact the Secretary of the Ethical Advisory Committee for confirmation.

If your research is transferring into Loughborough University and approval was obtained from your originating institution, there is a requirement on the University to ensure that appropriate approvals are in place.

If you believe this statement applies to your research, please contact the Secretary of the Ethical Advisory Committee with evidence of former approval and the terms on which this approval has been granted.

It is the responsibility of individual investigators to ensure that there is appropriate insurance cover for their investigation.

If you are at all unsure about whether or not your study is covered, please contact the Finance Office to check.

Name and Status of Senior Investigators (Research Grade II and above):

(Please underline responsible investigator where appropriate)

Dr Lorraine Cale (Senior Lecturer)

Department School of Sport and Exercise Sciences (SSES)
Appendix J: Ethics Checklist

Name and Status of Other Investigators:

Laura G. Ward (Full-Time PhD Student).................................................................

Department School of Sport and Exercise Sciences (SESS).................................

Title of Investigation

PE teachers' training, continuing professional development and experiences of health-related exercise.

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<td>Will junior researchers/students be under the direct supervision of an experienced member of staff?</td>
<td>Yes</td>
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<tr>
<td>Will junior researchers/students be expected to undertake physically invasive procedures (not covered by a generic protocol) during the course of the research?</td>
<td>No</td>
</tr>
<tr>
<td>Are researchers in a position of direct authority with regard to participants (e.g., academic staff using student participants, sports coaches using his/her athletes in training)?</td>
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** If you select any answers marked **, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a ** answer) to the Ethical Advisory Committee.

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<tr>
<td>Other vulnerable group (please specify ________________)</td>
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* Please submit a full application to the Ethical Advisory Committee.
Chaperoning Participants

If appropriate, eg studies which involve vulnerable participants, taking physical measures or intrusion of participants' privacy:

- Will participants be chaperoned by more than one investigator at all times?
- Will at least one investigator of the same sex as the participant(s) be present throughout the investigation?
- Will participants be visited at home?

Advice to Participants following the investigation

Investigators have a duty of care to participants. When planning research, investigators should consider what, if any, arrangements are needed to inform participants (or those legally responsible for the participants) of any health related (or other) problems previously unrecognised in the participant. This is particularly important if it is believed that by not doing so the participants well being is endangered. Investigators should consider whether or not it is appropriate to recommend that participants (or those legally responsible for the participants) seek qualified professional advice, but should not offer this advice personally.Investigators should familiarise themselves with the guidelines of professional bodies associated with their research.

Section C: Methodology/Procedures

To the best of your knowledge, please indicate whether the proposed study:

- Involves taking bodily samples (please refer to published guidelines)
- Involves procedures which are likely to cause physical, psychological, social or emotional distress to participants
- Is designed to be challenging physically or psychologically in any way (includes any study involving physical exercise)
- Exposes participants to risks or distress greater than those encountered in their normal lifestyle
- Involves collection of body secretions by invasive methods
- Prescribes intake of compounds additional to daily diet or other dietary manipulation/supplementation
- Involves testing new equipment
- Involves pharmaceutical drugs (please refer to published guidelines)
- Involves use of radiation (please refer to published guidelines)
Appendix J: Ethics Checklist

Investigators should contact the University's Radiological Protection Officer before commencing any research which exposes participants to ionising radiation - e.g. x-rays).

Involves use of hazardous materials (please refer to published guidelines)
Assists/alters the process of conception in any way
Involves methods of contraception
Involves genetic engineering

* Please submit a full application to the Ethical Advisory Committee

† If the procedure is covered by an existing generic protocol; please insert reference number here __
If the procedure is not covered by an existing generic protocol, please submit a full application to the Ethical Advisory Committee.

Section D: Observation/Recording

Does the study involve observation and/or recording of participants? If yes please complete the rest of section D.
Will those being observed and/or recorded be informed that the observation and/or recording will take place?

* Please submit a full application to the Ethical Advisory Committee

Section E: Consent and Deception

Will participants give informed consent freely?

If yes please complete the Informed Consent section below.
*If no, please submit a full application to the Ethical Advisory Committee.

"Note: where it is impractical to gain individual consent from every participant, it is acceptable to allow individual participants to "opt out" rather than "opt in".

Informed Consent

Will participants be fully informed of the objectives of the investigation and all details disclosed (preferably at the start of the study but where this would interfere with the study, at the end)?
Will participants be fully informed of the use of the data collected (including, where applicable, any intellectual property arising from the research)?
For children under the age of 18 or participants who have impairment of understanding or communication:
- will consent be obtained (either in writing or by some other means)?
Appendix J: Ethics Checklist

- will consent be obtained from parents or other suitable person?
- will they be informed that they have the right to withdraw regardless of parental/guardian consent?

For investigations conducted in schools, will approval be gained in advance from the Head-teacher and/or the Director of Education of the appropriate Local Education Authority?
For detained persons, members of the armed forces, employees, students and other persons judged to be under duress, will care be taken over gaining freely informed consent?

Please submit a full application to the Ethical Advisory Committee

Does the study involve deception of participants (ie withholding of information or the misleading of participants) which could potentially harm or exploit participants?
If yes please complete the Deception section below.

Deception

Is deception an unavoidable part of the study?
Will participants be de-briefed and the true object of the research revealed at the earliest stage upon completion of the study?
Has consideration been given on the way that participants will react to the withholding of information or deliberate deception?

Please submit a full application to the Ethical Advisory Committee

Section F: Withdrawal

Will participants be informed of their right to withdraw from the investigation at any time and to require their own data to be destroyed?

Please submit a full application to the Ethical Advisory Committee

Section G: Storage of Data and Confidentiality

Will all information on participants be treated as confidential and not identifiable unless agreed otherwise in advance, and subject to the requirements of law?
Will storage of data comply with the Data Protection Act 1998? (Please refer to published guidelines)

N/A

N/A

Yes

Yes
Appendix J: Ethics Checklist

Will any video/audio recording of participants be kept in a secure place and not released for use by third parties?  
Yes

Will video/audio recordings be destroyed within six years of the completion of the investigation?  
Yes

* Please submit a full application to the Ethical Advisory Committee

Section H: Incentives

Have incentives (other than those contractually agreed, salaries or basic expenses) been offered to the investigator to conduct the investigation?  
No

Will incentives (other than basic expenses) be offered to potential participants as an inducement to participate in the investigation?  
No

** If you select any answers marked **, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a ** answer) to the Ethical Advisory Committee.

Compliance with Ethical Principles

If you have completed the checklist to the best of your knowledge without selecting an answer marked with * or † your investigation is deemed to conform with the ethical checkpoints and you do not need to seek formal approval from the University's Ethical Advisory Committee.

Please sign the declaration below, and lodge the completed checklist with your Head of Department or his/her nominee.

Declaration

I have read the University’s Code of Practice on Investigations on Human Participants. I confirm that the above named investigation complies with published codes of conduct, ethical principles and guidelines of professional bodies associated with my research discipline.

Signature of Responsible Investigator

Signature of Student (if appropriate)

Signature of Head of Department or his/her nominee

Date: 21st February 2006

If the provision for Compliance with Ethical Principles does not apply, please proceed to the Guidance from Ethical Advisory Committee section below.
**Guidance from Ethical Advisory Committee**

If, upon completion of the checklist you have ONLY selected answers marked ***, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a *** answer) to the Ethical Advisory Committee.

If, upon completion of the checklist, you have selected an answer marked with * or † it is possible that an aspect of the proposed investigation does not conform to the ethical principles adopted by the University. Therefore you are requested to complete a full submission to the Ethical Advisory Committee. You should aim to complete the entire form in brief but need only provide specific detail on the questions which relate directly to the issues for which you have selected an answer marked * or † on the checklist. A copy of this checklist, signed by your Head of Department should accompany the full submission to the Ethical Advisory Committee. Please contact the Secretary if you have any queries about completion of the form. The relevant application form can be downloaded from the Committee's web page.

Signature of Responsible Investigator .................................................................

Signature of Student (if appropriate) .................................................................

Signature of Head of Department or his/her nominee ...........................................

Date: 21st February 2006
Appendix K

An Example of a Dated Scheme of Work for HRE
NAME: ______________________

BOYS PHYSICAL EDUCATION

YEAR 10 FITNESS MODULE

THE FOLLOWING SIX LESSONS WILL BE DEVOTED TO ASSESSING AND DEVELOPING YOUR FITNESS.

LESSON 1) MULTISTAGE FITNESS TEST

LESSON 2) FITNESS TESTING

LESSON 3) AEROBIC / ANAEROBIC CIRCUIT

LESSON 4) CIRCUIT TRAINING

LESSON 5) FITNESS TESTING (ASSESSMENT)

LESSON 6) MULTISTAGE FITNESS TEST (ASSESSMENT)
LESSON 1) MULTISTAGE FITNESS TEST

"A PROGRESSIVE SHUTTLE RUN EXERCISE THAT ASSESSES YOUR CARDIO-VASCULAR FITNESS, ENDURANCE AND VO2 MAX LEVELS."

A) MEASURE YOUR HEART RATE BEFORE EXERCISE.

___________ BEATS PER MINUTE (BPM)

B) DO THE TEST. TRY YOUR BEST!!!!

LEVEL; __________

C) MEASURE YOUR HEART RATE IMMEDIATELY AFTER THE TEST.

___________ BEATS PER MINUTE (BPM)

D) MEASURE YOUR HEART RATE FIVE MINUTES AFTER THE TEST.

___________ BEATS PER MINUTE (BPM)

WHAT ARE THE CHANGES IN YOUR HEART RATE BEFORE, DURING AND AFTER THE TEST?
LESSON 2: FITNESS TESTING

WORK YOUR WAY THROUGH THE FOLLOWING FITNESS TESTS! AND FILL IN YOUR RESULTS.

1) 20 METRE SPRINT: ___________ SECONDS

2) PRESS UPS: ___________ PER MINUTE

3) SIT UPS: ___________ PER MINUTE

4) PULL UPS: ___________ PER MINUTE

5) AGILITY TEST: ___________ PER MINUTE

6) STEP UPS: ___________ PER MINUTE

7) SIT AND REACH: ___________ CENTIMETRES

8) STANDING HIGH JUMP: ___________ CENTIMETRES

9) STANDING LONG JUMP: ___________ CENTIMETRES

10) MULTISTAGE FITNESS TEST: LEVEL ___________
LESSON 3) AEROBIC / ANAEROBIC CIRCUIT

1) WRITE IN THE DATE DECIDED BY THE GROUP FOR EACH MONTH.

2) START AT THE MONTH ALLOCATED TO YOU AND WORK CHRONOLOGICALLY THROUGH.

3) TICK OFF EACH MONTH AS YOU SUCCESSFULLY COMPLETE THE NUMBER OF EXERCISES REQUIRED.

4) ONCE YOU HAVE COMPLETED TWELVE MONTHS, START AGAIN!

5) HOW MANY YEARS CAN YOU COMPLETE IN 30 MINUTES?

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LESSON 4) CIRCUIT TRAINING

CIRCUIT ONE.

1) WORK WITH A PARTNER.

2) START AT ONE OF THE TEN FITNESS STATIONS AVAILABLE.

3) ONE PARTNER WILL WORK WHILST THE OTHER OBSERVES.

4) THEN CHANGE OVER.

5) WORK CLOCKWISE AROUND THE STATIONS.

CIRCUIT TWO.

1) WORK WITH A PARTNER.

2) START AT ONE OF THE NINE FITNESS STATIONS AVAILABLE.

3) ONE PARTNER WORKS AT THE STATION, THE OTHER JOGS AROUND THE GYM.

4) THEN CHANGE OVER.

5) WORK CLOCKWISE AROUND THE STATIONS.
LESSON 5) FITNESS TESTING (ASSESSMENT)

WORK YOUR WAY THROUGH THE FOLLOWING FITNESS TESTS AND FILL IN YOUR RESULTS.

1) 20 METRE SPRINT: __________ SECONDS

2) PRESS UPS: __________ PER MINUTE

3) SIT UPS: __________ PER MINUTE

4) PULL UPS: __________ PER MINUTE

5) AGILITY TEST: __________ PER MINUTE

6) STEP UPS: __________ PER MINUTE

7) SIT AND REACH: __________ CENTIMETRES

8) STANDING HIGH JUMP: __________ CENTIMETRES

9) STANDING LONG JUMP: __________ CENTIMETRES

10) MULTISTAGE FITNESS TEST: LEVEL_________

HAVE YOU IMPROVED ?????!
LEsson 6) Multistage Fitness Test (Assessment)

"A Progressive Shuttle Run Exercise that assesses your cardio-vascular fitness, endurance and VO2 Max levels."

A) Measure your heart rate before exercise.

________________BEATS PER MINUTE (BPM)

B) Do the test. Try your best!!!!

LEVEL:_______________

C) Measure your heart rate immediately after the test.

________________BEATS PER MINUTE (BPM)

D) Measure your heart rate five minutes after the test.

________________BEATS PER MINUTE (BPM)

WHAT ARE THE CHANGES TO YOUR HEART RATE BEFORE, DURING AND AFTER THE TEST?

DID YOU BEAT YOUR PREVIOUS SCORE ??!!
Appendix L

An Example of a Fitness-Focused Scheme of Work for HRE
### PHYSICAL EDUCATION

<table>
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<th>UNIT</th>
<th>Health Related Fitness</th>
<th>YEAR</th>
<th>RESOURCES</th>
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<td>UNIT AIM</td>
<td>To introduce the basic principles of health related fitness with particular reference to heart rate, speed and endurance.</td>
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<td>Fitness room, treadmills, bikes, cross trainer, steppers, rowing machines.</td>
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<td>Class record sheet for Week 4.</td>
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</table>

### WEEK 1
**Introduction to components of fitness. Name each with brief explanation.**
Q & A session. Who do pupils think is physically fit? Give examples, including why.
Demonstrate and instruct pupils to use each piece of equipment: treadmill, rowing machine, stepber, cross trainer, bikes.
Use of heart rate monitors. Warm up - pupils choose piece of equipment and do 5 mins warm up.
Stretch & mobility exercises - led by teacher.
Use other equipment to ensure pupils know how to work it and take their pulse rate.
Cool down - 5 mins on equipment.
Stretching & mobility exercises. Recap lesson.

### WEEK 2
**Recap last lesson including how to measure heart rate & components of fitness.**
Introduce taking pupils’ pulse rate. How to do it.
Explain resting pulse rate. What happens to heart rate when we exercise. Introduce a target heart rate of 150 bpm when working.
Demonstrate how to take pulse rate by using equipment and also manually.
Warm up - 5 mins on equipment. Take pulse. Now ask pupils to get their pulse rate up to 150 bpm for 15 mins using equipment. Keep it there for 15 mins at least.
Cool down - 5 mins on equipment - stretching and mobility exercises. Recap lesson.

### WEEK 3
**Recap last lesson – taking your pulse rate.**
Introduce reasons for warming up and cooling down - giving examples.
Set pupils off on equipment. They must all do 10 mins on all of the following pieces of equipment: treadmill, bike, stepper, cross trainer, rowing machine.
Monitor heart rate throughout.
Cool down - 5 mins on equipment - stretching and mobility exercises. Recap lesson.

### WEEK 4
**Recap last lesson & also Week 1 (components of fitness).**
Highlight to pupils the different ways of training depending on which component of fitness you are trying to improve.
Introduce “speed” and how we can train to improve it.
Warm up, stretch and mobility exercises. Set pupils on speed challenges:
1) Long bike cycle for 50m - record how long this takes.
2) Run 0.4 km - record how long this takes.
3) Row 500 m - record how long this takes.
Record all pupil scores on class sheet and reward pupils as necessary. Ensure pupils do light activity in between each exercise. Compare with rest of class - give reasons.
Cool down 5 mins on equipment with stretching & mobility exercises. Recap lesson.

### WEEK 5
**Recap last lesson on speed.**
Introduce cardiovascular fitness.
Q & A with pupils on endurance.
Warm up - stretch & mobility exercises.
Introduce cardiovascular fitness/endurance challenges:
1) Using bike cycle for 20 mins on level 2 or less - how far can you go?
2) Run for 20 mins - how far can you get?
3) Row for 20 mins - how far can you go?
Record result of challenge on pupil record sheet.
Cool down - stretch & mobility exercises. Recap lesson.

### WEEK 6
**Recap last lesson on cardiovascular endurance.**
Warm up - stretch & mobility exercises.
Use all information from this unit of work so far.
→ Heart rates.
→ Use of equipment.
→ Speed lesson.
→ Cardiovascular endurance lesson.
Allow pupils to work on equipment monitoring heart rate as they do.
Pupils can choose to do speed/endurance tasks. Cool down - stretch & mobility exercises. Recap lesson.

### DIFFERENTIATION
By outcome using equipment.
By heart rate per individual.
Using equipment - monitor heart rate.
By outcome - using equipment. Scores in speed tests.
Result from cardiovascular endurance tests.
Final fitness.

### ASSESSMENT/RECORDING
Use of different pieces of equipment.
Pupil self-assessment.
Self assessment through monitoring of heart rate.
Pupil assessments.
Record individual pupil scores.
Pupil individual scores.
National Curriculum level to be recorded.
Appendix M

Education Figuration
Whilst Elias' (1978) original diagrammatic representation of a figuration (see Appendix A) proved useful in terms of initially acknowledging Physical Education teachers' interdependence with others, the data from the present study allowed for a more specific, though not exhaustive, representation of the education figuration to be generated (see Figure M below).

*Members or employees.*
The teacher-centric nature of this research lent itself to a particular ‘way of seeing’ the interdependencies within which PE teachers appear to be enmeshed. From a traditional Eliasian perspective, the education figuration presented in Figure N may be interpreted as ego-centric, and therefore serving to separate the teacher(s) from the society within which they live and work. The arrows incorporated within the diagram, however, are an explicit acknowledgment of the multi-directional processes which inevitably link individuals and groups within and beyond the education figuration. Moreover, the lines which separate the levels of the figuration are broken in order to reflect the dynamic nature of social life and therefore suggest that there are varying degrees of overlap and interdependence between individuals on different levels of the figuration.
Appendix N

Education Figuration Case-Study
Within both phases of the research, all teachers discussed their engagement with HRE and HRE-CPD in a way that highlighted the importance of their interdependencies with other people, and groups of people, within the education figuration. Drawing upon the principles discussed in Appendix M, Figure N presents Thomas' education figuration as a case study.

* Members or employees