

**GRADUATING STUDENT TEACHERS'
BELIEFS REGARDING THE
PHILOSOPHY AND PEDAGOGY OF
PHYSICAL EDUCATION WITHIN THE
NEW ZEALAND CURRICULUM**

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Abstract

In the mid to late 1990's, physical education curriculum writers in New Zealand challenged the dominant skill mastery approach that was omnipresent in secondary school physical education. The resulting curriculum documents, Health & Physical Education (HPE) within the New Zealand Curriculum (Ministry of Education [MOE], 1999) and its revision, the New Zealand Curriculum (NZC) (MOE, 2007), reflected a critical/humanistic position with much broader curricular aims and objectives. This presented many challenges for Physical Education Teacher Education (PETE) programmes in New Zealand, where it is contested that students entering teacher education programmes do so with strongly held beliefs that may be difficult to alter. These entrenched beliefs have the potential to act as filters through which PETE students acquire knowledge and, therefore, may hinder their ability to consider other views of teaching and learning. Research suggests that unless these historical personal beliefs are challenged, teacher education programmes may be considered as weak interventions.

Therefore, the purpose of this study was to investigate the beliefs of a cohort of graduating physical education teachers around the philosophy and pedagogy inherent in the NZC (MOE, 2007), having recently completed a four year critically oriented PETE programme.

A mixed methods (MM) design was employed in the study. A quantitative survey questionnaire preceded a series of qualitative semi-structured interviews conducted on five purposively selected participants. The survey questionnaire was used to identify any inconsistencies between the participants' beliefs and the intentions reflected in the curriculum document and the supporting literature. An emphasis was placed on the qualitative phase of the study, which investigated the key areas of interest identified in the survey questionnaire. Interview data was then analysed using the process of constant comparison.

Analysis revealed that the PETE programme may have had some impact on the philosophical and pedagogical beliefs of the graduating students, and may have encouraged the participants to explore personal philosophical positions and question particular decisions regarding their personal beliefs. However, further examination revealed that the participants were still grappling with the philosophical underpinnings of the HPE learning area and the pedagogical approaches promoted to support its implementation.

This research supports the notion that unless historical beliefs about teaching and learning are deliberately and coherently challenged and confronted through PETE programme content and pedagogy, these entrenched beliefs may indeed act as knowledge filters and prevent graduates from making more informed decisions about differing conceptualisations of physical education curriculum and practice.

Glossary

BEd (PE)	Bachelor of Education and Graduate Diploma in Teaching and Learning (Secondary), specialising in Physical Education
BPE (Hons)	Bachelor of Education, specialising in Physical Education with honours
CK	Curriculum knowledge
CP	Critical pedagogy
CUAP	Committee on University Academic Programmes
HPE	Health and Physical Education
HPENZC	Health and Physical Education in the New Zealand Curriculum
ITE	Initial Teacher Education
MM	Mixed methods
MOE	Ministry of Education
NZC	New Zealand Curriculum
NZGTS	New Zealand Graduating Teacher Standards
NZTC	New Zealand Teachers Council
PCK	Pedagogical content knowledge
PCT	Primary classroom teachers
PETE	Physical Education Teacher Education
QL	Qualitative
QN	Quantitative
SSPE	School of Sciences and Physical Education
TEP	Teacher Education Programmes
TKB	Teachers Knowledge Base

1. Introduction

1.1 Background

The University of Canterbury, College of Education, has seen significant change and resultant programme transformations over the past two decades. Reasons are many, but significant amongst these are the deregulation of teacher education in a political climate, emphasising neoliberal globalisation and consequential changes in funding policy (Codd, 2008). The resultant commodification of education, including Initial Teacher Education (ITE) programmes, has seen an increase in ITE providers of which the vast majority are now aligned with universities and/or colleges of education. More recently, and consistent with neoliberal economic rationality, government policy has now seen the merger of all university and college of education ITE programmes (Fastier, Fouhy, French, McBain, McGrath, Quinlivan et al., 2008).

The reviewing, reconceptualising, redeveloping, and continual monitoring of existing qualifications, has been, and continues to be, a significantly arduous, but very important part of the merger process. Over recent times, the four-year undergraduate Physical Education Teacher Education (PETE) programme, comprising of the Bachelor of Education and Graduate Diploma in Teaching and Learning (Secondary), specialising in Physical Education (BEd (PE)) has not been immune to these processes. As a consequence, it has recently undergone a significant redevelopment and restructure.

In 2007, the BEd (PE) programme, the focus of this research, was included in a major review of secondary teacher education qualifications. The review report commended many aspects of the programme, but acknowledged that changes were necessary in this new landscape (Hartshorn, Alcorn, Hoben, McIntyre, Palmer, Ruckstuhl et al., 2008). Whilst change is accepted and considered necessary, the panel added that it was important to consider that change without reason may be counterproductive. The review panel saw many merits in the programme and stated:

The Review Panel wishes to commend the excellence of the BEd/GradDipTchLn (Secondary) as an initial teacher qualification for physical education in New Zealand and recommends that it continue to be offered. (p. 4)

As the College of Education, and the programmes within it, looked to refine and align with ubiquitous university-wide practices, it became evident that the conjoint BEd (PE) programme structure would not be sustainable. A key reason for change was necessitated by an unwillingness of the Committee on University Academic Programmes (CUAP) to recognise a conjoint programme consisting of an undergraduate degree and a graduate diploma. Consequently, in 2009 and 2010 the BEd (PE) staff worked vigorously to produce a 'new' structure that could effectively merge into the university environment and would continue to produce high quality physical education graduates, without compromising the key components of the existing BEd (PE) programme, as outlined by the review panel (Hartshorn et al., 2008). The resultant four-year undergraduate Bachelor of Education, specialising in Physical Education with honours (BPE (Hons)) programme emerged out of this process and was implemented with the first year intake in 2011. Years two, three and four of the programme will be rolled out in 2012, 2013 and 2014 respectively. One intention of this thesis is to inform and be of value to the development and implementation of the newly emerging, critically oriented BPE (Hons) programme, as much of the thinking around philosophy and pedagogy has been derived from the BEd (PE) programme.

In the context of this study, the researcher, who is one of the staff members involved in the redevelopment of the programme, noted that the New Zealand Teachers Council (NZTC) states clear guidelines relating to the quality of teacher education programmes and the evidence required to support their ongoing provider status. For example, the NZTC (2005) states that:

A quality teacher education programme must be informed by sound research and should promote research as an important component of student teachers' developing professional skills. Documentation will include evidence of a solid research base for the programme identified in the conceptual framework and followed through in its aims. In addition, evidence must be provided that shows that the research has informed the various programme elements, such as socio-cultural, historical, political, philosophical, curriculum and pedagogical perspectives. (p.8)

Furthermore, it was also noted by the researcher that the 2007 review panel, in considering and reporting on the BEd (PE) programme, highlighted a need for practice-based research to inform teaching practices within it.

The review panel stated:

Recommendation 20

That staff consider undertaking research projects to assess the merits of different teaching practices within initial teacher education programmes (Hartshorn, Alcorn, Hoben, McIntyre, Palmer, Ruckstuhl et al, 2008, p. 3).

While it is acknowledged that a plethora of research from the field of education, physical education and PETE were used to inform the redevelopment of the 'new' BPE (Hons) programme (for details see College of Education, 2010), it became apparent that little or no research, other than reviews and anecdotal evidence, could be drawn upon to determine the programme effectiveness and inform teaching and learning practices within it. This apparent dearth of research provides the genesis of this thesis.

1.2 The BEd (PE) Programme

The BEd (PE) programme is a four-year, professionally-focused ITE programme. The four-year qualification synthesises a three-year undergraduate Bachelor of Education degree with the conjoint delivery of the one-year Graduate Diploma in Teaching and Learning. This qualification integrates the substantive study of physical education pedagogy, sport and exercise science, sociology of sport and physical education, and studies in professional practice. Over the four-year period of study, students are required to complete 24 weeks of teaching practice in primary and secondary schools. Students are also required to pursue broader studies in education, health education, outdoor education, and an additional subject of their choice (College of Education, 2010, p. 21). At the completion of the programme, graduates gain a Bachelor Degree in Education, specialising in Physical Education, and a Graduate Diploma in Teaching and Learning that provides provisional teacher registration. This enables graduates to teach physical education and their chosen subject in New Zealand secondary schools (College of Education, 2010).

The underpinning philosophy of the BEd (PE) programme reflects a critical orientation. Curtner-Smith (2007) captures the essence of such an orientation when summarising critical PETE programmes as:

A variety of different educational projects, approaches, and ventures aimed at improving social justice, democracy and equality. Critical teacher education then, and by definition critical PETE, was aimed at promoting the same orientation to new teachers. (p. 37)

Critically orientated PETE programmes, therefore, seek to empower pre-service physical education teachers to challenge epistemological and pedagogical assumptions that are taken for granted and importantly locate and problematize this within a broader social, historical and political context (Curtner-Smith, 2007; Macdonald & Brooker, 1999; Tinning 2002; Tinning, 2010). Importantly, the aim of such programmes is to produce teachers with a socially-critical perspective who are capable of making philosophical and pedagogical change.

Many have argued that in order for pre-service teachers to make such a philosophical shift, requires an ability to engage in *reflective practice* (e.g. Brookfield, Macdonald & Brooker, 1999 and Gore, 1990). According to Gore (1990), reflection enables teachers at the beginning of their careers to learn for themselves. In a critically oriented PETE programme, the tensions and conflicts that may arise from the resulting cognitive dissonance, may give rise to appropriate pedagogical changes that reflect such a critical perspective. Indeed, the supporting documentation of the BEd (PE) programme (College of Education, 2010), including that supplied to the NZTC for re-accreditation and the most recent review panel (College of Education, 2007), demonstrates this position in the philosophical statement within the qualification conceptual framework:

The programme is focused on enriching the human experience through the development of *critically reflexive* and inspirational physical education teachers (College of Education, 2010, bold italics is authors emphasis).

In the context of this study, the courses in pedagogy, sport and exercise science, socio-cultural considerations and professional practice are important. These courses are conceptualised and delivered by staff from the School of Sciences and Physical Education (SSPE), and are considered essential to transform neophyte physical educators into provisionally qualified physical education teachers. It is assumed that graduates of the programme are capable of reflecting on their own practice and making appropriate epistemological and pedagogical adjustments. This transformative process, as described in the department philosophy, is achieved through:

...a coherent, holistic and transformative undergraduate and postgraduate education programmes that comprise of a careful and balanced blending of the physical, socio-cultural and pedagogical dimensions of movement (College of Education, 2010).

The programme anecdotally boasts that graduates exit with appropriate skills that enable them to effectively teach Health and Physical Education (HPE) in the New Zealand Curriculum (NZC) (Ministry of Education [MOE], 2007). Indeed, it is important to note at this point that the department philosophy has been influenced by similar discourse and by research that informed the Health and Physical Education in the New Zealand Curriculum (HPENZC) (MOE, 1999) and the current revised NZC (MOE, 2007).

It is also worthy to note that members of the SSPE staff were key in the lobbying, writing and implementation of the 1999 HPENZC, and, therefore, it is suggested that the BEd (PE) programme is proudly designed to maximize graduating students' knowledge, understanding and implementation of this document. However, it is this reliance on anecdotal evidence and relative dearth of practice-based evidence that necessitates and promotes a need for this and similar studies. It is intended that this study will begin the process and will help inform programme and course restructure, programme practices and indeed enable the programme to maximise, upon graduation, students' understanding and implementation of the NZC. This study also aims to contribute to the knowledge base of PETE programmes, specifically those with a critical orientation.

1.3 The Teachers' Knowledge Base and the New Zealand Graduating Teacher Standards

It is argued (Christensen, 1996; Palmer, 2001) that Shulman's (1987) seminal work on knowledge and teaching, which culminated in what is widely known as the Teachers Knowledge Base (TKB), has provided justification for teacher education programmes worldwide. Shulman's (1987, p. 8) stocktake of teacher knowledge consists of:

1. Content knowledge
2. General pedagogical knowledge
3. Pedagogical content knowledge
4. Curriculum knowledge
5. Knowledge of educational contexts
6. Knowledge of learners and their characteristics
7. Knowledge of educational goals

It is not surprising then, that the New Zealand Graduating Teacher Standards (NZGTS) (NZTC, 2007), and, therefore, the College of Education ITE and the BEd (PE) programme documentation (College of Education, 2010), reflects aspects of Shulman's TKB. Albeit there are subtle differences, the standards are littered with evidence of Shulman's distinctive work.

Of particular interest in this research are the concepts of curriculum knowledge (CK) and pedagogical content knowledge (PCK), which are clearly outlined in the graduate profile of the programme. It is stated that:

Consistent with the philosophy, guiding principles and course structure, graduates [of the BEd (PE) programme]... will have developed knowledge and understanding in the following areas:

- 1b have *pedagogical content knowledge* appropriate to the learners and learning areas of their programme.
- 1c have *knowledge of their relevant curriculum* documents of Aotearoa New Zealand (College of Education, 2010).

Clearly, graduates of the BEd (PE) qualification, in accordance with programme requirements and NZTC directives, are required to have attained both CK and PCK relevant to teaching physical education in New Zealand secondary schools. Therefore, it is these two particular areas on which this thesis focuses.

1.4 Student Beliefs and the Effectiveness of PETE

Richardson (1996) proposes that research should focus on teacher beliefs, as these have a considerable influence on the development of teacher behaviours. Such research on ITE (Brookhart & Freeman, 1992; Helfenbein, 2008) and PETE programmes (Doolittle, Dodds & Placek, 1993; Hutchinson, 1993; Graber, 2001; O'Sullivan, 2005) indicates that students entering ITE programmes do so with strongly held beliefs that are difficult to alter. Reasons for this, as suggested by Philpot and Smith (2011), may lie in what Lortie (1975) and Lave and Wenger (1991) describe as an observational apprenticeship, where the teaching profession is viewed and learned through many thousands of hours spent in classrooms as students themselves.

Such entrenched and difficult-to-change belief structures may limit the ability of a student teacher to consider other views of teaching, as these pre-existing beliefs may act as filters through which they acquire knowledge (Richardson, 2003b; Rovengo, 2003). Unless these historical personal beliefs are challenged, ITE programmes, it is contested, are considered to be weak interventions (Kennedy, 2005; Richardson, 2003b). Challenging core beliefs, or creating cognitive dissonance, is not easy and as Doolittle, Dodds and Placek (1993) suggested, teacher educators are often challenged themselves to create environments

where students' beliefs are challenged in a meaningful and reflective way. This argument has not diminished over time and as Helfenbein (2008) states:

The work of teacher education is not only engaging in the project of becoming but also in the disruption of already-held views, the creation of intellectual dissonance around issues of learning, teaching and the social world of school.
(p. 5)

PETE literature (Curtner-Smith, 2007; Matanin & Collier, 2003) appears consistent with these findings and indicates that PETE programmes may also have little effect on these deeply held beliefs. It also appears that PETE students are rarely challenged around these deeply held beliefs and that these may remain unchanged unless deliberately confronted (Curtner-Smith, 2007). It is also suggested that, without knowing student beliefs, teacher education programmes cannot be designed for maximum effect (Kulinna, Brusseau, Ferry & Cothran, 2010). Therefore, the research questions for this thesis were created on the premise that an understanding of student teacher beliefs is important if PETE programmes are to have any influence on their teacher development (O'Sullivan, 2003, 2005).

The intention of this study is to investigate graduating students' beliefs around the NZC and the pedagogical strategies they believe complement its implementation, having recently completed the four-year, critically oriented BEd (PE) programme. The research questions underpinning the study are stated below:

Research Question 1: What are the graduating BEd (PE) students' beliefs about the philosophy underpinning HPE within the NZC (MOE, 2007)?

Research Question 2: What are the graduating BEd (PE) students beliefs about the pedagogical strategies required to implement HPE within the NZC (MOE, 2007)?

2. Literature Review

The following discussion introduces HPE in the NZC and further defines and locates its philosophical position. It is the author's intention to outline the literature that informed the HPENZC (MOE, 1999) and its subsequent revision, the NZC (MOE, 2007). Specifically, this review will outline the critical and humanistic perspectives underpinning these documents, and will also give an account of the pedagogical discourse inherent in its philosophy. In doing so, the reader will be clearly positioned to consider the study in the context of the research questions.

2.1 Health and Physical Education in the New Zealand Curriculum and PETE

In the later part of last century, teachers, teacher educators, and scholars, keenly debated what they believed to be the content and curricula of physical education and PETE. Unfortunately, the debate largely remained unanswered (Fernandez-Balboa, Barrett, Solomon & Silverman, 1996). However, many considered 'movement' as fundamental to any description or conceptualization of physical education (e.g. Jewett, Bain & Ennis, 1995). Fernandez-Balboa et al (1996) stated that "although we agree that movement is the common thread of our content, many of the shapes that content has taken may not be appropriate" (p. 54). Today, there is general agreement that movement is an appropriate *context* for physical education, but there is a growing number of physical educators who believe that physical education *content*, defined by movement and the acquisition of physical skills alone, may potentially reduce it to mere physical activity with little educative value (Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Kirk, 2006; Tinning, 1991).

Philosophically, in arguing that physical education is 'socially constructed', Kirk (2009) begs the question:

Physical education has no essential, transcendental characteristics since the historical records shows it has changed over time, how then are we to avoid the position at the other extreme, that it has no meaning at all, at least, only the meaning that we arbitrarily select or choose to give it? (p. 20)

The way we engage in our practice is not something we have immediate or conscious control over, more often it is a case of reproducing the dominant culture in which we practice. It has been suggested that:

...the ideas we use and the ways in which we think about pedagogy are necessarily interrelated to our practice as teachers or teacher educators. Moreover, the way we think about physical education is, to some extent at least, influenced by the discourses used to describe it, and those who dominate the discourse have considerable influence on its practice (Tinning, 1991, p. 2).

In the late 1990's and at the turn of the century, New Zealand physical education scholars and curriculum writers advocated for pedagogies that drew from the humanist and critical paradigms as a way of addressing many of the critiques around existing educational philosophies (Culpan, 1996/97; Culpan, 2004; Culpan & Bruce 2007; Culpan 2011). Those who dominated the discourse had considerable influence on its practice and this ultimately led to the publication of the HPENZC (MOE, 1999). Importantly, it addressed the question *What is a physically educated person?* (van Holst, 1993). The HPENZC (MOE, 1999) was finally released on February 10, 1999 and there has been a revision in the form of the NZC (MOE, 2007). Essentially, the underpinning philosophy and associated pedagogies attributed to its successful implementation have not altered and these documents are considered synonymously within this thesis.

The curriculum writers were strongly influenced by prominent critical scholars of the time (e.g. Bain, 1997; Ennis, 1997; Fernandez-Balboa, 1997; Jewett, 1994; Lawson, 1992; Sage, 1993; Tinning, 1991; Tinning, Kirk & Evans, 1993; van Holst, 1993) and it is contested that the contrasting beliefs of the government and the curriculum writers proved to be personally and epistemologically challenging (Culpan, 2004; Gillespie & Culpan, 2000).

2.1.1 Socio-ecological Integration

The new curriculum incorporated aspects of social reconstruction (Jewett, 1994) and socio-ecological integration (Lawson, 1992). Importantly, the curriculum writers considered Lawson's (1992) critique of the dominant conception of health, where compartmentalisation and commodification resulted from the ever increasing political reliance on the free-market.

He states:

this compartmentalization of health has allowed each component of health to be claimed and then marketed as a specialized commodity by human services professions with vested interests (Lawson, 1992, p. 108).

Lawson (1992) continued to suggest that significant social, economic, and political implications presented themselves as a result of this dominant conception and that those with ‘vested interest’ stood to profit greatly. This presented many problems, as he explains:

the medicalization, compartmentalization and commodification of health, an ever-increasing knowledge base gained through research about health, health practices, and health promotion strategies tends to remain isolated, fragmented, and stripped from its broader ecological context. Paradoxically, most health problems (e.g. eating disorders, obesity, substance abuse, stress) are multidimensional, raising serious doubts about the import of the unidimensional research perspectives found in each subject field or "discipline." This disjuncture between the multidimensionality of health problems and behavior, on the one hand, and the singular perspective of each discipline on the other, limits the value of research and the impact of professional education programs.

From this critique, the curriculum writers included Lawson’s (1992) socio-ecological conception of health that incorporated the strengths identified in the dominant perspective. These included an emphasis on spiritual, intellectual, emotional, and social aspects of personal health; a need for both individual and collective responsibility for health and healthy choices; and an acknowledgement of the medicalised view but where health is considered as a broader, more inclusive concept than the medicalised version alone (Lawson, 1992).

This broader version or socio-ecological conception of health according to Lawson (1992) identifies its interdependence with societal and environmental, or ecological health. Curriculum writers interpreted and reflected this in the terms *self*, *others* and *society* (MOE, 1999, p. 33). This is clearly evident as one of the four underlying concepts that “support the framework for learning in health education and physical education” (MOE, 1999, p. 30).

The socio-ecological perspective will be evident when students:

- identify and reflect on factors that influence people's choices and behaviours relating to health and physical activity, including social, economic, environmental, cultural, and behavioural factors and their interactions
- recognise the need for mutual care and shared responsibility between themselves, other people and society
- actively contribute to their own well-being, to that of other people and society, and to the health of the environments that they live in (MOE, 1999, p. 33).

Aspects of this concept of health within physical education can also be seen in another of the four underlying concepts, namely *Hauora*, which is described by Cassidy (2010) as being a Māori philosophy of wellbeing that includes the physical, mental and emotional, social, and spiritual dimensions of health, which influence and support each other.

In this socio-ecological view of health these concepts are learned in physical education contexts *in, through* and *about* movement (Arnold, 1996; Culpan, 2004). Therefore, teachers use physical education contexts to allow students to experience, discover and make healthy decisions related to themselves, others and society in general. Crucial in the successful implementation of this thinking is the teachers' capacity to enable students to make connections between these experiences and enact these in wider life experiences and contexts.

2.1.2 Socio-Cultural Perspectives of Learning

Curriculum writers also attempted to achieve a socio-cultural focus within a critical paradigm (Sage, 1993). Earlier works and understandings of socio-cultural perspectives of learning reflected a synthesis of social constructivist principles and considerations of wider social and cultural influences in the construction of knowledge (Barker, 2008a). For example, Jarworski (1993, p. 7) summarised this relationship well, by suggesting five key components to a socio-cultural view of learning:

1. Knowing is an action participated in by the learner. Knowledge is not received from an external source.
2. Learning is a process of comparing new experience with knowledge constructed from previous experience, resulting in the reinforcing or adaptation of that knowledge.
3. Social interactions within the learning environment are an essential part of this experience and contribute fundamentally to individual knowledge construction.

4. Shared meanings develop through negotiation in the learning environment, leading to the development of *common* or ‘taken as shared’ knowledge.
5. Learning takes place within some socio-cultural setting – a ‘community of practice’ in which we can think of social *actions* as well as social *interactions*.

As can be noted from the fifth point, and of particular significance in the development of socio-cultural theory in education, is the work of Lave and Wenger (1991). Their research on knowledge construction within a *community of practice* (Lave & Wenger, 1991) outlined that knowledge construction is inevitably culture laden. They state that:

... learners inevitably participate in communities of practitioners and that the mastery of knowledge and skills requires newcomers to move towards full participation in the socio-cultural practices of a community. (p. 29)

Over the last two decades, scholars have similarly advocated for, and furthered our understanding of, socio-cultural learning perspectives. Most notably, the work of Pierre Bourdieu and Henry Giroux have elucidated on the tensions and power relations that exist in educational cultures and this has contributed significantly to the development of socio-cultural learning perspectives in education (Barker, 2008a). In New Zealand, Culpan and Bruce (2007), and Gillespie and Culpan (2000) have referred to this as a *socio-critical* perspective where curriculum principles and objectives suggest a need for pedagogical approaches to examine the power relationships within the ‘community of practice’. In critical PETE programmes, such as the BEd (PE) programme, student teachers are not only encouraged to include an understanding of the social and cultural influences on knowledge construction, but also an understanding of the conflicts and tensions that arise as a result of the hegemonic power relationships that manifest themselves within educational contexts. This interpretation and wider *socio-cultural* and *socio-critical* perspective of learning is where student teachers explicitly examine the historical and political influences of culture and power in their construction of physical education knowledge (Curtner-Smith, 2007; Kincheloe, 2005). Furthermore, this examination not only includes hegemonic considerations within society but also within the physical education classroom itself. Here, PETE students can begin to examine, evaluate and construct a wider understanding of their own personal teaching and learning behaviours. Through an understanding and implementation of critical reflection, PETE students may gain agency and begin to make informed decisions around their own epistemological assumptions and resulting pedagogical practices (Gillespie & Culpan, 2000; Macdonald, 2003).

2.1.3 Curriculum Critique

Leading up to the release of the HPENZC, some individuals advocated strongly against its philosophy. Culpan (2004) stated that:

Sustained critique of the document was offered by only a few groups and organisations (Culpan, 2000). The major critique was the education forum, a select group of conservative school principals, with strong affiliations to the New Zealand Business Round Table (prominent businesspeople with strong new right views). (p.2 38)

The basis of this critique stemmed around the critical nature of its philosophy where it was proposed that other “equally supported curriculum positions” (p. 239) were underrepresented. Effectively, the Education Forum (1998) suggested that HPE was going well outside its traditional remit and saw a need to restrict physical education to its ‘traditional’ place in the curriculum. Culpan (2004) states:

The forum was intent on restricting health and physical education to a traditional paradigm of skills development, giving only passing acknowledgement to the scientific foundations of physical education and the medical foundations of health. (p. 239)

In fact, Culpan (2004) continues to suggest that the Education Forum saw the document as having unclear and limited theoretical foundations, with hidden agendas, and was a radical attempt to pervade and change New Zealand society. This was obvious throughout the Forum’s submission but clearly evident in the following statement:

The programme set out here is thus a manifestation of a hidden agenda: to achieve the goals for health and physical education prescribed by critical theorists, which constitutes an exercise in individual and social emancipation and attacks of a subversive kind on existing social, communal, political and economic institutions, structures and practices. (Education Forum, 1998, p. 5)

Another area of criticism pertinent to this research was based on the accompanying pedagogical and epistemological shift required by teachers. The notion of student-centeredness epistemologically and pedagogically challenged the Forum’s conception of the teaching and learning process as, in their view, the teacher was necessarily the focal point of the learning process.

Far from recognizing its fallibility, the draft elevates the “needs” notion to the prime determinant of a needs-based curriculum poised on the principle of student-centeredness ... a consequence of this needs-based approach is the significant side-lining of the work of the teacher to that of facilitator ... the notion of student-centred learning is woolly, imprecise, unanalysed and undefended. (Education Forum, 1998, p. 33)

Thus, with this belief, the Education Forum (1998) recommended to the government that it:

... reject the notion of child-centredness as promoted within the draft ... [and] note that there is a more academically credible and rigorous ‘student-centred’ approach which seeks to identify differences in modes of learning and consequently in effective teaching styles, maintains the importance of knowledge and disciplinary procedures, upholds the need for teachers who are authorities in both content and procedures. (p. 38)

Immediately after the release of the HPENZC, concerns and questions continued to be raised from a number of different areas. Gillespie & Culpan (2000) suggested that “clearly teachers of physical education will need to become familiar with teaching and learning processes associated with this document” (p. 84). Indeed, the enormity of change for many physical educators posed problems and, as suggested by the Education Forum’s (1998) submission on the draft HPE Curriculum, resourcing the professional development of teachers would be paramount if it was, indeed, to have any chance in succeeding in its aims.

Some, including the Education Forum (1998), questioned the draft curriculum’s mandate to espouse wider educative goals and broader curricular objectives when it was suggested that physical education should remain in its traditional place in schools and that the curriculum writers should recast their thinking and should:

... produce a much more constrained and manageable remit for Health and Physical Education and one that is more true to its particular and respected place in the school curriculum (Education Forum, 1998, p. 95).

Burrows & Ross (2003), commenting on the HPENZC, also questioned the ability of such broad curricula and suggested that physical educators may struggle to meet all of the espoused benefits and epistemological challenges.

There were also concerns raised also over the bi-cultural aspects of the curriculum by the Ministry of Education (1998) during the draft phase and this continued after its release. For example, Salter (2000) argued that the Ministry of Education's dilution or "sanitisation of a Māori perspective of Hauora is a clear example of the lingering domination of western knowledge in education" (p. 14).

These concerns and issues raised had obvious implications for PETE programmes and as Barker (2008b), in discussing the revised NZC stated:

The implementation of The New Zealand Curriculum (MOE, 2007) presents a clear challenge for our colleges, faculties and schools of education. (p. 7)

Contrary to Kirk's so called 'arbitrarily selected' meaning of physical education, the NZC has a clear position of what represents physical education in New Zealand. Whilst, as Culpan (2008) suggests, there is debate around the NZC, essentially the curriculum has a pedagogy embedded within it that has a "socio-cultural focus within a critical paradigm" (Gillespie & Culpan, 2000, p. 84) as was originally intended by the architects of its predecessor, the HPENZC. Using movement as the context, and underpinned by a *critical* and *humanistic* perspective, physical education content links learning to the physical, cognitive, psychosocial and moral domains of learning. Importantly, it places learning in a wider historical, social and political context (Gillespie & Culpan, 2000) and promotes this within a critical pedagogy (Culpan & Bruce, 2007). Clearly, PETE programmes are challenged with the task of providing quality learning environments if they are to address such critique and produce graduates with appropriate curriculum knowledge (CK) and pedagogical content knowledge (PCK).

2.2 Critical Theory, Critical Pedagogy and PETE

2.2.1 Critical Theory

Historically, *critical theory* has had, at its very core, the concept of human emancipation—emancipation from oppression and oppressive structures that lead to dehumanisation (Freire, 1970). Simply, dehumanisation involves the eradication of individual consciousness to a point where reality of individual existence becomes unknown. This does not occur as a result of individual action, but as a result of the associations and relationships formed within the individual's socio-cultural context. Individuals are not excluded from the society in which they live, and therefore live and learn within a complex web of relationships, where the associations established and the interactions occurring become multifaceted and

interdependent (Hipkins, 2004). Based on the nature of these associations and the reasons for their interaction, many, driven by personal or political agenda, pervade to undermine the relationship from one of equality and justness to one which seeks to oppress.

Sparkes (1992) suggests that this manipulation of individual and group consciousness, through social structures, and the formation of power imbalances, manifest itself within society as those *with* and those *without* privilege. Such social structures and power imbalances become entrenched by those with power as a way of retaining the status quo and the benefits that are to be gained by such a relationship. Not surprisingly, those without privilege *may* have a vested interest in societal change as a means of improving their lives and gaining greater control over their own existence (Griffin, 1990; Sparkes, 1992). The word *may* is used because pivotal to social change is the concept of consciousness, and the level of consciousness that individuals and collectives are able to sustain. If those without privilege have no consciousness or awareness of their plight, then change becomes a redundant term. Freire (1970) argued that for societal change to occur it requires a raised level of ‘conscientization’ by those who are oppressed. That is, a need to understand their plight and therefore question their position or status in society as being one of inequality and dissatisfaction. As a result, disharmony and tensions between those with power and those without fuels a need for social change.

2.2.2 Critical Pedagogy

Critical pedagogy (CP) arises from the need to create an environment where conscientization can occur and where there is an ability to expose social and cultural inequities. Griffin (1990) highlights the fact that challenging existing hegemonic relationships is pivotal to this process, suggesting that a critical perspective that asks the *why*, and *why not?* questions and attempts to expose those whose interests are best served, are best suited to challenge unjust practices. For individuals and groups to become ‘conscientized’ it requires more than a mere description of their reality, but an in-depth look at the oppressive structures that maintain their state of unawareness. Educational settings may provide the setting and environment required to explore such concepts.

The evolution of CP from critical theory consistently demonstrates a passion to devolve hierarchy and power inequity within an educational setting (Burbules, 1993). Gur-Ze'ev (2006) accurately describes this as:

a critical dialogue between educators and educated that (are) committed to demolishing hierarchies and power relations, within which students are empowered (ideally) to the degree of being able to decipher the hidden codes, power relations, and manipulations that build and represent reality, knowledge and identities. (p. 11)

Critical pedagogues suggest that conscientization requires the critical position of asking appropriate questions that do not merely describe the situation, but raise individual student and group consciousness. Essential then to the educational success of CP, is a need to provide students with an appropriate environment to allow for critical thinking, questioning and discussion within a power neutral classroom (Macdonald, 2003). The ability to take action to promote social change is of equal importance (Burbules, 1993; Fernandez-Balboa, 1997; Freire, 1970; Giroux, 1983; Kincheloe, 2008; McLaren, 1995/1997).

It is important to note that critical thinking, as suggested by Gillespie & Culpan (2000), can be interpreted in several ways. Some consider this a process of problem solving and higher order thinking skills (Ennis, 1993; McBride, 1992), where the focus is on questioning as an analytical tool. In the researchers view, this provides an opportunity for teachers to believe that this is the major concern of CP and by utilising tools such as Bloom's taxonomy of higher order questioning and simple criticism, that they are addressing the issues presented by the critical paradigm.

A second interpretation suggests that critical thinking, within a CP, should examine and question assumptions around hegemony and inequality in a broader societal sense (Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Gillespie & Culpan, 2000; McLaren, 1995). It is important to note that physical education in the New Zealand Curriculum has subscribed to the second interpretation, where students are "examining, questioning, evaluating, and challenging taken for granted assumptions about issues and practices" (MOE, 1999, p. 56). However, it is also noted that this provides significant pedagogical and epistemological challenges to many physical education teachers (Burrows, 2005).

Kincheloe (2008) accurately portrays the obstacles facing those who advocate such pedagogies as being somewhat larger than merely teachers and students embracing a change in epistemological and pedagogical practices, but one with far more deeply rooted concerns.

In his opening paragraphs he explains that:

Advocates of critical pedagogy are aware that every minute of every hour that teachers' teach, they are faced with the complex decisions concerning justice, democracy, and competing ethical claims. While they have to make individual determinations of what to do in these particular circumstances, they must compete with what John Goodlad (1994) calls the surrounding institutional morality. A central tenet of pedagogy maintains that the classroom, curricular, and school structures teachers enter are not neutral sites waiting to be shaped by education professionals. Although such professionals do possess agency, this prerogative is not completely free and independent of decisions made previously by people operating with different values and shaped by the ideologies and cultural assumptions of their historic contexts. These contexts are shaped in the same way language and knowledge are constructed, as historical power makes particular practices seem natural - as if they could have been constructed in no other way (Kincheloe, 2008, p. 1) .

Hipkins (2004) furthers this claim suggesting that individuals do not operate in isolation; in fact they operate within a highly structured and complex web of relationships (Hipkins, 2004). It is, therefore, futile to conclude that they cannot be part of, or affected by the values, beliefs and agendas of the dominant culture. Similarly, it would be just as futile to suggest that education, and therefore physical education, is not bound by the same dominant cultural assumptions.

Considering the worldwide economic crisis we currently find ourselves in, the resultant disparity between those *with* and *without* power and privilege, and the increasingly evident entrenchment of new right politics (Codd, 2008), critical educators have been quick to promote more emancipatory pedagogies. Leading into this century, Fernandez-Balboa (1997) suggested that:

we must also admit that an alternative pedagogy geared towards creating a society in which humans live in harmony and respect nature is sorely needed – a type of pedagogy in tune with the postmodern times. Through such pedagogy we can become more civically and politically minded and strive for freedom and justice. Critical pedagogy is that type of pedagogy (Fernandez-Balboa, 1997, p. 123).

Physical education in New Zealand and Australia has not been immune to the discourse of CP. Scholars and educators have espoused its benefits within this context for many decades (e.g. Kirk, 1988; Tinning, 1988, 1991). Tinning (1988) outlined four possible perspectives that PETE programmes could utilise to meet the needs of physical educators in the future, namely: behaviouristic, personalistic, traditional/craft and critical enquiry. Concluding that “Zeichner’s (1983) critical enquiry perspective has the most to offer in terms of preparing teachers for the contemporary world of schooling, and for creating a more enlightened view of a possible future world of school and society” (p. 83).

Further developing this theme, Tinning (1991) similarly argued that performance pedagogy, where the emphasis lies in the development of physical skills, dominated the discourse of PETE, and that this alone had limited use in confronting the issues and addressing the necessary changes required in meeting future educational needs. He dismissed performance pedagogy, the dominant technical approach to teacher education, and stated, “It is argued that privileging performance pedagogy in teacher education is limited in vision and continues to produce physical education teachers who conceive of teaching as essentially a technical matter with little sense of the social, moral, and political aspects of their work” (Tinning, p. 1). He further challenged PETE programmes to consider discourse from the critical paradigm and engage in a discourse of critical and postmodern pedagogy, with a view to utilising physical education programmes as a means of deconstructing the existing social inequities.

Kirk (1988), a significant advocate for critical and postmodern pedagogies within physical education argued that CP concerned with emancipation, empowerment, and a cultural critique were key features of an educational rationale for physical education. Further writings sustained the argument advocating for CP’s curriculum inclusion:

School physical education was well placed to take up this challenge of sustaining sport as a moral practice and that pedagogical tools already exist to do this in the form of critical pedagogy ... physical education programmes could successfully challenge immoral values such as drug use, cheating and hegemonic assumptions of masculinity, as demonstrated by the elite sport model (Kirk, 2006, p. 255).

Rossi (2000), in supporting this position, suggested that there had been changes in thinking by some, including curriculum writers from both New Zealand and Australia. This he suggested had led to changes that were “evident in the Queensland 1-10 Health and Physical Education curriculum and also in the New Zealand curriculum document” (p 43).

2.2.3 Critique

Limitations of CP, cogently argued and debated over the previous two decades, cannot be dismissed by those who advocate for its educative value and curriculum inclusion. Commentators such as O’Sullivan, Siedentop and Locke (1992) have claimed that critical perspectives within education are counterproductive to their intended aims because they attack the hierarchical structures and traditional values and beliefs of a society—an attack that the dominant, influencing majority finds offensive and seeks to countermand. In this belief, it is suggested that teachers assume a position of *moral superiority* and are often criticised and alienated.

According to Sicilia-Comacho and Fernandez-Balboa (2009), it is this position of moral superiority that “has been criticised, resisted and rejected” (p. 452). Such resistance has not gone unnoticed by researchers and scholars within PETE programmes. For example, Ennis (1997) called for what she considered “... a more integrating and conciliatory perspective” (p. 212). This perspective, Ennis continues, enables teachers to feel capable and competent—not alienated—when implementing CP. Similarly, Tinning’s (2002) call for a more ‘modest’ approach to this concern, suggests that implementation of CP within PETE may require significant rethinking if it is to meet its intended aims and become widely accepted in practice.

However, as Sicilia-Comacho and Fernandez-Balboa (2009) suggest, those whose intentions are to promote CP may consider doing so in a less universalising and imposing manner where:

...far from preaching universalizing principles and imposing ‘liberating’ prescriptions and seeing people as objects to be liberated, recognizes people as ethical beings capable of reflecting on, deciding about and participating in, the construction of their own identity and their world. (p. 452)

Instead it is seen as an alternative where PETE students can begin to “... explore their own ethics and activate their own sense of agency” (Sicilia-Comacho & Fernandez-Balboa, 2009, p. 456).

A further concern emanates from the power that the critical paradigm brings to pedagogy. Some suggest that CP is high on rhetoric and low on practical application (Hellison, 1997; Rossi, 2000). Bain (1997) argues that CP often fails to meet its ultimate goal, where “the final step is transformative action. Educators often avoid political activism, justifying their ‘neutrality’ on the basis of their responsibility for protecting objectivity and

free speech” (p. 195). She suggests that there is a void between the intellectual rhetoric emanating from emancipatory pedagogies and the political activism required to fulfil that philosophy. She concludes with this statement:

Certainly we have a moral obligation to respect the rights of others. But we also have a moral responsibility to speak and act in ways that reflect our own values. The form that our actions take will differ, but the challenge ... is for each of us to be fully engaged in **reflection and action**. (p. 195, bold is author’s emphasis)

2.3 Praxis—Reflection and Action

Stemming from the work of Dewey (1933), *reflection* in teaching is seen as a deliberate action of examining the rationale and justification of one’s actions and beliefs. Dewey describes this as an “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (p. 118). Continuing Dewey’s work on reflection in teaching, several others, including Schon (1983, 1987) and Brookfield (1995), have developed the concept of *reflective practice* where both one’s reflections and practices (or actions) are considered as “thinking about how you teach and refining your teaching practice according to those thoughts” (O’Connor & Diggins, 2002, p. 11). In this sense, reflective practice becomes a cyclical process that requires teachers to make a deliberate effort to stop, think and enact these thoughts about, and within their practice (O’Connor & Diggins, 2002).

According to Friere (1972) reflective practice as ‘reflection’ and ‘action’ is termed *praxis* and is characterised as neither reflection nor action, but rather by the synergistic combination of both. According to Holmes and Warelow (2000) praxis is defined as:

... the act of reflectively constructing or reconstructing the social world. Authentic praxis must involve both action and reflection, and a dialectical relationship between subjectivity and objectivity which is achieved through what Friere called ‘conscientization’. (p. 177)

Holmes and Warelow (2000) continue to suggest that Friere's notion of praxis, consisting of reflection and action, may take the form of dialogue where “dialogue in which action is sacrificed is simply empty verbalism ... dialogue in which reflection is sacrificed is blind activism; true dialogue only occurs when action and reflection are in combination” (p. 177).

The concept of praxis is not lost on physical education discourse, particularly those advocating for emancipatory pedagogies and curricular inclusion (Hickey, 1997; Kirk & Tinning, 1992). Kirk and Tinning (1992) further define praxis as “attempts to capture the interrelations of thought and action” (p. 2). They continue to suggest that praxis therefore refers to the inseparability of theory and practice.

Muros and Fernandez-Balboa (2005) argue that those who claim to be critical pedagogues may, without praxis (reflection and action), be unable to achieve CP’s purposes. Therefore, the concept of praxis becomes central to any evolution or change in epistemological belief or pedagogical practice by neophyte physical education teachers. It is therefore this notion of praxis, involving a “constant, cyclical, critical reflection on ... **beliefs and actions**” (Muros & Fernandez-Balboa, 2005, p. 257, bold is author’s emphasis), which has led the researcher to explore the graduating students’ beliefs having completed a PETE programme that espouses a critical-humanist philosophy within a CP and promotes students reflection and opportunities for changes in pedagogical action.

2.4 Humanism and Holism

2.4.1 Humanism

Humanistic psychology is prevalent in educational discourse, but it “does not involve a specific content area so much as an attitude or orientation towards psychology as a whole” (Shaffer, 1978, p. 1). Humanism has been described as an ideology or ‘a belief system’, yet as Lyle (2010) suggests humanistic practices can be adopted by educationalists, particularly those in the movement culture, without an awareness of its ideological underpinning. Lyle (2010) further contends that this may help explain why there is a range of interpretations of humanism in educational settings. However, as diverse as these interpretations may be, there appear to be some fundamental commonalities (Gage & Berliner, 1992; Shaffer, 1978; Veugelers, 2011). In describing the emphases within humanistic psychology, Shaffer (1978) identified five central principles:

1. A strong phenomenological and experiential orientation
2. Human’s “essential wholeness and integrity” (p. 12)
3. Human’s retaining “essential freedom and autonomy” (p. 14)
4. It is anti-reductionist.
5. “Human nature can never be fully defined” (p. 17)

Much of the theory around contemporary humanistic psychology has been attributed to the theorising of Carl Rogers and Abraham Maslow (Cassidy, 2010). Maslow (1962) concluded that by promoting personal responsibility, the power of individualised learning, and using a rational set of values to be guided a sense of agency would be created and people could begin to actively change the society in which they lived. This could be promoted through engaging learners in contexts which were relevant to their own circumstances. Rogers's (1969, 1980) theorising, on the other hand, included the contention that learning must encompass both cognitive ideas and feelings as both teachers and learners are culturally, socially and emotionally located.

Educating humanistically is, therefore, about teachers enabling people to be who they are, encouraging autonomy and freedom addressing their 'whole' needs, which are unlimited, dynamic, complex and culturally based (Kidman, 2010). Lombardo (1999, 2010) promotes the thought that educational humanism, based on social psychology, pedagogy, sociology, and human growth and development, is necessitated by the tendency to privilege—what Tinning (1991) and Culpan & Bruce (2007) would call the 'scientised aspects' of physical education programmes. Thus, Lombardo's intentions are to ensure that in physical education and sport contexts human development is considered from a 'whole' person perspective, rather than just from the physical domain. Ultimately, 'whole' student development occurs as a result of the teacher promoting the learning of a wider range of skills.

Culpan (2011), the principal curriculum writer of the HPENZC suggests that humanism along with critical theory were the "driving philosophies" behind the HPENZC document. Whilst humanism is not explicitly identified, Culpan (2011) suggests that his positioning article, in *Delta* (Culpan, 1996/97), contained implicit links to humanistic philosophy. In a personal communication he stated:

For example, the whole personal/community development thrust, attitudes and values, the relationship strand and the self, others, society and the socio-ecological model has strong humanist leanings (Culpan, 2011).

Certainly, one does not have to delve too far into the revised NZC to find evidence of a humanistic philosophy. The overall vision of the document reflects humanist ideals where students "... who, in their school years will continue to develop the values, knowledge and competencies that will enable them to live full and satisfying lives. (MOE, 2007, p. 8)

Further evidence of these humanistic educational goals is found in the documents values statements, where the promotion and encouragement of excellence, innovation, inquiry and curiosity, diversity, equity, altruism, ecological sustainability, integrity and respect for themselves, others and human rights (MOE, 2007, p. 10). Humanistic intent is also clearly evident in the structure of the physical education curriculum area where, through four strands of learning, greater emphasis is placed on development of the affective domain, personal responsibility and concepts of common good are considered alongside or within a movement or performance context. These are inherently related to the epistemological beliefs and assumptions of the teachers that consider learning environments have the capacity to promote the development of the following (MOE, 2007):

1. Positive self-direction and independence in learning and an ability to take responsibility for what is learned.
2. Curiosity, where through exploratory and inquiry behaviour cognitive dissonance is created and adaptation occurs.
3. Creativity, where individualism and different perspectives are valued.
4. The affective/emotional system including citizenship, attitudes, values and moral development.

2.4.2 Holism

There appear to be links between humanism and the concept of ‘holism’ (Aanstoos, 2003; Lombardo, 2010). According to Mallet and Rynne (2010) “Holism comes from the Greek word *holos*, meaning *all, whole, entire, total*, and is representative of the idea that the properties of a given system cannot be determined or explained by its component parts alone” (p. 453). More recently, the rise of humanism in the 1960’s has seen the notion of holism associated with humanistic psychology (Mallet & Rynne, 2010). For example, Aanstoos (2003) claims that “the humanistic vision is historically holistic” (p. 121) and that “the humanistic self is an engaged, involved, situated self, concerned and caring about the whole of being, of which it’s an interrelated manifestation” (Aanstoos, 2003, p. 128). Lombardo (2010) similarly claims that there is a relationship between holism, humanistic psychology and the educational movement culture, suggesting that holistic education essentially is to do with humanism—with freedom, autonomy, and anti-reductionist understandings.

Kidman (2010) makes similar claims when suggesting that the movement culture may provide the appropriate contexts where “athletes have an opportunity to develop as human beings” (p. 475). She further contends that the movement experiences in sport and physical education should be:

Humanizing, in that they positively influence self-esteem, self-direction, independence and opportunities that can “express intense movement of joy and supreme well-being” (Workman, 2001p. 85, as cited in Kidman & Lombardo, 2010, p. 181). To attend to these individualised, holistic experiences coaches need to focus on the ‘whole’ person, one who has been socially constructed and has a personal, culturally-based practice and understanding (Kidman, 2010, p. 475).

However, while humanism and holism appear synonymous, there are some, such as Lombardo (2010), who contest that there are differences. He states that “humanistic psychology typically does not address the spiritual dimension, while holistic practitioners certainly would address this characteristic” (p. 478). Therefore, humanism in education, and indeed holism which should intersect with humanistic tenets, should seek to address the whole learner—the physical, emotional, social, spiritual, and cognitive domains of human development.

Interestingly, Cassidy (2010) suggests that holism, consistent with Lombardo’s broader view of the humanistic/holistic approach to education in sport and physical education, is reflected in HPE in the NZC (MOE, 2007). She contends that ‘metaphorical frameworks’ such as Hauora, a Māori term used to describe a holistic philosophy of health and wellbeing, which recognises the positive interdependence of the physical, cognitive, social and emotional, and the spiritual domains is used to operationalize holistic development.

2.5 PCK and ‘Effective Pedagogy’

Shulman (1987) describes PCK as “that special amalgam of content and pedagogy that is uniquely the providence of teachers’, their own special form of professional understanding” (p. 8). Shulman makes a clear distinction between general pedagogical knowledge, which applies to “those broad principles and strategies of classroom management and organization that appear to transcend subject matter” (p. 8).

Grossman (1989) expands this generic definition of PCK to include:

. . . overarching conceptions of what it means to teach a particular subject, knowledge of curricular materials, and curriculum in a particular field, knowledge of students' understanding and potential misunderstanding of a subject area, and knowledge of instructional strategies and representations for teaching particular topics. (p. 25)

Successful PCK enables a teacher to transform content knowledge and curriculum knowledge into effective and powerful learning environments, responsive to the needs and characteristics of the learners (McLellan, 2008). In essence, and by definition, effective pedagogical strategies should be encapsulated by Shulman's evolved definition of PCK. Therefore, effective pedagogical strategies employed by physical education teachers in New Zealand should be encompassed by this term and teachers should demonstrate clear understanding of the epistemological basis from which they originate.

Contemporary discourse about PCK emphasises congruence with constructivist learning principles (Hendry, 1996; McLellan, 2008; von Glasersfeld, 1989, 2001; Windschitl, 2002). Piaget (1977), a pioneer of cognitive development theory, which has significant influence in the development of cognitive constructivist thinking, defines learning as a process of accommodation, assimilation, and equilibration (Schunk, 2012). Saxe (1991) suggests that this is a dialectic process in which the subject resolves conflicts in understanding by coordinating and constructing new, more adequate cognitive structures. The teacher's role becomes one of mentor or facilitator, to help the learner gain personal and individual meaning of the subject content. This is juxtaposed with the traditional notion of education where the teacher enters a didactic relationship with the learner in order to cover the content. Therefore, the role of a constructivist teacher becomes one of a facilitator utilising heuristic problem solving and discovery whilst stimulating problem solving skills, curiosity, creativity and originality. It is suggested that this helps the learner to get to his or her own understanding of the content. It may aid the learner in modifying existing knowledge and allow for creation of new knowledge. Richardson (2003a) describes constructivism in the following way:

The general sense of constructivism is that it is a theory of learning or meaning making, that individuals create their own new understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact. (p. 1624)

The NZC (MOE, 2007, p. 34-35) makes clear connections to constructivism when outlining effective pedagogy and although pragmatically articulated, clearly the intentions of the curriculum require teachers to have not only an understanding, but also knowledge of how to implement constructivist strategies in their classrooms.

Making connections to prior learning and experience

Students learn best when they are able to integrate new learning with what they already understand. When teachers deliberately build on what their students know and have experienced, they maximise the use of learning time, anticipate student learning needs and avoid unnecessary duplication of content (MOE, p. 34, bold is author's emphasis).

Importantly, and in the context of this study, Richardson (2003a) distinguishes between two forms of constructivism, "... the first being sociological, the second psychological"

(p. 1624). According to Richardson (2003a), sociological constructivists consider "the ways in which power, the economy, political and social factors affect the ways in which groups of people form understandings and formal knowledge about their world" (p. 1624). Singleton (2009) in drawing on the work of noted critical scholar Joe Kincheloe (2005) states that:

... [Kincheloe] suggests that "critical constructivism" is where critical theory and constructivist notions of learning and teaching come together. That is, he sees critical theory as a place whereby individuals extend consciousness of themselves, "... as a social being in light of the way dominant power operates to manage knowledge," and thus, "Critical constructivism . . . promotes reflection on the production of self". (p. 10)

Richardson's (2003a) second distinction considers that psychological constructivism is more in line with cognitive interpretations stemming from the work of Piaget where, "... the ways in which meaning is created within the individual mind and, more recently, how shared meaning is developed within a group process (p. 1625).

Psychological constructivism appears to be consistent with the development of cognitive and social constructivism—where students must be *active learners*, by solving problems and making decisions; *social learners*, by formulating knowledge through interaction with their peers; and *creative learners*, in that they discover and make meaning through experimentation with the subject matter (Dyson, Griffin & Hastie, 2004). Social constructivism places great emphasis on the importance of culture and context in

understanding what occurs in society and constructing knowledge based on this understanding (Derry, 1999; McMahon, 1997). It builds upon the work of cognitive constructivist theory, which is derived from the work of Piaget (1977), and rather than viewing the learning process from an individual cognitive perspective that is related to the individual learner's stage of cognitive development, social constructivists view this process as one of close relationship with the social environment in which the learning takes place. This perspective is closely associated with many contemporary theories, most notably the developmental theories of Lev Vygotsky (social and cultural learning theory) and Jerome Bruner (discovery learning), and Albert Bandura's social cognitive theory (see Schunk, 2000, for a more detailed description). Traditional dialectic technocratic approaches (Tinning, 1991), such as direct or command instruction (Metzler, 2005), strive for context independence, whereas a social constructivist views the context in which the learning occurs as central to the learning itself.

The rhetoric of constructivism is not lost on physical educators and many physical education scholars and practitioners argue a need for constructivist approaches (Curtner-Smith, Todorovich, McCaughtry & Lacon, 2000; Kirk & Macdonald, 1998; Kirk & McPhail, 2002; Light & Butler, 2005; Light & Fawns, 2003; Light & Wallian, 2008). Many physical education researchers (e.g. Hastie & Curtner-Smith, 2006; Kirk, 2006) have made links between emancipatory pedagogies, such as that underpinning the NZC, and the many forms in which constructivist pedagogy manifests itself. Curriculum documents that exhibit physical education content as more than skill performance, such as the NZC, promote a shift from didactic—direct, reproductive, or teacher-centred styles—to more student-centred and productive styles of teaching (Curtner-Smith et al, 2000). Cooperative Learning models (Dyson, 2001), Mosston's spectrum of teaching styles and games-based approaches such as play-teach-play (Graham, 2008), the Teaching Games for Understanding Curriculum model (Thorpe & Bunker, 1986), the Tactical Games Model (Griffin, Mitchell & Oslin, 1997), Game Sense (den Duyn, 1997) and Siedentop's Sport Education Model (Siedentop, 1994) all make links to student-centred, constructivist learning approaches.

Singleton (2009), drawing on the work of Kelly, Hickey, and Tinning (2000) cogently argues that in physical education, 'good pedagogy' may have its genesis in differing "versions of truth" (p. 331). In defining these 'truths' she suggests that one version of truth:

... may conceptualize knowledge as identifiable, quantifiable, and predictable—knowledge that is characterized in physical education on the one hand, as measurable, predictable, merit-based, and performance-oriented (Tinning's technocratic-rationalism). This promise of certainty also suggests that physical

educators may expect to impose a certain degree of mastery and control in their practice. But can this version of truth, influenced by technocratic-rationality, support the diverse needs of students in modern-day secondary physical education programs? This ... may be explored through a further examination of the versions of truth presented by constructivist pedagogical approaches. (p. 331)

Another version of truth, she contends, stems from Kincheloe's (2005) deliberations which firmly place the construction of knowledge in a social and political context. In this view, knowledge is constructed and filtered by those who have power and influence over what constitutes validated knowledge (Singleton, 2009). Essentially, those who have power and influence act as *gatekeepers* in whom certain information is "constructed or discarded" (Singleton, 2009, p. 332). Therefore, the purpose of education, according to Kincheloe (2005) in a critical constructivist process is:

... not to transmit a body of validated truths to students for memorization. Instead, critical constructivists argue that a central role of schooling involves engaging students in the knowledge production process". (p. 3)

Physical education, and therefore intuitively PETE, subscribing to this approach should be "concerned with enabling their students to interrogate, analyze, interpret, and construct a wide variety of knowledges" (Singleton, 2009, p. 332), rather than having knowledge filtered and validated by gatekeepers who alone decide what constitutes effective pedagogy.

2.6 Relevant Research on Critically Oriented PETE Programmes

To date, it appears that much of the research on the effectiveness of PETE programmes has centred around what Zeichner (1983) terms the traditional/craft or behaviourist orientations, where, according to Curtner-Smith (2007):

The main focus, however, certainly seems to have been on transmitting technical skills as well as traditional curricula and content to PCT's [Pre-service Classroom Teachers] viewed as being fairly passive in the whole process. (p. 37)

Recent research on traditional/craft PETE or component courses focused on content and pedagogy presents mixed results (Carney & Chedzoy, 1998; Chedzoy, 2000; Faulkner, Reeves, & Chedzoy, 2004; Tsangaridou, 2005). Tsangaridou's (2005) study suggested that the PETE courses undertaken did, indeed, contribute to their pedagogical considerations and evolving teaching identity. However, other studies report that PETE programmes may have little influence on pre-service teacher preparation, suggesting that other factors including prior experience and levels of physical activity may be better predictors of physical education teacher confidence (Carney and Chedzoy, 1998; Chedzoy, 2000; Faulkner, Reeves, and Chedzoy, 2004).

Research on critically oriented PETE programmes appears more scant and unclear (Curtner-Smith, 2007). Gore (1990), in her study of a critically oriented PETE course suggested that pre-service students, who demonstrated greater commitment to teaching as a profession, were more inclined to embrace and problematize the social and political nature of schooling than those with less commitment and whose recalcitrant characteristics rejected the need to reflect on their own teaching.

In the latter half of this decade more research has begun to emerge around critically oriented PETE programmes (e.g. Curtner-Smith, 2007; Ovens, 2004; Philpot & Smith, 2011). While this research base is still relatively small, it may be gathering momentum and, therefore, will begin to address some of the questions raised around its placed in the PETE curriculum.

From an international perspective, Curtner-Smith (2007) examined the effectiveness of a six-week critically oriented methods course and a nine-week early field experience on one class of 24 pre-service primary classroom teachers (PCT's). Evaluating the PCT's capacity to critically reflect, he suggested that these manifested themselves as technocratic at best and reinforced the dominant messages presented in traditional methods courses. He continued to suggest that there was little evidence to support the PCT's ability or willingness to critically reflect on the social and political nature of teaching and learning. Reasons for rejection of the critical nature of the course, he suggested, included powerful and extremely conservative forms of personal, cultural and programmatic factors.

Macdonald & Brooker (1999) and Tinning (2002) provide insight here, suggesting that critical pedagogues risk criticism from the majority who have been influenced by the pervasive, conservative and historical discourses that dominate and entrench traditional education, physical education and PETE environments.

It also appears to verify Gore's (2003) concern around the social, political and historical nature of teachers work and the realities associated with implementation of attempts to work critically in traditional and conservative education environments.

My major concerns are that these critical claims to empowerment attribute extraordinary abilities to the teacher, and hold a view of agency which risks ignoring the context of teachers' work. Teachers are constrained by, for example, their location in patriarchal institutions... (p. 334)

In New Zealand, where physical education within the NZC (MOE, 2007) espouses a critical orientation, PETE programmes are charged with producing graduates who have the capacity to understand and enact its philosophical position. There is some research (Ovens, 2004; Philpot & Smith, 2011) in New Zealand around the capacity of critically oriented PETE programmes but this dearth suggests that much more is required if there is to be documented evidence to support or deny its overt claims. Ovens (2004), in his unpublished doctoral thesis explored the (im)possibility of critical reflection in PETE, suggesting that

Its very possibility lies in the complexity of the contexts students encounter as part of the existential landscape of teacher education and the factors that mediate their meaningful engagement with those contexts. (p. 261)

More recently, Philpot and Smith (2011) compared “the different beliefs about the nature and purpose of physical education of beginning and graduating physical education teacher education students” (p. 33). They concluded that both beginning and graduating students believed that physical education had wider educative purposes than developing physical skills alone and articulated purposes that extended beyond performance discourses. Indeed, the students acknowledged that physical education was both an uncertain and complex conceptualization. Interestingly, Philpot and Smith (2011) reported that graduates articulated a much deeper understanding of this complex conceptualization, and also the role that the teacher plays within it, than their less-experienced counterparts did. They concluded that the four-year critically oriented PETE programme may have contributed to the development of teaching behaviours that enabled the students to critically reflect on their evolving identity and understanding of teaching physical education.

This indeed presents a more positive view of the capacity appropriated to PETE programmes in New Zealand and suggests that some progress may be being made towards the development of effective critically oriented PETE programmes, however, as Philpot and Smith (2011) cautioned:

It is unclear how, or even if, the graduates ‘more than sport’ beliefs will survive the early years of socialization in the school physical education teaching context. (p. 43)

3. Methodology

This chapter outlines the research methodology and rationale used to conduct this research. It also describes the research design methods used to gather, analyse and make sense of the data, and describes the ethical considerations appropriate to the study.

The study followed a Mixed Method (MM) sequential explanatory design (Creswell, 2008; Teddlie & Tashakkori, 2009). In the first, quantitative (QN) phase of the study, 32 graduating students voluntarily completed a survey questionnaire. This survey was presented in three parts, each with a different focus:

- Part A—to obtain demographic information
- Part B—seeking information regarding the participants’ beliefs relating to the NZC
- Part C— investigating the participants’ beliefs around the HPE learning areas

This information was obtained through a series of multiple choice and open-ended questions. Data were then analysed using descriptive statistics and areas considered of interest to the researcher were further explored in the qualitative (QL) phase of the study. The two areas of interest identified and that were considered for the QL phase of the study were:

1. **Pedagogical considerations**—including ‘effective pedagogy’ as advocated in the NZC, namely constructivist, student centred approaches to teaching and learning.
2. **Curriculum philosophy considerations**—specifically those related to and underpinning the HPE Learning area.

The second phase of the study involved a QL case study design, that looked to ‘flesh out’ and expand on the participants’ beliefs around the areas identified above. During this phase, five of the graduating students who had participated in the first phase of the study volunteered to participate in individual semi-structured interviews that lasted between 45 – 60 minutes. The interview data was transcribed, coded thematically and categorised into three themes related to the research questions. The three themes to emerge were:

1. The multiple aims of HPE in the NZC
2. HPE as an area of paradigmatic uncertainty
3. The teaching continuum and moving beyond direct instruction

The following discussion outlines the MM sequential explanatory design used and the methodological framework employed in this research.

3.1 Quantitative and Qualitative Research

Johnson and Christensen (2012) suggest that QN research is frequently used in the social sciences, including educational settings. QN methodologies refer to an empirical investigation of social phenomena, where the process of measurement is pivotal. Empirical measurement is used to provide connections between empirical data and social phenomena through a mathematical expression of these relationships (Johnson & Christensen, 2012). They go on to state that QN researchers see the world objectively where there is a “reality to be observed and that rational observers who look at the same phenomenon will basically agree on its existence and its characteristics” (p. 36). In terms of this research, empirical data were gathered to determine the participants’ beliefs relating to the philosophy and pedagogical considerations of the NZC.

Commonly statistics are used to analyse numerical data and can be divided into two broad categories: *descriptive* and *inferential* statistics. Descriptive statistics are used to describe, summarise or make sense of the data by presenting it in a more interpretable form (Creswell, 2008). Such forms include the use of frequency distributions and generating graphical displays (Johnson and Christensen, 2012). Similarly, the data in this research is presented in terms of frequencies and graphical displays to ‘describe, summarise and make sense’ of the participants beliefs and portray an overall conception of the topic.

Conversely, QL researchers generally contend that reality is a social construction (Johnson & Christensen, 2012). QL research typically involves an inquiry process, concerned with understanding a human or social problem, “based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting” (Creswell, 2008, p. 2). QL designs also suit educational research, where it enables the researcher to locate themselves in the world of the participant(s) and make this world visible (Denzin & Lincoln, 2003). Relevant to this research, it is also suggested that QL research is often used when the researcher wishes to learn more about a particular topic (Johnson & Christensen, 2012). Burns (1997) suggests that by using an inductive methodology and maintaining a close association with both the participants and the setting, the researcher is able to discover the subtleties and complexities of educational interaction which is often missed through positivist (QN) inquiry.

Mason (1998) considers QL research as having three common elements. Firstly, it is ‘interpretivist’ as it is concerned about how the social world is interpreted, understood, experienced or produced. Secondly, QL inquiry data collection are flexible and sensitive to the environment in which they are produced and thirdly, the analysis of QL data places greater emphasis on the holistic understanding of the rich, complex and detailed data

gathered. Jones and Gratton (2004) propose that interpretive enquiry is particularly relevant when examining the social phenomenon of physical education and sport, where it enables concepts such as thoughts, beliefs, values and relationships to be interpreted and explained from the multiple standpoints of teacher and student, coach and athlete and the researcher.

Similarly, Stake (2003) suggests that case study inquiry is very common in QL research and that “case study is not a methodological choice but a choice of what is to be studied” (p. 134). Within a physical education and sports research context, Gratton and Jones (2004) state that “the use of case study research is based on the argument that understanding human activity requires analysis of both its development over time and the environment and context within which the activity occurs” (p. 97).

Additionally, it is suggested that researchers employing a QL case study approach may do so using a variety of methods and interpretive practices in an attempt to gain a better understanding (Denzin & Lincoln, 2003; Gratton & Jones, 2004). In this QL phase of the study, a multiple case study approach (Yin, 2009) was used to gain ‘better understanding’ by exploring these concepts in greater depth. A multiple case study design consists of more than one case and enables the researcher to not only analyse and report *individual* cases, but also *across* cases (Stake, 2003; Yin, 2009). To provide the detail required in the case descriptions (Stake, 2003), multiple sources of data gathering were utilised: (1) individual, in-depth, semi structured interviews with each of the five participants; (2) individual participant responses to open-ended questions from the QN survey questionnaire and (3) electronic follow-up with individual participants to clarify information given in the interview or on the survey questionnaire.

The following discussion will outline the theoretical framework underpinning this research and provide justification for the decisions made by the researcher.

3.2 Theoretical Framework

Teddlie and Tashakkori (2009) suggest that historically, as QL research proliferated, it became apparent that fundamental ontological, epistemological and axiological differences existed between the QN (positivist) and QL (constructivist) research communities. Indeed, Gratton and Jones (2004), in discussing research approaches within sporting contexts, suggest that methodologies adopted, data collected and interpretation of data will differ depending on the researcher’s epistemological and ontological assumptions. Previously, Sparkes (1996) had eluded that “alternative visions” or ways of interpreting and informing our practice, were becoming increasingly evident and justified within physical education. Traditionally, research and influence on physical education had subscribed to the QN (positivist) perspective to gain respectability and credibility in an educational climate where

this perspective dominated. This belief assumed that scientific knowledge and objectivity provided a strong foundational basis and future for physical education. However, as noted by Gillespie and Culpan (2000), this paradigm has been hugely influential in the scientization of physical education, and whilst this focus has importance it provides “limited insight into how people make meaning of the movement culture” (Gillespie & Culpan, 2000, p. 86).

As the paradigm debate grew and the two research communities moved to opposite ends of the spectrum, some research scholars (e.g. Guba & Lincoln, 1994; Sparkes, 1996) developed comparison tables that in effect ‘dichotomised’ these fundamental differences and highlighted the key beliefs of each (Teddlie & Tashakkori, 2009). As a consequence, “a major component of the paradigm debate was the *incompatibility thesis*, which stated that it is inappropriate to mix QUAN & QUAL methods due to fundamental differences in the paradigms underlying those methods” (Teddlie & Tashakkori, 2009, p. 15, original emphasis). However, Willis (2007) suggests that to merely refer to research as being QN or QL is an “oversimplification that emphasises data rather than foundational beliefs and assumptions” (p. 8). Constructing the notion that paradigms or ‘world views’ are better suited to reference ones research, Willis (2007) continues to describe paradigms as “a comprehensive belief system, world view, or framework that guides research and practice in a field” (p. 8).

More recently, researchers have become less concerned with debating such issues and from many perspectives, more acceptant of differing approaches and philosophical basis to research (Teddlie & Tashakkori, 2009). For example, Mertens (2010) cogently argues that there are currently four “labels commonly associated with different paradigms” (p. 8). Synthesising the work of noted research scholars (Creswell, 2009; Guba & Lincoln, 1989; Lather, 1992; Morgan, 2007; Teddlie & Tashakkori, 2009), she concludes that there are four categories under which the many research terms can be placed and justified. The first two labels include the commonly used ‘post-positivist’ and ‘constructivist’ paradigms. The third, the ‘transformative’ paradigm, is a blend of what scholars have previously termed the critical (Guba & Lincoln, 2005; Sparkes, 1996; Willis, 2007) and emancipatory paradigms (Lather, 1992). Her fourth, the ‘pragmatic’ paradigm, emanates from the rapid rise and increasing acceptance of MM research (Creswell, 2008; Mertens, 2010; Teddlie & Tashakkori, 2009). The following section will briefly outline the pragmatic paradigm, where, in the sense of this study, the researcher has significant philosophical compatibility.

3.2.1 The Pragmatic Paradigm

In essence the pragmatic paradigm, as suggested by Howe (1988, as cited in Teddlie & Tashakkori, 2009), counters the claims made by the incompatibility thesis that QN and QL methods cannot be mixed. Indeed, as Mertens (2010) suggests, that as mixed method research proliferates, many scholars support a pragmatic view where the employment of research methods that align with the research question or problem is ultimately more important than the researchers philosophical paradigm or ‘world view’. Conversely though, Greene and Caracelli, (1997) recommend that it may be important for the researcher to report their ‘world view’ even though they are collecting both QN and QL data.

In this study the researcher sees great value, understanding and coherence in aligning the post-positivist and transformative paradigms together, as this enables the researcher to gain a far greater understanding of the research problem and questions being asked. Admittedly, to place oneself in one camp or another appears to be counterproductive and in essence may limit the research, particularly during the interpretation and reporting phases. Effectively, the researcher subscribes to, as Mertens (2010) and Johnson and Christenson (2012) describe it, a pragmatic approach that enables the mixing of methods associated with the post-positivist and transformative paradigms. Namely, using a web-based, cross-sectional survey (QN) and a multiple case study approach (QL) in a MM sequential explanatory design (see Figure 3-1).

3.2.2 Mixed Method Research

MM research designs have become increasingly popular with educational researchers in the last few decades (Ivankova, Creswell & Stick, 2006; Bergman, 2008). Creswell and Plano Clark (2007) suggest that MM designs are the collection and analysing of QN and QL research and methods in one study. The basic premise of MM designs is that, combined, they may provide a better understanding of the research problem than if either method were singularly employed. Schutt (2009) suggests that mixing QN and QL methodologies can “enhance the value of a research design that uses primarily QN measurement techniques...as well as offer insight into the meaning of particular fixed responses” (p. 347). Drew, Hardman and Hosp (2006) suggest an amalgam of QN and QL approaches may address the deficiencies of each whilst highlighting the benefits of both. In this instance, a MM approach will enable the researcher to provide a breadth (survey data) and depth (interview data) of understanding that is not possible when using either a QN or QL design in isolation (Gay, Mills & Airasian, 2006).

However, it is important to consider that “Mixed method research is not simply collecting two distinct strands of research—qualitative and quantitative. It consists of merging, integrating, linking, or embedding the two strands” (Creswell, 2008, p. 552).

There appears to be many MM research designs that utilize both QN and QL procedures (Tashakkori & Teddlie, 2003; Creswell, 2008; Teddlie & Tashakkori, 2009). Decisions on which of these methodologies to employ are inevitably linked to the research problem or question. MM sequential explanatory design involves the collection and analysing of QN and then QL data consecutively (Creswell, 2008; Teddlie & Tashakkori, 2009). Using QN techniques at the beginning of the sequence enables the researcher to identify the research problem and provide an overall conception. QL procedures are then employed to build on the QN findings and this therefore enables the researcher to explore these in greater depth (Creswell, 2008).

However, researchers employing MM designs are quick to highlight the major procedural issues and accompanying decisions that must be considered and reported to ensure the quality of the research (Ivankova et al., 2006; Creswell, 2008; Teddlie & Tashakkori, 2009). Major considerations include “priority or weight given to the QN and QL data collection and analysis in the study, the sequence of the data collection and analysis, and the stage/stages in the research process at which the QN and QL phases are connected and the results are integrated” (Ivankova et al., 2006, p. 4). The following will outline these issues and justify the decisions made in this process.

3.2.3 Considerations in Mixed Method Research

The *sequence* in which the two research methods will be employed (Creswell, 2008) requires substantial consideration when designing MM studies. Typically, in a MM explanatory design, the QN data collection and analysis precedes and informs the second, QL phase of the study (Creswell, 2008; Gay et al., 2009; Ivankova et al., 2006). Accordingly, in this research, collection and analysis of the QN data (the survey questionnaire) preceded the second QL phase. Analysis of this phase informed the researcher of the focus for inquiry for the QL case study phase of the research.

Priority decisions are considered when the researcher is determining which approaches, QN or QL, are given more weight (Creswell, 2008; Ivankova et al., 2006; Teddlie & Tashakkori, 2009). Generally, in a MM explanatory design the emphasis is given to the collection and analysis of QN data, followed by the collection of QL data to elaborate on the QN findings (Creswell, 2008; Gay et al., 2009). However, whilst this is the typical approach to this design, priority may change depending on the goals and scope of the study

and the resultant analysis of the QN data (Morgan, 1998; Ivankova et al., 2006). Ivankova *et al* (2006), state that, “depending on the study goals, the scope of the quantitative and qualitative research questions, and the particular design of each phase, a researcher may give priority to the qualitative data collection and analysis (Morgan, 1998) or both” (p. 9). In this study the researcher considered that greater priority would be given to the QL data. In this instance the QN data analysis was used to gain an overall ‘conception’ of the participants’ beliefs about curriculum and pedagogical matters and therefore provide a focus for the questions and strategy of the interview schedule. Consequently, priority or weighting in this research therefore shifted, to reflect an emphasis on the QL data.

Within MM research *integration* refers to the “stages in the research process where the mixing or integration of the QN and QL methods occurs” (Ivankova et al., 2006, p. 11). This can become difficult when attempting to analyse QN and QL data together and attempting to find intersecting points (Gay et al., 2009). Integration may occur in many stages of the research process. These may be during the initial stages of the study where both QN and QL questions are being formulated, in the intermediate stages, when considering the participants for the QL interviews and determining the questions to be asked, or during the interpretation and reporting phase of the study (Ivankova et al., 2006). In this study the QN and QL data were connected at two distinct points. Firstly, during the intermediate phase when, having collected and analysed the survey data, participants were selected as a result of these findings. Interview questions were also considered and written and the focus of inquiry was determined. Secondly, as suggested by Onwuegbuzie & Teddlie (2003) both QN and QL data were connected during the interpretation and reporting phase of the study. Figure 3-1 provides a diagrammatic representation of the methodology used in this study.

Figure 3-1: Schematic overview of the MM sequential explanatory design used

Phase	Procedure	Product
<p>QN Data Collection</p>	<ul style="list-style-type: none"> • Cross-sectional, web-based survey • QN Software: SurveyMonkey.com 	<ul style="list-style-type: none"> • Numeric data (N=28)
<p>QN Data Analysis</p>	<ul style="list-style-type: none"> • Uni/Bivariate analysis: (Freq, Means) • QN Software: SurveyMonkey.com 	<ul style="list-style-type: none"> • Descriptive Statistics (QN results)
<p>Connecting QN & QL Phases</p>	<ul style="list-style-type: none"> • Purposive sampling: based on 'typical' cases • Developing Interview Q's 	<ul style="list-style-type: none"> • Cases (N=5) • Interview Schedule
<p>QL Data Collection</p>	<ul style="list-style-type: none"> • Individual semi-structured interviews • Open-ended survey questions 	<ul style="list-style-type: none"> • Text data (N=5)
<p>QL Data Analysis</p>	<ul style="list-style-type: none"> • Thematic analysis: Single & cross case using constant comparative method • QL Software: QSR NVIVO8 	<ul style="list-style-type: none"> • Codes & Themes (QL results) • Participant quotations
<p>Integration of QN & QL Results</p>	<ul style="list-style-type: none"> • Interpretation & explanation of the QN & QL results 	<ul style="list-style-type: none"> • Discussion • Implications & Future Research

Adapted from: Ivankova, Creswell & Stick (2006) Using MM sequential explanatory design: From theory to practice, *Field Methods*, 18, (1), 3-20.

3.3 The Research Setting

This study took place within the College of Education in a large New Zealand University. The participants were enrolled in the four-year BEd (PE) programme. The programme typically involves substantive study of courses in education, physical education pedagogy, sport science, socio-critical education, professional studies, teaching studies and professional practice. Upon graduation, students are primed to teach HPE in secondary schools in New Zealand. Additionally, students are required to pursue a further subject of their choice to 200 level, giving some diversity to their teaching qualification.

Staff and official programme documentation (College of Education, 2010) espouse a socio-critically oriented philosophy and an accompanying constructivist, student-centred pedagogic approach that is integrated and coherent in nature. Its major point of difference is anecdotally claimed to be the emphasis on emancipatory and transformative pedagogies that are aligned with the successful implementation of the NZC.

The BEd (PE) programme is physically and philosophically located within the College of Education, which has recently merged with the University of Canterbury, where its separate location does not remove it from its policy and politics. Indeed, staff and students alike have found the merger implications both epistemologically and philosophically challenging as resultant economic rationality forces class sizes up and reduces academic staff numbers. A significant initiative to come from these implications and resultant manifestations has been the redevelopment and restructure of the BEd (PE) programme, where the participants were very quick to acknowledge the relevance that the study may have on the development and implementation of the new BPE (Hons) programme.

3.4 Ethical Considerations

This research proceeded once the proposal was reviewed and approved by the appropriate Ethical Committee of the University of Canterbury (see Appendix A). As this research study involved adult students at the University of Canterbury and the exploration of beliefs, the ethical considerations were minimal but some require scrutiny. These concerns were outlined to the participants in the information sheet and the participant informed consent form (see Appendices B and C). Notwithstanding, major ethical considerations are considered below.

Kervin, Vialle, Herrington & Okley (2006) suggest that anonymity is “when the identity of the participant is unknown to anybody, including the researcher”. Mutch (2005) defines this somewhat differently and describes that anonymity in research simply “should ensure that individuals, groups, and sites cannot be identified. This may require “changing

names or identifying features” (p. 79). The essence here is that participants are comfortable in the fact that personal information and identity are held in confidence and kept in a secure manner by the researcher. Tolich and Davidson (1999) suggest that participant confidentiality is of ultimate importance to a researcher. Again, the concept of confidentiality was clearly outlined in the information sheet and the informed consent form (see Appendices B and C). Other than to the researcher, participants’ names are not disclosed at any stage of the research. Pseudonyms are used when identifying and reporting the QL interview data and quotes (Mutch, 2005).

Within educational contexts, researchers often have perceived ‘power’ over the participants, such as that which can exist between teacher and students (Mutch, 2005). Participants should not feel obligated or coerced in this situation and every endeavour must be made to alleviate such influence (Mutch, 2005). The researcher was fully aware of dominant discourses of power, gender, race, culture, religion and class around the research process and consequently adopted an inclusive, empowering and empathetic framework when conducting the research. Furthermore, although many of the participants were known to the researcher from previous study years, in the year that the research was undertaken, there was no direct contact or teaching with the graduating year group.

3.5 Validity and Trustworthiness

In MM research, the term validity has come under increasing scrutiny. Early researchers in MM studies prescribed to the validity description from each paradigm (QN and QL) treating each phase separately (Dellinger & Leach, 2007). However, recent debate in MM research suggests a need to develop MM’s own unique definitions that are compatible with the assumptions of the pragmatic paradigm (Creswell & Plano Clark, 2007; Onwuegbuzie & Johnson, 2006). At the forefront of this debate, Onwuegbuzie & Johnson (2006) propose the term *legitimation* as an appropriate MM validity term and continue to describe a “Typology of mixed methods legitimation types” (p. 288). Dellinger and Leech (2007) focus further to promote a construct validity framework that includes *legitimation*, *design quality* and *interpretive rigor*. Conversely, Teddlie & Tashakkori (2009) suggest the term *inference quality* for MM research to determine what is known as validity in QN research and trustworthiness in QL research.

While all these discussions demonstrate significant merit, the researcher has adopted a pragmatic approach to validation and, in agreement with Mertens (2010), will outline the integrity of the research “as they are derived from each paradigm” (p. 304). Therefore, within QN research, *validity* may be enhanced through appropriate sampling techniques, appropriate instrumentation and statistical procedures (Cohen et al., 2007). Inferential statistical analysis is beyond the scope of this research but appropriateness of sampling procedures, instrumentation and descriptive statistical analysis are discussed below. In QL research *trustworthiness* may be represented by the “honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the ... objectivity of the researcher (Winter, 2000; as cited in Cohen et al., 2007, p. 133). Similarly, discussion and justification of research decisions including participant selection, interview procedures, and triangulation of data are discussed below. Additional factors to be considered, which may help determine the quality of this research, and are discussed below are: piloting of both survey questionnaire and interview schedule, member checks of open questions and interview transcripts, rich and accurate descriptions of the participant views, and objectivity of the researcher.

3.6 Triangulation

Triangulation is commonly defined as the use of two or more methods of data collection in one study. According to Cohen *et al* (2007) triangulation is a useful way of demonstrating “concurrent validity” (p. 141). Consistent with the claims of MM researchers (e.g. Teddlie & Tashakkori, 2009; Creswell, 2008), the adoption of two or more approaches enhances the validity of a study and the more contrasting the methods are, the greater the researchers confidence (Cohen et al., 2007). This research employed two major methods of data collection and, therefore, triangulated data. These were a descriptive cross-sectional survey questionnaire (QN) and in-depth semi-structured interviews (QL) of five purposively selected participants. Additionally, within the QL phase of the study, data was collected from three separate sources to increase the depth, richness and scope. These included individual interview text, individual participant responses to open-ended questions from the QN survey questionnaire, and electronic follow-up with individual participants to clarify information given in the interview or on the survey questionnaire. Whilst there are some cogently argued claims of increased validity and reliability using MM designs (e.g. Abowitz & Toole, 2007; Onwuegbuzie & Johnson, 2006), this inevitably comes at a cost. Generally, these are “counted in terms of time, money, and energy” (p. 115).

However, as the researcher found in this study the additional costs were outweighed by the quality of the data generated and the inference quality (Teddlie & Tashakkori, 2009) obtained through the synergistic effects created by mixing two contrasting research methods.

3.7 Sampling

The quality of QN research relies on the appropriate choice of methodology, methods and the sampling procedures and decisions (Cohen et al., 2007). Furthermore, if the sampling process is well considered and appropriate then “the results of a study testing the sample should be *generalizable* to the population” (Gay, Mills & Airasian, 2009, p124). QN researchers suggest that probability sampling, such as the random sampling strategy employed in the QN phase of this research, increases the chance of the sample being representative of the target population, and, as suggested by Williams (2003), the use of probability sampling in survey research is common.

On the other hand QL research differs in that samples are generally smaller and less representative of the population, but seek to explore, in great depth, the thoughts, beliefs and experiences of the participants as they relate to their own unique context. The concern is not about being able to make generalizations, but to understand and explore the research question from the uniquely constructed experiences of the participant (Willis, 2007). Non-probability samples, such as the purposive sampling strategy used in the QL phase of this research study, relinquish the ability to generalize but enhance the depth and richness of the data gathered (Abowitz & Toole, 2010). In effect, both QN and QL research sampling procedures serve very different purposes and from a MM perspective are complimentary. Therefore, MM research design can overcome the limitations of a single sample of data and enhance it through the synergies created by employment of another (Abowitz & Toole, 2010). In this research both probability and non-probability (purposive) sampling strategies were used in the QN and QL phases respectively.

Random sampling, appropriate to QN methods of inquiry (Burns, 2000), were employed in this first phase of the study. Eligibility to participate was offered on a voluntary basis to all members of the BEd (PE) 2009 graduating year group. Of the 32 students conferring their degrees, 28 students chose to participate in the study. As the target population, defined by the characteristic of being a graduating student of the BEd (PE) 2006-2009 programme, was a maximum of 32 students, there was confidence that the 28 students that elected to participate in the study were representative of the target population (Cohen, Manion & Morrison, 2007; Creswell, 2008).

Purposeful sampling was used in the QL phase of the study (Thomas & Nelson, 2001; Gratton & Jones, 2004). Purposeful sampling (as opposed to random) is the dominant strategy used in QL research as it seeks information-rich cases that can be studied in depth (Gratton & Jones, 2004). The selection of the cases was determined by the specific characteristics that made the case unique, ordinary or exceptional (Stake, 2003). In this research, the target population (N=32) was represented by five typical (or 'ordinary') cases (Yin, 2009). Selection of cases considered gender, age, ethnicity and qualification upon entry into the programme. These criteria enabled the researcher to select cases that best represented a 'typical student' in the graduating year group.

3.8 The Participants

In the first QN phase of the study, all 28 students, who voluntarily participated in the study, were members of the BEd (PE) 2009 graduating year group. Staff teaching into the programme suggested that the cohort was competitive and diverse in nature, which usually resulted in lively and robust debate in both lectures and physically active contexts. The average age of the participants was 23.1 years (SD = 2.40) and in terms of gender, nearly two-thirds of the cohort were female (64%), with males comprising approximately one-third (36%) of the group. Eighty-two percent of the cohort was aged between 21 and 23 years and 18% were 24 years of age or over. The ethnic make-up of the cohort consisted of mostly New Zealand Europeans (89%), with New Zealand Māori (7%) and Samoan (4%) students completing the group. This was very similar to cohorts entering the programme in 2003 – 2005 and, therefore, the researcher considered this a typical programme intake and used these factors to determine the make-up of the 'typical cases' in the second QL phase of the study. Further detail of the 28 survey participants are given in Table 4-1 in the following chapter—Quantitative Results.

In the second, QL phase of the study, five participants were purposively selected. This consisted of three female and two male students with an average age of 22.6 years (SD = 0.55). Four of the students were NZ European and the other of NZ Māori descent. All the participants had gained university entrance by achieving the NCEA Level 3 qualification before entry into the four-year programme. Further detail of the five case study participants are given in Table 4-4 the following chapter—Quantitative Results.

When approached to participate in the study, the five purposively selected ‘typical’ or ‘ordinary’ cases were happy to do so. The five students are identified as Jenny, Emily, Brigid, Graeme and Andrew and their biographies are detailed below.

Jenny was a 22 year old New Zealand European female. She entered the programme immediately upon gaining entrance to university via her year 13, level 3 National Certificate of Educational Achievement (NCEA) results. Jenny was a quiet and reserved student who offered information when she felt confident. She was passionate about teaching but was now considering a move away from physical education and applying for jobs in her second chosen subject of geography. However, she was also very keen to travel overseas and was deciding whether to pursue this before she applied for a teaching position.

Emily was also a 23 year old New Zealand European female who, similar to Jenny, had entered the programme having completed her last year at year 13 in high school. She gained entrance to the university via the NCEA level 3 qualification and was the head girl of her school. Like almost the entire cohort, she excelled at physical education at school and her passion to pursue this further emanated from these experiences. Emily was always well considered, thoughtful and very confident and comfortable in articulating her beliefs.

Brigid was a 23 year old New Zealand European female who entered the programme after completing a gap-year abroad. She was very passionate about teaching physical education and had, in her mind, already secured a physical education teaching position at the school where she had recently completed a teaching practicum. Although this was not confirmed, she stated it “was in the bag”. As can be seen by this statement, Brigid was naturally confident and had little problem articulating her thoughts and feelings. She had enjoyed sport and competition all her life and physical education had been her greatest passion at school. PE she said, “had provided the role model teachers ... (that she wished) ... to be like”.

Graeme was a 23 year old New Zealand Māori. He had entered the programme immediately having completed year 13 at school and having gained his university entrance. Similarly, he was very passionate about physical education and had applied for two teaching positions in other parts of New Zealand. He was in his words “a bit of a joker” and “one of the lads” and was always looking to find the humorous side of things. He was an outgoing, sociable student who was very forthcoming with his thoughts and beliefs.

Andrew was a 22 year old New Zealand European male student. He, like the others had entered the programme having completed year 13 at high school and gaining his university entrance qualification. Andrew was considering travelling immediately after his graduation but planned to return in two years to pursue his teaching career. He was a much quieter student than Graeme, but was still very confident and articulate when he spoke.

The discussion which follows looks to outline the methods of data collection and procedures used for both the QN and QL phases of this MM study.

3.9 Methods of Data Collection and Procedures

In this MM research, two forms of data gathering were implemented. In the first QN phase of the research a survey questionnaire was employed and administered to 28 of the 32 graduates of the 2009 BEd (PE) programme. In the second, QL case study phase of the study five purposively selected students or ‘cases’ who had participated in phase one of the study, were interviewed. The following will outline these two methods.

3.9.1 Cross-Sectional Survey

Researchers have increasingly used web-based surveys to collect data (Creswell, 2008) and after consulting the literature (e.g. Gay, Mills & Airasian, 2009; Mertens, 2010) it was decided to employ a web-based survey tool called SurveyMonkey.com.

Surveys are a very common form of research design and a very popular form of data collection in educational settings (Burns, 2000; Creswell, 2008). Surveys rely on “individuals’ *self-reports* of knowledge, attitudes, or behaviours” (Mertens, 2010, p. 173). A cross-sectional survey “produces a snapshot of a population at a particular point in time” (Cohen et al., 2007, p. 213). For the purposes of this research, a simple, descriptive cross-sectional survey (Burns, 2000) that enabled the researcher to gain “one shot... for the purpose of describing the characteristics of a sample at one point in time” (Mertens, 2010, p. 177) was used.

The questionnaires “reliability, validity and practicality” was enhanced through piloting (Cohen et al., 2007, p. 341). This process involved five voluntary students from the year three cohort completing the questionnaire and making comments regarding the survey’s clarity and ambiguity, readability, obvious omissions, the time taken to complete, motivation to complete, question types etc. (Cohen et al., 2007). Minor adjustments with wording and jargon were made as a result of this feedback. Ultimately, the result was a self-developed, piloted and refined questionnaire requiring participants to answer demographic information and also questions that explored their beliefs around their curriculum knowledge (CK) and pedagogical content knowledge (PCK).

Apart from requesting demographic information, the survey questions were directly linked to statements and concepts derived from the NZC. Essentially, simple multiple choice and open ended questions were used to explore the generic concepts contained in the NZC, as they relate to all seven learning areas. Importantly, the questions also explored and

focused on the students' beliefs around the philosophy underpinning the HPE learning area. See Appendix D for the survey questions.

Information about the study was given to the students two weeks prior to completion of the survey, where consent to participate in the project was obtained from the 28 participants. Once the initial survey questionnaire was piloted (Cohen et al., 2007) and refined, it was administered via an electronic link within one of the online programme course sites. The survey was completed by all participants on the same day and at the same time in one of the College of Education computer suites. Each participant completed the survey at an individual computer. Participants were instructed to complete the survey under 'test' conditions and, therefore, were unable to communicate with each other. The survey was administered by a programme administrator who had very little knowledge of the students and who was not an academic staff member.

The collection of the data occurred instantaneously when the students 'submitted' their survey online. The SurveyMonkey site stored the data online, in a safe and secure way. Access to the data was available to the researcher alone, via password access. The researcher found this form of web-based survey significantly reduced issues normally associated with 'hardcopy' questionnaires. As a result, issues of accessibility, cost, data storage and analysis were significantly reduced (Drew et al., 2008).

3.9.2 Semi-Structured Interviews

A QL research approach using semi-structured interviews with five case study informants was used in this phase of the research. This research method was selected to further develop and elaborate on the student beliefs around the underpinning philosophy of HPE in the NZC and the pedagogical strategies they believed supported its implementation.

The semi-structured interview employed in this interpretive phase of the research is one method commonly engaged in by educational researchers (Cohen et al., 2007). The main purpose of the semi-structured interview is to gain an in-depth understanding of the interviewees' perspectives, beliefs and experiences in an environment that the interviewee feels at ease to express their understanding in their own terms (Gay, Mills & Airasian, 2009).

Burns (2000) outlines several advantages of semi-structured interviews over more structured forms. Firstly, the informant's perspective is provided rather than that of the researcher. Secondly, the informant can use language natural to them, rather than trying to fit into the concepts of the study. Thirdly, the informant is of equal status in the dialogue. These factors enable the semi-structured interview process flexibility and allow the researcher to modify their line of inquiry and follow up responses that are of interest, enabling 'richer' data gathering. However, as Gay, Mills & Airasian (2009) point out, this flexibility may

create its own concerns as unskilled interviewers may produce incomparability between interviews making the data more difficult to analyse. Another major disadvantage aligned with semi-structured interviews is the cost in terms of time, effort and skills and that semi-structured interviewing are very challenging (Gay, Mills & Airasian, 2009). Indeed, the researcher found that transcribing each of the participant's interview texts and the subsequent analysis took many hours, which proved to very frustrating.

For the purposes of the case study, a semi-structured interview schedule was developed and piloted (Gay, Mills & Airasian, 2009) with three students from a different year group. Feedback from these participants and reflection from the researcher resulted in some minor adjustments to wording and the combining of some questions to reduce repetitiveness. A guiding interview schedule of eight questions resulted and was administered individually to each participant (see Table 3-1). This enabled the researcher to ask each of the participants "the same basic questions in the same basic order" (Cohen et al., 2007, p. 353), but importantly allow flexibility as the conversation evolved.

The interviews were conducted with the five participants in a small lecture classroom. Participants were given choice of interview location, but in all cases the participants were happy for the interviewer to arrange and organise the venue. The interviews were conducted individually in an unused, small lecture classroom, in isolation from other students or distractions. The semi-structured interviews all followed the conventional sequence, beginning with a personal introduction, then a statement assuring the confidentiality of the interview, and double-checking permission was gained to have the interview audio taped. Each interview was recorded digitally for accuracy, and lasted between 45 minutes and an hour, enabling the researcher to replay and improve the quality of the transcripts (Silverman, 2006).

The interview transcripts were then transcribed verbatim, allowing the text to be viewed in sequences and context (Silverman, 2006). Follow-up checks were conducted where participants were sent electronic versions of the transcripts and asked to validate the accuracy. All participants were comfortable that the original transcripts were used for the analysis phase of the study. However, during analysis, the interviewer contacted two participants via email for clarification on certain parts of their original transcripts. Participant email responses to these questions were then used to adjust transcripts to reflect this new information. Additionally, data were collected from the open-ended question responses gathered during the preceding QN phase of the study. Relevant information for each of the interview participants was then included in the thematic analysis of the QL phase of the study.

Field notes were also recorded during the interviews where the researcher noted the disposition, expression and emotions of the participants when answering questions. This information is utilised in the results reporting phase of the study and provides the ‘thick’ description necessary in QL case study research.

Table 3-1: Semi-structured interview question schedule

-
1. What do you believe H&PE within the NZC is all about? What is its philosophy?
 2. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about the philosophy of H&PE within the NZ curriculum?
 3. How do you believe critical theory embeds itself in H&PE in the NZC?
 4. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of critical theory as it is intended within H&PE in the NZC?
 5. How do you believe humanistic theory embeds itself in H&PE in the NZC?
 6. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of humanistic theory as it is intended within H&PE in the NZC?
 7. What do you believe are the pedagogical (teaching) approaches that best suit and are consistent with implementing H&PE in the NZC?
 8. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about these pedagogical (teaching) approaches?
-

3.10 Data Analysis

Consistent with Johnson and Christensen (2012), the initial QN phase of the study looked to gather and analyse empirical data that focused on describing and summarising a phenomenon. Once data were collated and analysed, the researcher looked to organise and convey the essential characteristics by arranging it in a more interpretable form (Creswell, 2008). In this research the QN data gathered from the survey questionnaire was collated and analysed utilising the SurveyMonkey.com software analysis functions. The SurveyMonkey.com software analysis involved simple collation and calculation of frequencies, means and standard deviations for each of the survey questions.

Once the participant responses were collated, the analysis required the researcher to compare the participants' collated responses to appropriate areas of the NZC for consistency. As Johnson and Christensen (2012) suggest, the information is then reported descriptively using frequency response rates, tables and graphical representations in the next chapter—Quantitative Results.

Part A of the questionnaire gathered demographic information and was quickly and effectively electronically collated in to categories relating to age, gender, ethnicity and highest qualification upon entry into the programme. Part B and C relating to the students' beliefs about HPE and the NZC were also collated and categorised electronically using the SurveyMonkey.com software. Frequency response rates were collated and shown for each option of each of the multiple choice questions. The open-ended question responses were collated for each individual response for each question. These responses were then compared, by the researcher, for consistency with the NZC documentation and marked as correct or incorrect. This analysis provided an overall conception of the research area and highlighted some areas of interest requiring further examination. Importantly, the response rate frequencies then became the focus of attention for the ensuing QL phase.

In the QL phase of the study, the data generated from the semi-structured interviews were transcribed and analysed thematically for re-occurring themes (Mutch, 2005). The answers to each question from all five participants were grouped, using constant comparison and inductive analysis (Denzin & Lincoln, 2005; Johnson & Christensen, 2012) as a means of identifying emerging themes. Firstly, to gain individual participants viewpoints the interview transcripts were coded separately into common subthemes and ultimately into final themes related to the research questions (Mutch, 2005). Following this process, and consistent with multiple case study approaches, the interview data were then similarly analysed across 'cases' (Yin, 2009).

The researcher adopted Rossman and Rallis' (1998) coding system where texts from transcripts were categorised according to the frequency of reoccurring words or phrases. This enabled a systematic analysis and reduction of the data to a number of smaller identifiable categories (Rossman & Rallis, 1998). Category titles such as 'movement as a context' and 'variety of teaching styles' and 'holistic' began to emerge. Further analysis of the data in relation to the research questions, determined that a final theme was only considered if all five participants articulated the commonly coded subtheme(s).

This resulted in the following three themes, which are presented in more detail in Chapter five – Qualitative Findings

1. The multiple aims of HPE in the NZC
2. HPE as an area of paradigmatic uncertainty
3. The teaching continuum and moving beyond direct instruction.

In addition, and to add to the reliability of the process, the researcher also used the ‘word frequency’ and ‘text search’ functions of the QSR NVivo8 QL analysis software to identify ‘missed’ or ‘newly emerging’ themes by grouping common phrases and words. This process was completed for individual cases and repeated across all five transcripts and additionally the data gathered from the five participants’ open-ended survey question responses was also included. However, this process did not highlight any new or emerging themes and, despite being hugely time consuming, it did affirm the robustness to the manual coding process.

The research outcomes emerging from the survey questionnaire (QN) conducted with 28 participants of the graduating BEd (PE) programme and the semi-structured interviews (QL) of the five purposively selected informants are reported in the next chapter. The survey results are presented using descriptive statistics in the form of means, standard deviations and frequencies and supported visually with a graph and tables. The semi-structured interview results are reported in a descriptive narrative form and using the participants’ quotations provides a rich and accurate portrayal of the five participants’ beliefs.

4. Quantitative Results

This chapter outlines the QN results gathered in this MM research. In accordance with the nature of a MM sequential explanatory design, the data will be presented in the order that it was gathered. Firstly, in this section, the QN results will be presented. This is followed by the QL findings, which will provide a rich and more detailed description of the areas of interest identified in the QN phase of this research.

Part A of the survey questionnaire consisted of questions related to age, gender and ethnicity as well as highest qualification held when entering the programme. Part B sought the participants' beliefs relating to the overarching vision, key principles, values, key competencies and effective pedagogy as articulated in the NZC. Part C investigated the participants' beliefs around the HPE learning area and specifically on the underpinning philosophy, the underlying concepts and the four strands of learning.

In Part B and C the participants were required to answer multiple choice and open-ended questions that they believed accurately identified, defined or explained some of the key philosophical and pedagogical terms or concepts in the curriculum. The participants' responses were then compared against the curriculum document and marked for consistency by the researcher. These results are detailed below and are reported using descriptive statistics whereby the results are explained, quantified and presented using numeric descriptions and graphs. They are outlined under the following sections:

- 4.1 Demographic Information
- 4.2 The Students' Beliefs Relating to HPE in the NZC
- 4.4 Summary of the Quantitative Results

4.1 Demographic Information

In the QN phase of the study, eligibility to participate was offered on a voluntary basis to all members of the BEd (PE), 2009 graduating year group. Of the 32 students conferring their degrees, 28 chose to participate in the study which constituted an 87.5% response rate. As the target population, defined by the characteristic of being a graduating student of the BEd (PE) (2006-2009) programme, was a maximum of 32 students, there was confidence that the 28 students that elected to participate in the study were representative of the target population (Cohen, Manion & Morrison, 2007; Creswell, 2008). Table 4-1 summarises the demographic information in relation to the students participating in the research study.

Table 4-1: Demographic data: age, gender, ethnicity and qualification on entry

		<i>%</i>	<i>Frequency</i> (<i>N=28</i>)
Gender	Male	35.7	10
	Female	64.3	18
Age	21 years	21.4	6
	22 years	28.6	8
	23 years	32.1	9
	≥24 years	17.9	5
	Mean Age = 23.1 years SD = 2.5		
Ethnicity	New Zealand Māori	7.2	2
	New Zealand European	89.2	25
	Samoan	3.6	1
Qualification on entry	Diploma or Certificate	17.9	5
	NCEA (Level 3)	75.0	21
	NCEA (Level 2)	7.1	2

4.2 The Students' Beliefs Relating to HPE in the NZC

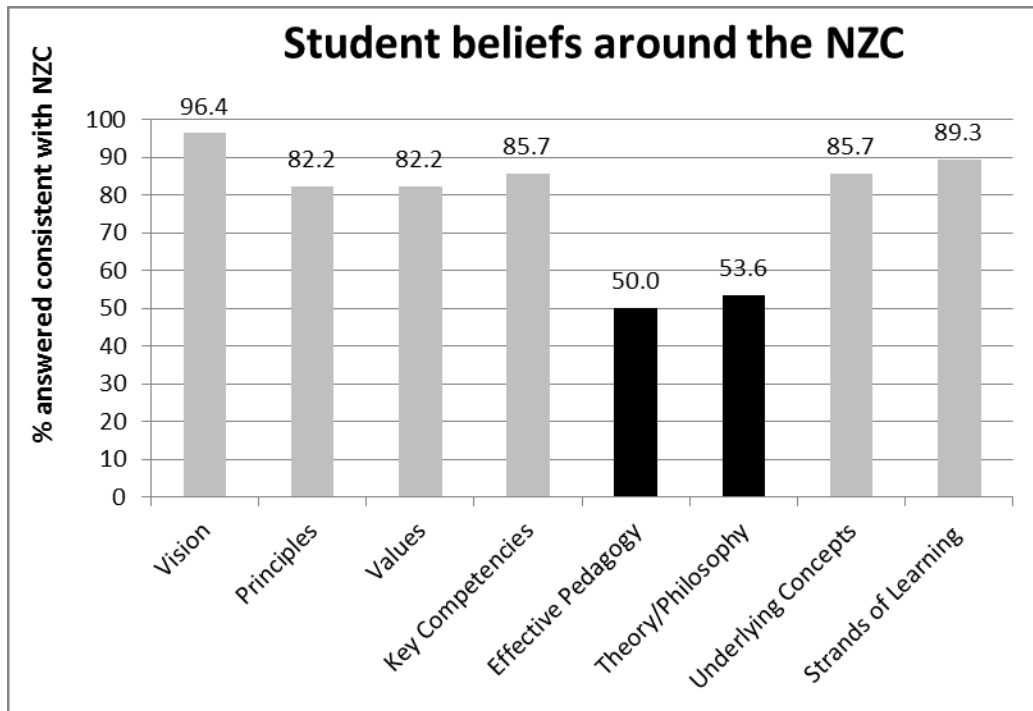
The results of Part B (questions 1-5) of the questionnaire indicated that the participants' beliefs relating to the conceptual framework and overall philosophy of the curriculum, including HPE, were most consistent with the documents intentions for the questions relating to the *vision* (96%), the *principle* statement (82%) the *values* (82%) and the *key competencies* (86%), Student beliefs appeared to be less consistent with considerations around *effective pedagogy* (50%). Given the intention to use the quantitative data to highlight any possible areas for further investigation, the researcher noted the latter concept. The participant responses to these questions are shown in Table 4-2 and are summarised in Figure 4-1.

Table 4-2: Participants' responses to the five NZC survey questions

Questions and Answer Options	Response %	Count (n =28)
Q 1. Which of the following do you believe best reflects the key themes stated in the New Zealand Curriculum VISION statement?		
a. confident, connected, coherent, inclusive	3.6	1
b. connected, actively involved, lifelong learners, culturally diverse	57.1	16
c. confident, connected, actively involved, lifelong learners	39.3	11
d. connected, participatory, aware, abundant	0.0	0
e. none of the above	0.0	0
Q 2. Which of the following best reflects some of the key PRINCIPLES stated in the New Zealand Curriculum?		
a. high expectations, learning to learn, inclusion	82.2	23
b. confidence, activity, connectedness	7.1	2
c. values, coherence, reliability, sincerity	10.7	3
d. facilitating, inquiring, identifying	0.0	0
e. all of the above	0.0	0
Q 3. In the New Zealand Curriculum what do you believe that students are encouraged to VALUE....?		
a. excellence, respect	10.7	3
b. inquiry, curiosity, integrity	7.1	2
c. community and participation, diversity	0.0	0
d. equity, innovation	0.0	0
e. all of the above	82.2	23
Q 4. Which of the following is NOT one of the KEY COMPETENCIES as stated in the New Zealand Curriculum?		
a. participating and contributing	3.6	1
b. striving for excellence	85.7	24
c. managing self	3.6	1
d. relating to others	0.0	0
e. using language, symbols and texts	7.2	2
Q 5. Which of the following statements do you believe best supports the concept of Constructivist Learning Theory and therefore reflects 'effective pedagogy' as suggested in the NZC?		
a. inquire into the teaching learning relationship	0.0	0
b. encourage reflective thought and action	25.0	7
c. facilitate shared learning & make connections to prior learning & experience	50.0	14
d. facilitate learning through positive reinforcement	17.9	5
e. encourage learning through behaviour modification and punishment	7.1	2

Note: The responses that are most consistent with those stated in the NZC are shown in **bold**.

Figure 4-1: Participants response rates consistent with NZC



A point worthy of discussion related to question one which explored the key themes associated with the ‘Vision’ of the NZC (MOE, 2007, p. 8). Only 11 participants (39%) believed, and were consistent with, the curriculum vision that reflected a desire for young people to be confident, connected, actively involved and lifelong learners. However, it is important to note that 16 of the participants (57%) believed that the curriculum vision is for young people to be confident, connected, actively involved and *culturally diverse*. The term ‘cultural diversity’ is not articulated in the curriculum vision statements but it is considered as a key principle and foundational for curriculum decision making. One could also argue that much of the detail in the vision statement actually alludes to concepts of cultural diversity and, therefore, this could be justified as a reasonable response. For example, terms such as ‘members of communities’ and ‘contributors to the wellbeing of New Zealand—social, cultural, economic and environmental’ and ‘critical thinkers’ (MOE, 2007, p. 8) all encapsulate the essence of cultural diversity. The researcher recognises a plausible argument for ambiguity and considered that both answers may be interpreted as reflecting the curriculum vision. Therefore it was concluded that 27 participants’ (96%) beliefs were consistent with the vision statement as reflected in the NZC and, therefore, this concept was not considered for the QL phase of the inquiry.

The results of Part C (Questions 6-8) of the questionnaire indicated that the participants' beliefs demonstrated the greatest consistency with the curriculum intentions for the question relating to the *underlying concepts* (86%) and the *four strands of learning* (89%). Conversely, and again of interest to the researcher, was the relative inability of the participants to demonstrate beliefs about the underpinning *philosophy of the HPE learning area* (54%) that were consistent with the information documented in the curriculum and the supporting literature. The participant responses to these questions are shown in Table 4-3 and are also summarised in figure 4-1.

Table 4-3: Participants' responses to the three HPE learning area survey questions

Questions and Answer Options	Response %	Count (n =28)
Q6. Which of the following terms do you believe best reflect the underpinning Philosophy of HPE within the New Zealand Curriculum?		
a. Humanistic, Critical	53.6	15
b. Critical, Constructivist	7.1	2
c. Behaviourist, Constructivist	21.4	6
d. Marxist, Neoliberal	3.6	1
e. all of the above	14.3	4
Q 7. Which of the following best represents the 4 UNDERLYING CONCEPTS as reflected in the Health and PE learning area?		
a. relating to others, attitudes and values, constructivism, participation	0.0	0
b. hauora, managing self, attitudes and values, socio-ecological perspective	10.7	3
c. hauora, attitudes & values, socio-ecological perspective, health promotion	85.7	24
d. connected, actively involved, lifelong learners, culturally diverse	0.0	0
e. none of the above	3.6	1
Q 8. Please list as many of the 4 STRANDS OF LEARNING as you can from the Health and PE learning area?		
A-personal growth and development, B-Movement concepts and motor skills, C-relationships with others, D-Healthy communities and environments	89.3	25
3 of the four above strands identified	10.7	3

Note: The responses that are most consistent with those stated in the NZC are shown in bold.

Of particular interest to the researcher were the participants' beliefs around the underpinning philosophy of the HPE learning area (54%), and effective pedagogy (50%) that were inconsistent, in the researchers view, with the curriculum conceptualization and the supporting literature.

4.3 The Demographics of the Case Study Participants

In the QL phase of the study, five 'typical cases' were purposively selected. A typical case consisted of a student aged between 21 and 23 years, of New Zealand European descent, and entered the programme with the NCEA Level 3 qualification. The researcher considered that the makeup of the five participants should consider an ethnic representation and represent the gender balance of the overall cohort. This resulted in the selection of three female and two male students with an average age 22.6 years (SD=0.6). Four of the students were NZ European and the other was of NZ Māori descent. All the participants had gained university entrance by achieving the NCEA Level 3 qualification before entry into the four-year BED (PE) programme. Three of the students identified for the interviews held beliefs that were inconsistent with the curriculum objectives for Question 5 and 6. The other two demonstrated consistency in these areas. This information is summarised in Table 4-4.

Table 4-4: Demographic information for case study interviews

Participant	Gender	Ethnicity	Age (years)	Qual. on Entry
Jenny	Female	NZ Euro	23	NCEA L3
Brigid	Female	NZ Euro	23	NCEA L3
Emily	Female	NZ Euro	22	NCEA L3
Graeme	Male	NZ/ Māori	23	NCEA L3
Andrew	Male	NZ Euro	22	NCEA L3
Mean age =			22.6	
SD =			0.6	

4.4 Summary of the Quantitative Results

The results of this phase of the study suggested that a higher number of the participants (>80%) held beliefs around the vision, principles, values, key competencies, underlying concepts and the four strands of learning that were consistent with those documented in the NZC and HPE learning area. Notably, there were two concepts within the curriculum where the participants' beliefs were less consistent with those articulated in the document and supported by the academic literature. These were the concepts of effective pedagogy and the underpinning philosophy of the HPE curriculum learning area. Having identified the areas of interest, these latter two concepts became the focus of the second QL phase of the study. As a consequence, three female and two male students aged between 22 and 23 years (Mean = 22.6; SD = 0.6) who were representative of a 'typical' student graduating from the programme were purposively selected for the qualitative interview phase of the research. An interview schedule was created, trialled, refined and then administered to the five identified students. The resulting data generated from the subsequent thematic analysis is outlined in the following chapter—Qualitative Findings.

5. Qualitative Findings

The interview questions were formulated in response to the QN data analysis and were clearly linked to the research questions of this study. Therefore, consistent with the nature of this MM sequential explanatory design and the emphasis used in this research, the second QL phase of the study aimed to build a significantly more detailed picture of the students' beliefs surrounding the two identified areas. In particular, areas of interest to the researcher were: the students' responses to the underpinning philosophy of HPE within the NZC and the question relating to effective pedagogy. At the conclusion of the interviews the participants' responses, along with their individual open-ended responses from the survey questionnaire, were grouped to correspond to the research questions and major themes were identified. The themes are then reported using quotations from all participants. For a summary of the key themes and the relationship of these to the research question, interview questions and the supporting evidence, refer to Table 5-1.

5.1 Theme 1: The Multiple Aims of Health and Physical Education in the NZC.

Interview Question 1 and 2 examined the participants' beliefs around the philosophy underpinning HPE in the NZC. Field notes taken during the interview reflected that most of the participants' responses were hesitant and demonstrated a great deal of anxiety when confronted with Question 1. Andrew's opening statement demonstrates a typical student response to the question being asked:

I don't know really... (pause)... I guess its uumm looking at an all-round development of the person... (pause)... uumm, I'm not too sure really (laughs).

Similarly, Jenny seemed confused by the question and replied:

Uumm... phew (pause)... probably that... yeah (laughs)... (long pause).

After these typical responses, and some pauses to allow the participants to gather their thoughts, they proposed a variety of viewpoints. However, although these beliefs were expressed in different ways there were three key discourses that were notably promoted, these were, (a) *movement as a context*—to provide and promote learning opportunities, (b) *the socio-ecological perspective*—where learning involved considerations of self, others and society and (c) the concept of *holistic development*.

Table 5-1: Relationship between the research questions, the interview questions, the key themes identified and the supporting evidence.

Research Question 1		
<i>What are the graduating BEd (PE) students' beliefs about the philosophy underpinning HPE within the NZC (MOE, 2007)?</i>		
Interview questions	Key themes	Support for theme and subthemes
1. What do you believe HPE within the NZC is all about? What is its philosophy?	1. The multiple aims of HPE in the NZC	5 of 5 participants believed that the purpose and philosophy of physical education was wide ranging.
2. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about the philosophy of HPE within the NZ curriculum?		Subthemes revealed that PE was believed to involve <i>movement as the context</i> where wider holistic and societal development could be achieved through a <i>socio-ecological perspective</i> .
3. How do you believe critical theory embeds itself in HPE in the NZC?	2. HPE as an area of paradigmatic uncertainty	5 of 5 of the participants articulated beliefs that were inconsistent with the underpinning philosophy and paradigmatic conceptualization of HPE within the NZC.
4. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of critical theory as it is intended within HPE in the NZC?		
5. How do you believe humanistic theory embeds itself in HPE in the NZC?		
6. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of humanistic theory as it is intended within HPE in the NZC?		

Research Question 2

What are the graduating BEd (PE) students beliefs about the pedagogical strategies required to implement HPE within the NZC (MOE, 2007)?

- | | | |
|---|--|---|
| 7. What do you believe are the pedagogical (teaching) approaches that best suit and are consistent with implementing HPE in the NZC? | 3. The teaching continuum and moving beyond direct instruction. | 5 of 5 believed that using a variety of teaching styles and a number of teaching models was the best pedagogical approach to implement HPE. |
| 8. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about these pedagogical (teaching) approaches? | | Additionally, participants saw a need to move beyond direct instruction as a lone method but saw this as part of the continuum of teaching styles to draw from. |

5.1.1 Movement as a Context

The most notable discourse to emerge was that the participants believed that movement and activity were an important context to learn and therefore an important aspect of the HPE philosophy. Graeme's response reflects this well when he stated:

Well I'm a great believer that Physical Education is a great tool that allows us to use movement for our lessons. I think we [PE teachers] are lucky in that other classes I see as a bit more static. So in terms of PE we can use movement and get outdoors and you know we can teach those principles and values and especially the vision of the curriculum document in such a unique way that others [curriculum areas] can't. That's really highlighted in my philosophy, in that sport and movement brings so many different qualities to it. That in order to promote, you know, excellence and respect and all that and that is such a big dynamic of team sport and movement so I reckon it can be very easily used for developing things like interpersonal skills. In terms of lifelong learners you know teaching them skills through fitness, through you know skill acquisition, you know teaching them through movement, teaching them values and setting high expectations and all that. Then also by using movement, [PE] is about how it can implement interpersonal skills, you know, how it can implement relationships with society, within the school communities.

The underpinning philosophy for me is that we've got movement to use. I think these things can be more easily achieved ... very easily implemented through the uniqueness of sport and PE. [Graeme]

Similarly, all the other participants made reference to 'movement' as being a key concept associated with the HPE philosophy and constantly referred to this throughout the interviews. Jenny, for example referred to the physical context as an overarching term when she stated:

It's Physical Education, [we] learn to relate to other people, manage themselves with, like, inter-personal skills and stuff, all within the physical context, yeah I reckon movement, like sports and dance and outdoor recreation and being involved physically is really important for learning in PE. [Jenny]

Similarly, Brigid, Andrew and Emily also saw physical activity as being the context in which wider educative goals could be fostered.

I think PE is a context where all of it can be applied ... I think the key philosophy in Physical Education would be getting all students actively involved and teaching them to be lifelong learners [Brigid]

I think it [the HPE philosophy] is trying to encourage ... through movement, to get students to engage in healthy life styles. [Andrew]

[PE] ... is about being regularly active and involved and building relationships through being active or being involved with different activities and also sports, it's learning in, through and about movement. [Emily]

5.1.2 The Socio-Ecological Perspective

A second discourse to emerge suggested that all participants articulated some consideration of the socio-ecological perspective of health and wellbeing as part of their understanding of the HPE philosophy. This perspective seeks to explore, using movement as a context, the interrelationship and synergies that exists between the individual, others and society (MOE, 2007). While the term was not explicitly referred to, all the students articulated aspects of the socio-ecological perspective.

Graeme articulated a view that suggested the curriculum had ‘advanced’ physical education through a greater understanding and need to develop students’ relationship knowledge and skills within a wider societal sphere when he stated:

The new curriculum has advanced, and you kind of look at how movement can enforce or help, you know within yourself, others and then ... society and community, and the new curriculum can come in and help underpin that ... You know, how it can implement relationships within society, within the school communities, you know the wider community... [Graeme]

Similarly, Andrew made reference to wider educative goals that are traditionally and often not attributed to physical education. He suggested that the curriculum philosophy had potential to develop skills relating to the ‘wider community’ and the capacity for students to take these skills beyond the classroom or their immediate peer relationships when he stated:

It’s looking at ways they can be more active, not just ... [physically] active but in relationships and also the wider community... perhaps helping others to live healthy and active lifestyles. [Andrew]

Emily and Jenny, on the other hand, both made mention of such potential but did not elaborate further than to say:

You know how you can be involved in the communities and the environment and how that relates to self, others and society. [Emily]

I suppose that students would learn to relate to other people and work within society and this could be taught all within a physical context, so that the students are learning to manage self and relating to others and stuff like that. [Jenny]

Brigid’s comments were somewhat less encompassing but also suggested the potential of the curriculum, within physical contexts, to explore and develop relationship skills with others. She suggested that:

You don't have to have good skills, like you could be the best batsman in the world but if you can't have relationships with other people and get on with your team mates you are not going to be very successful, so teaching them explicitly around that. Teaching them about how they can use these skills in other aspects of their lives. [Brigid]

When asked to elaborate on how this could be achieved in physical education classes, the participants had difficulty stating any examples. Brigid offered the following example that best exemplifies the group's responses.

I had my Year 9 kids and they were my form class, well I had one session where they were getting to know each other so they came in for 1 session and they had to look at like their goals and they filled in this questionnaire that looked at their skills and their relationships with others and then what they can do to kind of intertwine them all, I dunno I didn't really think of how I did it.

5.1.3 Holistic Development

While the term was not explicitly stated, aspects of humanistic theory surfaced during the participants articulations. Commonly, some of the students referred to the term holistic and hauora, and while this is not an encompassing view of humanism in an educational sense, it has some relevance to HPE in the NZC. Andrew, Brigid and Emily demonstrated, to varying degrees, an understanding and confidence around this concept. Andrew demonstrated some knowledge, although not in a confident way, when he stated:

I don't know really, I guess its umm looking at an all-round development of the person uumm I'm not too sure really. I guess focus on holistic development, as opposed to a traditional more medical and physical model which is what PE was in the past. [Andrew]

At the other extreme, Brigid was more confident about the philosophy being holistic when she stated:

I think that the Holistic idea definitely comes through, it talks about overall wellbeing, and it doesn't just talk about [being] physically active and fit. You know developing other aspects of a person, things like the cognitive and

emotional and social stuff ... you know making PE a holistic learning experience. [Brigid]

Emily demonstrated a more informed understanding when she suggested that the HPE curriculum philosophy not only reflected and considered aspects of holistic human development but also articulated this in terms of hauora. Hauora is a Māori philosophy of wellbeing that includes the physical, mental and emotional, social and spiritual dimensions of health that influence and support each other (MOE, 1999).

This philosophy is promoted in the NZC as one of the four underlying concepts that underpin HPE within the NZC. She promoted that:

... the holistic ideas that are carried in Physical Education and how ... because it identifies and tries to develop all aspects of people's health and their wellbeing ... how balance is important in peoples lifestyles and I think that yeah it is quite vital and it's identified a lot in PE and health. I think this philosophy is reflected quite frequently and quite strongly in Physical Education especially through the concept of hauora and wellbeing. [Emily]

Jenny also described how, in his belief, the HPE curriculum philosophy incorporated this term.

A very strong idea that comes out in the philosophy of the curriculum is hauora. The idea that students need to develop other aspects of their lives to become a better person. It's not just about the physical games and stuff, you know not like when my dad was at school it's about learning about how to do other stuff as well. [Jenny]

However, when asked specifically about humanistic theory, at a later point in the interview process, the participants struggled to articulate a meaningful definition of this as it relates to the HPE philosophy. The interviews revealed that the participants had a very superficial understanding of this information and, at best, a superficial knowledge and understanding of the philosophy underpinning the HPE learning area. What was noticeably missing from the students' conversations was an articulation of a clear understanding of humanistic and critical theory that embeds itself in the HPE learning area. Further clarification and exploration of this is reflected under the next section 'Theme 2: HPE—An Area of Paradigmatic Uncertainty'.

5.2 Theme 2: HPE—An Area of Paradigmatic Uncertainty

Interview Questions 3 – 6 explored the concepts of critical theory and humanism in relation to HPE within the NZC. Interview Question 3 asked the participants to discuss how they believed critical theory embeds itself in HPE in the NZC. Participants were prompted to define the term and articulate how this embedded itself in the document. Interview Question 4 enabled the participants to draw on course and practicum experiences to further articulate their understanding.

All of the participants keenly responded to this question and although this was expressed in a number of ways, it resulted in one unanimous subtheme. All of the students saw ‘critical theory as challenging inequality’.

5.2.1 Critical Theory as Challenging Inequality

Jenny for example, saw critical theory as an examination of those advantaged and those who are disadvantaged.

Who’s advantaged, who’s disadvantaged and why and that kind of stuff. [Jenny]

Similar to Jenny, Graeme saw merit in describing critical theory as an examination of advantaged and disadvantaged.

I think looking at who is advantaged and who is disadvantaged. [Graeme]

He continued to develop his definition around the term ‘critical thinking’ and ‘critically analysing’ when he stated:

When I hear the word ‘critically’ I automatically think about critical thinking, critical views, you are looking at both sides. I also see like critical theory as critically analysing something, looking at both sides of the fence. And you know for people to be able to see it from both sides of the fence and not look at it from just the top layer really and go down deeper and critically look at it, the positives, negatives, advantages, disadvantages. [Graeme]

When asked to consider his teaching practicum experience to give some teaching examples and clarify these beliefs he was not very specific, but he stated:

I think it's around health and wellbeing and it was all around critical thinking, critical knowledge... you know, it allowed them [students] to look at both sides on the fence, to really go deeper ... [to] come up with debate, I allowed them to think. You don't have to agree with it ... they had to critically think themselves, with shared learning, think about it and delve deeper yeah. [Graeme]

Andrew, who believed he understood things well, contributed the idea that exploring power and hegemony may play a part in critical theory and the overall philosophy of HPE.

I think I've got a good grasp of that, like it took me some time to understand it but just this year doing socio-cultural aspects of Physical Education I think I've gained a much better understanding of that. I think it's important to incorporate that into my teaching, that is, one thing I think is important. So, just looking at things from a much wider perspective. Looking at who's advantaged, who is disadvantaged and the sort of balances of power and hegemonic relationships and all sorts of things. [Andrew]

When asked to give some examples he continued the theme of 'advantaged versus disadvantaged' and expressed the difficulty in implementing this in his teaching practicum classes.

Looking at who's advantaged and who is disadvantaged... Yeah I think it's quite hard to incorporate it sometimes you need to know your students quite well cause it's deeper like even myself I've found it hard sometimes to think of things critically ... to critically think. [Andrew]

Brigid had similar articulations but expressed this slightly differently than Graeme, Andrew and Jenny. She believed that critical theory was an objective position where students could explore a situation from 'a totally different perspective'.

...being able to look at both sides of the argument. So you can look at a situation, and you might look at the good things but then you can look at it from a totally different perspective. (Brigid)

She gave an example of this in a physical education context as evidenced in the following statement:

So, like critical theory, on TP [Teaching Practicum] we looked at the rules of sport and applied the ethics associated with that ... (pause) ... so being able to look at both sides of it and not just one side and making sure that no one is unfairly advantaged. [Brigid]

And then further endorsed critical theory from a personal perspective when she said:

I like how critical theory challenges the norm, challenges what I assume is right. [Brigid]

Consistent with Graeme and Andrew's responses, Emily also encompassed the term 'critical thinking' into her definitions of critical theory.

I guess it's being critical of something, thinking critically, and testing what they see as needing to be tested. [Emily]

When asked to clarify 'testing what they see as needing to be tested' Emily further described critical theory as challenging perceived normality or taken for granted assumptions.

I would say that critical theory is where somebody is challenging what is perceived as normal or things we assume are right. [Emily]

After the interviewer prompted her to consider and articulate this from her teaching practice experiences, Emily continued to evolve her definition, albeit briefly, by discussing this in a physical education context.

In physical education and health, especially in a class where kids are willing and they know they are allowed to ask questions ... you know, to challenge what normally goes on. [Emily]

However, participants' beliefs and the concepts they expressed here suggest that only one student, Andrew, considered this in the way it is intended in the HPE context. Themes such as emancipation and empowerment were missing, and also beliefs that described and elaborated on the concepts of power and hegemony as they are historically located in the HPE underpinning philosophy.

5.2.2 Humanism or Confusionism?

Interview Question 5 and 6 explored the concept of humanism, the second paradigmatic concept underpinning HPE in the NZC and embedded in its philosophy. The researcher's field notes reflected that these articulations were often fragmented and the participants would often stop, mid-sentence, and begin on a different line of discussion. Four of the five students, despite some emphasis on Question 6 and prompting from the interviewer to have the participants draw on their practicum experiences, struggled to offer any substantial information around humanism and its relationship to physical education.

Jenny, who appeared the least confident of the participants, offered the following:

Uumm humanism is like humans so I guess like people and relating to people and uumm (pause) humanistic values I don't know (sigh, pause) ... I just don't know (sigh). [Jenny]

Brigid, who with previous questions had been very free to converse and 'think out loud' took quite a different approach to this question and appeared to be less keen and sure of herself. Her answer was quite short and brief. When the researcher asked "How would you define humanism in an educational context?" she replied:

Ohhh Ummmm (pause)

When prompted by the researcher with "Is it a context you have explored in the sociology papers, have you heard the term before?" she replied:

No ummm but probably... (pause) ...When I think of it just logically I'd say Humanism would be, uumm relating well to others totally off topic uumm no I'm stuck ... (pause). [Brigid]

Similarly, Emily also struggled to articulate any meaningful definition and also appeared to be unsure of her response. When questioned she stated:

Oh ah testing my brain. Uumm humanism uumm ... (pause) ... what to do with people and uumm ... (pause) ... how people perceive ideas and how they uumm ... (pause) ... I guess how they uumm interact and display them, I guess? [Emily]

When prompted to reflect on her teaching practice experiences to enhance this definition Emily responded with the following but continued to be unconfident in her reply:

Argh how would I see that in PE? uumm I think the interaction thing is a big thing in Physical Education, not just between individual teacher and student, but between student to student, groups of students with teacher in the classroom, and with other staff, other people involved uumm and I guess it's uumm ahhh I suppose I think Physical Education has placed quite a lot on it, you know they, it's all about working with people, interacting with people or being a person and being involved and interacting ... (pause) ...I guess? [Emily]

Graeme also found this question particularly challenging and was obviously agitated by the question. He articulated the following:

I'm just trying to uh, I don't think I've got my head around it at the moment, humanism [long pause] a humanistic approach [pause, sigh]... I don't know. (Graeme)

After a brief pause and it appeared still in a state of confusion, he stated the following but concluded with a comment suggesting that this was an area he may have to revisit:

...[pause] I think I keep seeing humanism as this, it is probably totally wrong but in terms of understanding others the fact that we are all humans and all got human [long pause] ... if you were asking before section [teaching practicum] it would have been so fresh in my mind. [pause] ... uhhh you know social construction and humanism, humanistic social approaches and that and uumm definitely covered it and I remember too going out on school section and it just sort of dropped out of my brain a bit and I can't really tell you why. For some reason I went out on section and it just sort of dropped out, but I don't know, I just wanted to get out there and get on with it but uumm, it's one thing this interview has taught me I have to go and relook at that. [Graeme]

Of the five participating students, Andrew was more considered and confident in his articulated definition. Andrew offered a more comprehensive description when he suggested the following:

OK ummm well I know that it is a Holistic document; it is a humanistic document that is looking to promote the diversity in NZ. PE is quite a holistic subject where you look at a wide range of things. The strands including personal development, movement skills and wider community relationships, it hangs itself quite nicely to that as well. I guess ummm focus on holistic development as opposed to the traditional model which develops only sports skills as PE was in the past. It's looking at the whole human being so it's promotion of the person. So the document is a humanistic document so it's all about the person and trying to develop the person as a whole. (Andrew)

He looked puzzled when asked how this may be reflected in a physical education classroom but offered the following, albeit brief statement that also included a comment on the difficulty the question presented to him:

I guess the focus is on the students and how they can better themselves, how they can learn in order to enhance their wellbeing and their learning. Wow, that was quite a hard question. [Andrew]

Unlike the descriptions and definitions given above for critical theory, where the students were confident in expressing their views, albeit with limited insight, the students appeared to struggle with the concept of humanism and had much difficulty in defining it.

5.3 Theme 3: The Teaching Continuum and Moving Beyond Direct Instruction

Interview Questions 7 and 8 explored the pedagogical strategies that the participant students believed were best suited to teaching physical education in accordance with the HPE within the NZC. The final analysis resulted in the researcher interpreting this as 'Theme 3: The Teaching Continuum and Moving Beyond Direct Instruction'.

The common belief held by the participant students reflected that a variety of pedagogical strategies may be required to implement HPE in the NZC. Data analysis also suggested that the participants were describing a continuum of teaching styles, consisting of a teacher-centred approach at one end and a student-centred approach at the other. What also became very apparent, was that in describing this continuum the participants saw merit in

teachers 'moving' from the direct teacher-centred approaches to more facilitative student-centred approaches.

Jenny, in confirming her belief that a variety of learning contexts were required, expressed that this concurrently required a variety of teaching styles to do so. She stated that:

Just through a range of activities, so lots of variety and different teaching styles and all different kinds of things so that students would have lots of contexts to learn. [Jenny]

Jenny further believed that the pedagogical approach she implemented would depend significantly on the characteristics of the students, in this case the 'learning capacity' of the students. She saw merit in students working collectively and collaboratively and began to, albeit superficially, describe a continuum and a move away from direct to more indirect instructional methods and models. She stated that:

It just depends on the class, like, if the class is quite capable of working by themselves then for some reason I don't need to directly teach them anything and they can do it themselves then. I can put them into group work and they can go and, you know, TGfU, inquiry based sort of stuff otherwise if I need to tell them something I'll tell them (pause) it just all depends. [Jenny]

When asked to draw on her course or practicum experiences to elaborate further she clarified her response by adding that:

Oh yeah, I used many different contexts and different teaching styles. I remember using a dance context where I had them working in groups, working together. I did a stomp class and split the class into groups and wanted to see if it would work. I gave them an outline and they investigated group dynamics and all that kind of stuff, so I don't know, sometimes it doesn't always work but I think it's something, as a teacher, I believe you need to learn to do ... (pause). [Jenny]

After a brief pause Jenny then added the following:

...through group work, or like stuff outside the classroom, or just whatever fits the class, ummm teaching might be teacher directed if needed or student led if needed. [Jenny]

Emily similarly reflected these beliefs and added that differences in student learning styles may be justification for ‘using many different ways of teaching’.

I think by ensuring that like all styles of learning are covered in your session ... (pause) ... using many different ways of teaching. I guess doing things in groups or doing tasks individually, in pairs, working as a whole class, having discussions or uumm presenting things, peer share things like that, for variety. [Emily]

When asked to elaborate on these ‘different ways of teaching’ she also began to outline, as the researcher has interpreted it, a teaching styles continuum.

I think sometimes you need to be a quite direct, quite direct in your style of teaching and sometimes that doesn’t always work best for the class you are with or students you are with. I think if there were specific ideas that were really important and you needed to get them across clearly and precisely I think it [the direct style] would be really useful, uumm or if you were demonstrating things and you needed to ensure that students had the correct technique for example (pause) But I think knowing where your students are at at the beginning and where you want them to be at the end I think that is quite vital. That way you can guide them, not necessarily direct them but guide them to the key points that you want them to learn and then they can achieve ultimately. [Emily]

When asked to expand on this from her own experiences, and after careful deliberation, she began to describe varieties of indirect pedagogical approaches and again justify her belief that teachers could draw from a number of different pedagogical approaches and instructional models. As is evidenced in the following quote, such decisions depended entirely on the needs and characteristics of the learners, or as she states, the ‘type of kids’ that are being taught.

(pause) uumm specific examples, I don’t know, I guess doing things in groups or doing tasks individually, doing in pairs, cooperatively, working as a whole class, having discussions or play-teach-play stuff works. I think I mean depending on what type of kids you are teaching you could probably use all different styles... (pause) ... but like I said it depends on the situation. [Emily]

Having presented this information, Emily, with confidence, then began to expand:

Usually I try and steer away from drills, uumm I find them boring. If it was something I wanted them to learn it would possibly be some sort of activity or game. Yeah, I think so long as the information is getting put across the teacher becomes more facilitative. You're not quite so important in their learning at that stage. I think it's important for the students to actually have the opportunity to learn themselves ... so it's more independent because it's their learning and their understanding. If it's not their understanding they're not going to learn.
[Emily]

The interviewer then probed a little further asking Emily to explain when she might use these 'different ways of teaching'. Emily appeared to gain more confidence as she spoke and continued to espouse her knowledge of learning theory as it related to the teaching styles she was portraying.

I suppose you know when you want attention and you feel you need to have control; I am a lot more direct and behaviourist. You reward the people that are giving you the attention you want. You then reinforce to the people that are not giving you what you want, what you want from them. But, I think that students get more of an understanding of something as a result of learning through constructivism, like TGfU and experiential learning, cooperative learning and group work, inquiry stuff, you know, so they can link old information to new and build on it. I think there is more room for experimenting and independent learning I guess. Like they have more opportunity to learn why something happens rather than being told why and expecting them to just accept it yeah I guess uumm. [Emily]

Similarly, Brigid believed that a range of pedagogical approaches may be required depending on the specific content being taught.

Yeah, you know I suppose it depends on what I am teaching, I would use constructivism and TGfU for some things, like cooperating with others and behaviourist styles for teaching sports skills. All different ways of teaching, different styles, I suppose it would depend on what I am teaching. [Brigid]

When asked to explain this further and give some examples of how this was achieved on her teaching practicum she explained the following:

So we were doing Korfbal, and they [the students] knew nothing about Korfbal. Most students you would get in your class had some experience in playing a team sport, you know whether it be netball, rugby, basketball, touch 7's, you know water polo they would have had some experience so you can scaffold and build on that knowledge with TGfU. You can relate it to other things that they already know and so like how to work together as a team ... how to make and build relationships to work as a team. You are trying to make them understand what things they can build on to enhance their learning. [Brigid]

At this point Brigid smiled and leaned back in her chair confidently stating:

You know we have to be creative enough to take that AO [a HPE Achievement Objective] and the key themes and the level associated with that and try and interlink all of what they previously know and then scaffold their knowledge, build on their knowledge so that they can see how they can effectively develop to the best of their ability. [Brigid]

Graeme began his description by also suggesting a move away from the traditional direct approaches that subscribe to a behaviourist view of learning and promoting more student-centred approaches.

A lot of different ways of teaching are necessary, I think. Uummm I am really going away from a more direct behaviourist approach, I'm a big fan of facilitative learning. The likes of, you know learning that allows students to be a bit more involved. You're looking at discovery learning, enquiry based learning and other models that promote all of that. I'm a big believer that students learn best through experience, you know watching others, shared learning rather than if the teacher is more direct. [Graeme]

Although he was 'a big believer' in moving beyond direct instruction and appeared to have preference in doing so, he also believed this had periodic relevance. When drawing on his teaching practicum experiences he stated that:

At times, I also remember using the direct teaching model. I've definitely got the skill, quite good at using rewards, you know, like if you do this well we'll go out play games. Pretty much if do something for me, I'll do something for you. I also refer to it as being far more behaviourist, in that I control the learning, like [the students] turn up for class and you tell them what they are going to be doing, how they are going to be doing it. I use this mostly like when they are a difficult class to control. [Graeme]

Graeme then proceeded, with great enthusiasm, to espouse his knowledge of an array of instructional models to support constructivist, student centred approaches to learning and teaching. His teaching practice experiences gave him confidence to state that:

I've got them all in my bag, discovery learning, enquiry based learning, cooperative learning, Johnston and Johnston's model of expert groups where students go off in groups and come back and share with others. In my teaching practice I used Discovery [learning models] and Johnston and Johnston's expert groups and they were the ones I really pushed, I thought they worked really well. [Graeme]

Continuing confidently, Graeme promoted what he believed were the benefits of constructivist learning theory:

Constructivist teaching, you know its thinking about giving the teacher and the students more opportunity to construct their own learning and construct their own ways, own meanings, because everyone is different. Yeah, yeah, I think the most effective tool I used was constructivism, you know relating to prior experiences which can allow students freedom to put a bit more onus on themselves and their own experiences. I think when a teacher becomes more facilitative and guides them through and allows them to, you know, discover or work things out themselves, they learn better. [Graeme]

He then continued on to contrast this against behaviourist, direct instructional approaches:

Really, going away from a more behaviourist approach, a more direct approach, that doesn't allow for that sort of thing to happen. [Graeme]

This prompted Graeme to refer back to some of his own learning experiences as a high school student.

You know for students it [the teacher-centred approach] must get boring because I know it got boring for me when I was at school. It just keep referring back to repetition, you know, are you going to do this 10 times - learning skills. All I see on my teaching placements is this approach, still seems to dominate PE in schools. You've got to look at what they are really getting out of it? Like I said, do we want to teach them how to do a layup in basketball or a pass in rugby and that is what PE is about? [Graeme]

Graeme further qualified his position with the following statement.

I don't think it's any less work as a teacher or any less important as a teacher to be more facilitative than it is to be more direct. I reckon those sort of methods, more sort of discovery, enquiry, facilitative learning are key to implementing the curriculum in a successful way. [Graeme]

Andrew's description elaborated on, and justified, the use of direct instruction whilst also proposing some limitations.

Uumm I guess in the classroom teachers can use a wide range of different teaching styles and contexts to do this ... I guess a sort of direct [teacher-centred] approach is best sometimes when you need to be in control and what you say goes but it doesn't really encourage the students to be actively contributing in the lesson. [Andrew]

He then describe and portray 'student-centred' pedagogies at the 'other end of the scale', portraying a dichotomy between the two.

... whereas on the other end of the scale a more student centred approach favours itself more where you are getting students to become more actively involved and engaged in their learning, where they are making meaning and they're just, yeah, more involved generally. [Andrew]

When asked to describe these approaches in more detail he responded with the following statement:

I guess a sort of direct style of approach teaches the students what you say goes. It's a management thing really like it doesn't really encourage the students to be more actively contributing in the lesson, whereas on the other end of the scale for the cognitive constructivist, a more student centred approach favours itself more where you are getting students to become more actively involved and engaged in their learning, where they are making meaning and they're just yeah they're just more involved generally. I guess it's where the students are constructing their own meaning about a certain idea. [Andrew]

When asked to draw on his teaching practicum experiences to clarify his position and further clarify how he believed these approaches were beneficial to teaching HPE within the NZC he stated:

Well for example in the sporting model [TGfU] uumm looking at things like managing self and responsibility you just keep giving students responsibility they can take care of that ... I think experiential learning is a good one, the learning model where they do everything, they reflect on it, they come up with a plan, what would they do next time, and put that plan into action and the cycle goes on again. It teaches them how to learn, how to become lifelong learners yeah, yeah, I've found that is pretty good. I've used that in class before and it's worked quite well. [Andrew]

And after a pause and careful consideration he continued with:

(pause) ... also, I think cooperative learning works quite well so just students working in groups, come up with ideas and you give them a problem they've got to come up with uumm problem solving anything where they've got to be encouraged to come up with a solution or putting a challenge in front of them works quite well, yeah. [Andrew]

It appears that the five case study participants believed that pedagogically the teaching process could be placed on a continuum. At one end of the continuum lay a teacher-centred approach where decisions around learning contexts and content were firmly in the hands of the teacher and at the other end of the continuum lay the student-centred approach where control over and power to make such decisions is shifted to the students. Epistemologically, it was the participants' beliefs that the teacher-centred approach has epistemological origins in behaviourist discourse. Conversely, the student-centred approach, they believed, emanated from constructivist learning theory. It appeared that all five participants believed that successful implementation of HPE within the NZC involved a knowledge and implementation of a variety of teaching styles and instructional models based on knowledge of learning theory. Furthermore, any decisions on the appropriate teaching style or instructional model should be determined by the characteristics of the students they are teaching and the content being taught. The participants also added that where possible, student-centred, constructivist pedagogical approaches should be favoured as these were more in line with curriculum aims and contemporary students.

This was inferred, by the researcher, as a 'shift' away from teacher-centredness and direct instructional models to student-centred and constructivist pedagogical approaches.

The next chapter discusses the findings of this MM research study in light of the literature. Also, considering the motives behind the study and a wish to inform the BPE (Hons) programme and its subsequent 'roll out' in 2012 – 2015, a number of insights and implications will be presented.

6. Discussion

In this chapter the findings and emerging themes are summarized and insights and implications are discussed in light of the research questions. Consistent with the MM research design employed in this research, it is important to integrate and link these research methods. Therefore, as discussed in the methodology section, this discussion will place an emphasis on the findings from the QL phase, but importantly also summarise the results of the QN survey questionnaire. In so doing, the reader is presented with a conceptualization of the research problem and the focus of the QL discussion that follows. The QL discussion will detail the five purposively selected participants' beliefs around the HPE curriculum philosophy and the pedagogical strategies and teaching approaches they believe to best suit its implementation. These will be compared and contrasted with the literature, and insights and recommendations discussed.

The researcher's insights and recommendations will be articulated with a view to, in some cases, confirm the assumptions that underpin the BEd (PE) programme and, in other cases, challenge these assumptions. It is hoped that such a discussion will be of value to the development and implementation of the newly emerging, critically oriented BPE (Hons) programme, as the BEd (PE) programme is where much of its thinking around philosophy and pedagogy has been derived. Also, a discussion around the subsequent findings may provide further insight into the programmes capacity to meet aspects of its legislative requirements, in the form of the NZGTS's, specifically, those standards that are aligned to, and reflect the concepts of CK and PCK (Shulman, 1987; NZTC, 2007).

6.1 The Quantitative Results—PETE Students' Beliefs about HPE in the NZC

Richardson (1996) suggests that research should focus on teacher beliefs as these have considerable influence on the development of teacher behaviours. Research in ITE (Brookhart & Freeman, 1992; Helfenbein, 2008) and PETE (Doolittle, Dodds & Placek, 1993; Graber, 2001; Hutchinson, 1993; O'Sullivan, 2005) indicate that students' entering ITE programmes do so with strongly held beliefs that are very difficult to alter. Reasons for this may lie in the many thousands of hours spent in the classroom as students themselves (Philpot & Smith, 2011). Such entrenched and difficult to change beliefs may limit a student teacher's ability to consider other paradigms or world views as these pre-existing beliefs may act as filters through which they acquire knowledge (Richardson, 2003b; Rovengo, 2003).

According to Curtner-Smith (2007) the role of teacher education, particularly critically oriented programmes such as the BEd (PE) programme, is not only to engage students in technocratic teaching matters (Tinning, 1991, Light, 2008), but also in the disruption of strongly held beliefs and world views. This requires such teaching and learning environments to create cognitive dissonance around the social and political nature of education and their contexts (Helfenbein, 2008).

Consistent with the findings of Philpot and Smith (2011) the QN data generated from the survey questionnaire suggests that the four-year BEd (PE) programme may also have created intellectual dissonance that enabled many of the students to incorporate new ways of thinking about physical education as it is intended in the NZC. The results suggested that more than 80% of the participants' beliefs around the vision, principles, values, key competencies, underlying concepts and the four strands of learning, were consistent with those espoused in the NZC (MOE, 1999; MOE, 2007) and aligned with the academic discourse surrounding its conceptualization and subsequent implementation.

However, contrary to this, and supporting Burrows and Ross' (2003) claim that physical education teachers may struggle to meet the epistemological challenges presented by the curriculum, there were two areas that did not reflect such consistency. Only 14 of the 28 participants (50%) beliefs were consistent with the appropriate pedagogical approaches, as documented as 'effective pedagogy' in the NZC (MOE, 2007, p. 36). Similarly, for just over half of the participants (54%), their beliefs were consistent with the well documented philosophical underpinning of the HPE learning area and, more precisely, its critical and humanistic foundations.

This clearly conflicts with the programmes espoused aims to produce graduates that have appropriate CK and PCK (Shulman, 1986), as is outlined in the programmes official documentation (University of Canterbury, 2010) and the supporting graduating teacher standards (NZTC, 2007). However, the intention of the QN phase of the research was not to confirm or deny the benefits of the BEd (PE) programme or to enable the researcher to generalize the findings. The intention was to conceptualize the graduating cohort's beliefs around HPE in the NZC and identify any areas that may require a more detailed, focussed and in-depth analysis. Whilst these concerns may support, for some areas, the claim that PETE students' beliefs may indeed be difficult to alter (Graber, 2001; O'Sullivan, 2005), the researcher does not believe that this data alone could validate such an assumption. However, the survey did reveal and present some very clear areas of interest that could be examined, analysed and discussed in further depth through the QL phase of the study. The results of this examination and analysis are discussed in the next section.

6.2 The Qualitative Results—PETE Students’ Beliefs Surrounding CK and PCK in the NZC

The following discussion looks to compare and contrast the participants’ beliefs with that documented in the literature. The discussion headings will reflect the key themes emanating from the QL analysis and will therefore be linked to the research questions and Shulman’s (1987) concepts of curriculum knowledge (CK) and pedagogical content knowledge (PCK) as summarized in Table 6-1.

Table 6-1: The relationship between CK and PCK, the key themes and the research questions.

	Research Question	Key Themes and Discussion headings
Curriculum Knowledge (CK)	What are the graduating BEd (PE) students’ beliefs about the philosophy underpinning HPE within the NZC (MOE, 2007)?	<p><i>1. The multiple aims of HPE in the NZC</i></p> <p><i>2. HPE, an area of paradigmatic uncertainty</i></p>
Pedagogical Content Knowledge (PCK)	What are the graduating BEd (PE) students’ beliefs about the pedagogical strategies required to implement HPE within the NZC (MOE, 2007)?	<i>3. The teaching continuum and moving beyond direct instruction</i>

6.3 The Multiple Aims of HPE in the NZC

6.3.1 Movement as a Context

There appears to be consensus among physical educators that movement is foundational to any conceptualization of physical education regardless of the different interpretations of content (Culpan & Bruce, 2007; Fernandez-Balboa et al, 1996; Jewett, Bain & Ennis, 1995; MOE, 2007). It became clear from the QL phase of the study that the participant students shared this belief. Clearly, movement remained integral to, and with, the intentions and philosophy of the NZC (Gillespie & Culpan, 2000) and in their view was essential in the delivery of HPE. It was also clear that the students saw movement as the context for learning “in, through and about” (MOE, 2007, p.23) health and physical education.

Sport is firmly entrenched within New Zealand culture and historically has a place within education contexts – specifically school physical education. But physical education and sport are not synonymous (Stothart, 2000). By choosing to adopt a ‘sport’ approach to physical education teachers may be unwittingly compromising the educative value of physical education as a curriculum area because, by default, physical education becomes sport. However, physical education as described in the New Zealand curriculum has a broader educative role (Gillespie and Culpan, 2000). There is general agreement that movement is an appropriate ‘context’ for physical education (Culpan & Bruce, 2007; Fernandez-Balboa et al, 1996; Jewett, Bain & Ennis, 1995; MOE, 2007) but there is a growing number of physical educators who believe that physical education ‘content’ defined by movement, particularly under the label of sport, may potentially reduce it to mere physical activity with little educative value (Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Kirk, 2006; Tinning, 1991). Jenny exemplified this when she stated the following:

It’s Physical Education, [we] learn to relate to other people, manage themselves with, like, inter-personal skills and stuff, all within the physical context, yeah I reckon movement, like sports and dance and outdoor recreation and being involved physically is really important for learning in PE. [Jenny]

While the students saw movement as an integral part of HPE, they did not indicate that movement meant sport. They considered that HPE had multiple aims and conceptualized HPE as more than developing physical sport skills. Consistent with Philpot and Smith (2011), who also sought to gain graduating students insights into a critically oriented PETE programme in New Zealand, this appears to demonstrate that, whilst sport in its traditional

sense is seen as being an appropriate context for learning physical education, it is not seen as synonymous by the students. This seems to be consistent with the curriculum intentions where the contexts for learning takes place in “play, games, sport, exercise, recreation, adventure, and expressive movement in diverse physical and social environments” (p.23). In fact most of the students qualified their statements of the HPE philosophy as being more than sport. Although they expressed this in different ways, in their view, the multiple aims of HPE in the NZC were seen as extending beyond sport performance discourse (Culpan & Bruce, 2007; Tinning, 1991) and this appears to be a belief that is very consistent with the aims and intentions of HPE in the NZC.

6.3.2 Holistic Development

A second discourse to emerge from this overall theme was around the concept of holistic development. This confirmed that students believed that HPE had clearly moved away from the traditional sport and performance pedagogy that has historically been privileged in physical education and sporting environments (Tinning, 1991). Light (2008) would confirm this as a dominant view, suggesting that historically physical education and sport teaching pedagogy has tended to privilege technical content knowledge. This approach, he suggests, has been consistently accompanied by pedagogical strategies that place the teacher firmly in control of the learning environment. In this perception, knowledge is traditionally seen as an object and learning is seen as a process of internalising knowledge. Teachers subscribing to this technocratic approach consider knowledge to be a commodity and as such they have ownership and control over it (Light & Fawns, 2003). While it has been cogently argued that knowledge constructed in this way may limit learning to mere physical skill development (Bain, 1990; Culpan & Bruce, 2007), the evidence presented by the participants suggests that this still appears to dominate physical education contexts.

Von Glasersfeld (2001) argued that such epistemological positions and resulting pedagogical strategies are not considered on the basis of sound reasoning. Rather, they are based on historical assumptions that continually entrench themselves within society. He further argued that learning environments require a much broader epistemological view, where the learner becomes an integral part of the construction of knowledge. Such discourse is not lost in the context of this study as it became apparent that the participating students were beginning to change their thinking and accept the notion that their role as a teacher in enacting the HPE curriculum was far more ranging than one of technical skill adviser. Although expressed in different ways, the students all considered that HPE content required teachers to promote and develop more than physical skill.

I think that the Holistic idea definitely comes through, it talks about overall well-being, and it doesn't just talk about [being] physically active and fit. You know developing other aspects of a person, things like the cognitive and emotional and social stuff ... you know making PE a holistic learning experience. [Brigid]

Commonly, the participants often referred to the term 'holistic' when defining the intentions of HPE. The students also demonstrated a more informed understanding when they commonly suggested that the HPE curriculum philosophy not only reflected and considered aspects of holistic human development but also articulated this in terms of hauora. Hauora, according to Cassidy (2010) is used to describe a Māori philosophy of wellbeing that includes the physical, mental and emotional, social and spiritual dimensions of health that influence and support each other. She continues to suggest that "various metaphorical frameworks are used to explain and 'operationalize' hauora, some of which have been incorporated into cultural contexts such as the New Zealand Health and Physical Education curriculum" (p. 439). This philosophy is promoted within the four underlying concepts articulated in HPE learning area (MOE, 2007, p. 22).

Notably, holism is considered to have links with humanistic psychology (Aanstoos, 2003; Cassidy, 2010) and, while this is not an encompassing view of humanism in an educational sense, it has relevance to HPE in the NZC (MOE, 2007). Significantly, the participants demonstrated a 'shift' in their beliefs away from the traditionally limited and privileged 'performance view' of physical education (Culpan & Bruce, 2007; Gillespie & Culpan, 2000; Kirk, 2006; Tinning, 1991) to one which was more holistic and aligned with the curriculum intentions (Culpan, 2004).

6.3.3 The Socio-Ecological Perspective

The participants' beliefs continued to elaborate on and consider other discourses that contribute to the wide ranging scope and multiple aims proposed and supported in HPE in the NZC. In this case, the participants began to outline the socio-ecological perspective of health, one of the four underlying concepts that "support the framework for learning in health education and physical education" (MOE, 1999, p. 30). Influenced by Lawson's (1992) call for a broader and more integrated approach to health and health promotion, the curriculum writers considered physical education contexts as an appropriate vehicle for students to identify and reflect on factors that influence people's choices and behaviours relating to health and physical activity.

Indeed, the participants saw a need for students to consider and enhance personal and social relationships extending into societal and cultural settings and therefore “create the conditions that promote their own wellbeing and that of other people and society as a whole” (MOE, 1999, p. 33).

It’s looking at ways they can be more active, not just ... [physically] active but in relationships and also the wider community... perhaps helping others to live healthy and active lifestyles. [Andrew]

This evidence presented by the participants further supports the researchers claim that the participating student teachers were indeed developing a broader definition of physical education and health within the NZC that supported and promoted multiple aims and objectives. However, further analysis suggested that while this definition could be articulated there was little evidence to suggest how this could be enacted in the classroom, particularly ‘in, through and about’ movement.

This reaffirms some of the critique of the draft HPENZC, where leading up to, and continuing after its release, many concerns and questions were raised from a number of different areas (e.g. Burrows, 2005; Barker, 2008b; Gillespie & Culpan, 2000; The Education Forum, 1998). A major source of critique stemmed from the Education Forum (1998) who questioned the draft curriculum’s mandate to espouse wider educative goals and broader curricular objectives, suggesting that physical education should remain in its traditional place in schools. Culpan (2004) suggested that:

The forum was intent on restricting health and physical education to a traditional paradigm of skills development, giving only passing acknowledgement to the scientific foundations of physical education and the medical foundations of health. (p. 239)

The Education Forum had a point, whereby the enormity of change posed by the introduction of HPENZC (MOE, 1999) and its subsequent revision, the NZC (MOE, 2007), presented many challenges for physical educators in this country. Some suggested that physical educators may struggle to meet all of the espoused benefits and epistemological challenges (Burrows & Ross, 2003) and, as Culpan (2008) suggests, this may well still be the case.

However, despite the concerns levelled at physical education teachers, it appears that the BEd (PE) student teachers in this research study had begun the process of (re)defining health and physical education from the traditional sport performance mastery approach to

one with wider educative value, multiple aims and in the researchers view this appeared to be reasonably consistent with the intentions of HPE in the NZC (MOE, 2007). This is clearly evidenced in the following interview quote:

[PE] ... is about being regularly active and involved and building relationships through being active or being involved with different activities and also sports, it's learning in, through and about movement. [Emily]

6.4 HPE—An Area of Paradigmatic Uncertainty

6.4.1 Critical Theory

A second theme to emerge from an analysis of the participants' beliefs suggested that HPE was an area of significant paradigmatic uncertainty and confusion. The first subtheme emanated from the researchers exploration of critical theory and its relationship to HPE in the NZC (MOE, 2007). At best, the participant students were beginning to understand and grapple with the concept of critical theory and its relationship to critical pedagogy.

Historically, *critical theory* has had at its very core the concept of human emancipation, emancipation from oppression and oppressive structures that lead to dehumanization (Freire, 1970). Simply, dehumanization involves the eradication of individual consciousness to a point where reality of individual existence becomes unknown. This does not occur as a result of individual action, but instead as a result of the associations and relationships formed within the individual's socio-cultural context. Individuals, therefore, live and learn within a complex web of relationships, where the associations established and the interactions occurring become multifaceted and interdependent (Hipkins, 2004). Based on the nature of these associations and the reasons for their interaction, many, driven by personal or political agenda, pervade to undermine the relationship from one of equality and justness to one which seeks to oppress (Sparkes, 1992). Not surprisingly, those oppressed may have a vested interest in societal change as a means of improving their lives and gaining greater control over their own existence (Griffin, 1990). Freire (1970) argued that for societal change to occur, it requires a raised level of 'conscientization' by those who are oppressed. That is, a need to understand their plight and therefore question their position or status in society as being one of inequality and one of dissatisfaction. However, pivotal to social change is the concept of consciousness and the level of consciousness that individuals and collectives are able to sustain. If those who are oppressed have no consciousness or awareness of their plight, then change becomes a redundant term.

Critical pedagogy (CP) arises from the need to create an environment where conscientization can occur and where there is an ability to expose social and cultural inequities. Griffin (1990) highlights the fact that challenging existing hegemonic relationships is pivotal to this process, suggesting that a critical perspective that asks the *why?* and *why not?* questions and attempts to expose those whose interests are best served, are best suited to challenge unjust practices. For individuals and groups to become 'conscientized' it requires more than a mere description of their reality; it requires an in-depth look at the oppressive structures that maintain their state of unawareness. Educational settings, particularly ITE programmes, may provide the appropriate context to explore such concepts.

Critical pedagogues suggest that conscientization requires the critical position of asking appropriate questions that do not merely describe the situation but raise individual student and group consciousness (Burbules, 1993; Freire, 1970; Giroux, 1983; McLaren, 1995,1997). Essential then to the educational success of CP, is a need to provide students with an appropriate environment to allow for critical thinking, questioning and discussion within a *power neutral classroom* (Macdonald, 2003). Of equal importance is the ability to take action to promote social change (Fernandez-Balboa, 1997; Kincheloe, 2008).

An implication of this thinking, in terms of this study, and importantly in the development of neophyte physical education teachers, is the concept of a 'power neutral' classroom. Ultimately, teaching becomes a political act, intimately linked with power and control, regarding what constitutes legitimate knowledge and who holds that knowledge in the culture and profession (McLaren, 2007). This requires PETE students to consider the effect that the power and influence that they have over the production of knowledge relies heavily on an understanding of how power manifests itself and the social and political way in which this power is derived (Macdonald, 2003). Without this awareness, or conscientized view of teaching and learning it becomes difficult for deeply rooted beliefs to be altered (Richardson, 1996).

Critical thinking is often defined as a process of problem solving and higher order thinking skills (Ennis, 1993; McBride, 1992), where the focus is on questioning as an analytical tool. In the researchers view, this provides an opportunity for teachers to believe that this is the major concern of CP, and by utilising tools such as Bloom's taxonomy of higher order questioning and simple criticism, that they are addressing the issues presented by the critical paradigm. Gillespie & Culpan (2000), in discussing the inclusion of CP in the HPENZC (MOE, 1999) consider this to be an inappropriate application of critical theory to CP. In their interpretation, critical theory is defined as 'empowering' and 'emancipatory'.

This is a position where critical thinking within a CP examines and questions assumptions around hegemony and inequality in a broader societal sense (Culpan & Bruce, 2007; Fernandez-Balboa, 1997; Gillespie & Culpan, 2000; McLaren, 1995). HPE in the NZC (MOE, 2007) has subscribed to this interpretation, where students are “examining, questioning, evaluating, and challenging taken for granted assumptions about issues and practices” (MOE, 1999, p. 56).

In light of this argument, it is proposed by the researcher that a key premise of critically oriented PETE programmes, such as that espoused in the BEd (PE) programme, is to not only equip students with the content, management and pedagogical skills that educational environments have historically demanded but to also engage them in a dialogue relating to the social and political world in which it exists (Curtner-Smith, 2007). Therefore, intuitively, the work of critically oriented PETE programmes is to disrupt the deeply held beliefs by creating a sense of cognitive dissonance around common assumptions of the teaching and learning process and the social and political world in which it is located (Helfenbein, 2008). This becomes paramount if, as Richardson (1996) argues, teacher behaviours are influenced considerably by their beliefs, particularly when these beliefs act as filters through which they acquire knowledge of the teaching and learning process.

Simply, the participants in the QL phase of the study viewed critical theory as *challenging inequality* and whilst this is meritorious, there was no evidence to suggest that this could lead to a personal deconstruction of the student-teacher power relationship from a personal teaching perspective. This was simply defined as looking at who is *advantaged* and who is *disadvantaged* from a wider societal perspective.

A major feature of CP, informed by critical theory as intended by the NZC, suggests a redistribution of power between teacher and learners, a redistribution that enables students to take responsibility for the direction of their own learning. Teachers ‘listen’ to the learners and then act as guides and facilitators, as the students work to construct knowledge through problem solving and discovery. It is this type of classroom, McLaren (1998) infers, that exemplifies CP. He suggests that this is a “... way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the institutional structures of the school, and the social and material relations of the wider community, society and nation state” (p. 170). This redistribution of power, according to MacDonald (2003), which calls into question the social, ethical and political contexts in which learning occurs demonstrates a marked difference to the traditional, hierarchical style of pedagogy that still dominates most contemporary classrooms (Culpan & Bruce, 2007).

All the participants stopped short of utilising critical theory with a view of defining CP in this way. It appeared that the participants in this research were only beginning to grapple with the notion of critical theory and had limited or no knowledge of its application to CP. Analysis revealed that participants' beliefs around critical theory were limited and their understanding appeared superficial. The participants believed that critical theory embedded itself in wider societal issues, in essence, as a topic for discussion. The following interview excerpt reflects this common position:

So, like critical theory, on TP [Teaching Practicum] we looked at the rules of sport and applied the ethics associated with that ... (pause) ... so being able to look at both sides of it and not just one side and making sure that no one is unfairly advantaged. [Brigid]

Drawing on the work of Apple (2004) the researcher proposes that these 'topics' or issues have evolved from those involving class, the economy and the state to include "issues of sexuality and the body, disability, post colonialism and many more" (Apple, 2004, p. 187). However, unlike the participants in this study, he continues to suggest that critical pedagogues seek to challenge the very nature of the systems and structures they are a part of and seek to change the dominant conservative culture and epistemology associated with many educational and societal settings (Apple, 2004).

Despite much prompting and attempts by the interviewer to consider and relate these considerations to their own teaching and learning experiences, and to indeed 'challenge' the 'dominant conservative culture' and epistemology, the students struggled to appropriately define critical theory and make the appropriate connections to their own epistemological beliefs. This is typified by Andrew's comment, where he suggested that this was difficult to enact:

Looking at who's advantaged and who is disadvantaged... Yeah I think it's quite hard to incorporate it sometimes you need to know your students quite well cause it's deeper like even myself I've found it hard sometimes to think of things critically ... to critically think. [Andrew]

This has significant implications when considering the epistemological adjustments required to implement CP as it is intended within HPE in the NZC (MOE, 1999; MOE, 2007) and documented in the academic literature (Culpan & Bruce, 2007; Gillespie & Culpan, 2000). Fundamentally, this suggests that the relationship between the teaching and learning process and the social and cultural dimensions in which it exists have not been differentiated.

From a socio-cultural perspective, this may entrench the apprenticeship model of learning (Lortie, 1975; Lave & Wenger 1991), which subordinates the learner to established practices where empowerment and change may only be possible once compatibility with, and confidence in, established practices is achieved. Whilst this view may emphasise the importance of ensuring culture and context receive recognition in understandings about what occurs in education contexts and that understanding, in turn, contributes to the type of knowledge that the learner constructs, it does not bring into question the epistemological assumptions or the associated pedagogical practices of the community of practice, namely physical education. Essentially, in the view of the researcher, this becomes problematic if, in introducing a curriculum underpinned by differing paradigmatic assumptions, PETE students are to align pedagogical practices with epistemological beliefs.

6.4.2 Humanism and Holism

Within HPE in the NZC (MOE, 2007) humanistic perspectives of education provide a possible rationale for pedagogical change (Culpan, 2004). That is to say it provides an alternative framework of approaching our pedagogical practice by challenging existing, taken-for-granted conceptions of the teaching and learning process. Specifically, within the HPE in the NZC (MOE, 2007), physical education teachers are asked to, if necessary, reconceptualise their epistemological and pedagogical position and consider one which has a critical-humanistic perspective (Culpan, 1996/1997; Culpan, 2004; Culpan & Bruce, 2007; Gillespie and Culpan, 2000).

Interestingly, a major critique of the draft HPENZC appeared to be centred on a lack of theoretical foundation. The Forum stated that:

the lack of clarity and openness about its theoretical basis and assumptions means that the draft does not form a satisfactory basis for further work on the development of a Health and Physical Education curriculum statement.
(Education Forum, 1998, p. xii)

However, for reasons which are not obvious, there was no reference in the Forum's critique to humanistic philosophy and its argued links to student-centred, constructivist pedagogies. The researcher finds this perplexing as, inherent in the theoretical justifications of the draft document and its pedagogical leanings, is the concept of humanism and, as has been argued, its links to holism. One can only speculate that this possible omission enabled, and, arguably, suited the Forum's, and others, position on the traditional performance or skill mastery view of physical education.

Humanistic approaches in physical education and sport, such as those proposed by Culpan (1996/1997, 2004) and Lombardo (1986, 1999) respectively, propose that learning and development are not encapsulated by the historically dominant performance view, where skill development within sport contexts is privileged (Tinning, 1991, 2002; Kirk, 2006). Instead, movement contexts are utilised to develop broader educative goals that include wider consideration and inclusion of the cognitive and affective domains. In this view, the NZC (MOE, 2007) interprets physical education and sport cultures as contexts for developing the 'whole' person where educators promote positive self-direction and independence, curiosity and creativity through discovery and inquiry, and development of the affective system in an environment where individualism is valued and concepts such as citizenship, attitudes and values and moral issues can be examined.

It appears that this rhetoric was lost on the students studied in this research. The participants presented no evidence to support an understanding of the underpinning humanistic rationale, as suggested by Culpan (2004), underpinning HPE in the NZC (MOE, 2007). Jenny exemplified this lack of understanding:

Uumm humanism is like humans so I guess like people and relating to people and uumm (pause) humanistic values I don't know (sigh, pause) ... I just don't know (sigh). [Jenny]

However, the participants did present evidence of an understanding of holism, or at least the term was used to demonstrate that the curriculum had broader educative intentions than its traditional remit.

PE is quite a holistic subject where you look at a wide range of things. The strands including personal development, movement skills and wider community relationships, it hangs itself quite nicely to that as well. I guess umm focus on holistic development as opposed to the traditional model which develops only sports skills as PE was in the past. [Andrew]

Holism, and holistic educators, according to Lombardo (2010) share many commonalities with humanistic ideology. That is, the educative process seeks to address the whole learner; the physical, cognitive, and psycho-social domains of learning. Lombardo (2010) continues to suggest that holistic educators, unlike humanistic educators, also seek to develop the concept of spirituality. Importantly, in terms of this research, HPE in the NZC (MOE, 2007), ‘operationalizes’ (Cassidy, 2010) its humanistic philosophy in terms of Hauora, where “Māori have used the term Hauora to describe a holistic philosophy of health, which recognises the integration and connectivity of the physical, social, spiritual and the mental as well as emotional domains” (p. 439).

Theoretically, one could argue, using Lombardo’s (2010) definition, that in its application, and with its obvious links to spirituality, HPE in the NZC (MOE, 2007) is a holistic document, as it incorporates an inclusion of spirituality in the concept of Hauora. Using this definition, there was evidence to suggest that the students had some understanding of this concept and, while this was encouraging, and perhaps suggested that the students’ beliefs were grounded in holistic ideology, the researcher would cautiously promote this as a catalyst for cognitive dissonance. There was little evidence, despite prompting students to articulate this belief in a teaching sense, to suggest that the students could make a connection between holism and an enactment of this in their own teaching behaviours. Rather, it appeared to be a description and philosophical position of which to describe the outcomes for students, with little understanding of how this may inform their own epistemological and pedagogical decisions.

Unlike the descriptions and definitions given above for critical theory, where the students were confident in expressing their views, albeit with limited insight, the students appeared to struggle with the concept of humanism and had much difficulty defining it, let alone making attempts to describe how this would look in practice. Admittedly, the students could articulate some gross understandings of holism, and arguably this may be a term better suited to, as Cassidy (2010) suggests, the operationalized version of HPE in the NZC (MOE, 2007) but it became clearly evident to the researcher that there was a nexus between the theory of humanistic/holistic education, the discourse surrounding it, and the connections that needed to be made in order for an accompanying epistemological and pedagogical shift.

6.5 The Teaching Continuum and Moving Beyond Direct Instruction

A curriculum with such broad educative aims necessitates that PETE programmes develop, implement and model pedagogical approaches that are humanistic/holistic and critical in nature (Culpan & Bruce, 2007; Gillespie & Culpan, 2000). These pedagogical approaches should, therefore, reflect the capacity to promote independence and positive self-direction, curiosity and creativity in the learner through inquiry, and the development of the cognitive, affective and spiritual domains of learning. That is, these approaches should be constructivist and student-centred in their epistemological justification and applied *in, through, and about* movement (Arnold, 1996; Culpan, 2004). It is therefore paramount that physical educators, particularly teachers at the beginning of their careers, have knowledge of these pedagogical considerations, if they are to acquire appropriate PCK and effectively implement the NZC (MOE, 2007).

PCK, as defined by Shulman (1986) and developed by Grossman (1989) and McLennan (2008) enables effective teachers to transform content knowledge and curriculum knowledge into effective and powerful learning environments responsive to the needs and characteristics of the learners (McLellan, 2008). Complementing this notion, there has been a plethora of contemporary literature around constructivist learning principles and the potential that this brings to pedagogy (Hendry, 1996; von Glasersfeld, 1989, 2001; Windschitl, 2002). Many in the physical education community also advocate for constructivist pedagogies as being a more appropriate twenty-first century pedagogical tool (Curtner-Smith, Kirk & Macdonald, 1998; Kirk & McPhail, 2002; Light & Fawns, 2003; Light & Butler, 2005; Light & Wallian, 2008; Todorovich, McCaughtry & Lacon, 2000).

Psychological constructivist theories, such as cognitive constructivism and social constructivism, stemming from the work of cognitive developmental theorist Jean Piaget, Lev Vygotsky and Albert Bandura, promote learning as a process of accommodation, assimilation and equilibration (Schunk, 2012). Saxe (1991) suggests that this is a dialectic process in which the subject resolves conflicts in understanding by coordinating and constructing new, more adequate cognitive structures. The teacher's role becomes one of mentor or facilitator to help the learner gain personal and individual meaning of the subject content. This is in conflict with the traditional notion of education where the teacher enters a didactic relationship with the learner in order to cover the content (Light, 2008). The role of a constructivist teacher therefore becomes one of a facilitator utilising heuristic problem solving and discovery whilst stimulating problem solving skills, curiosity, creativity and originality.

This, it is suggested, helps the learner to get to his or her own understanding of the content and may aid the learner in modifying existing knowledge and allow for creation of new knowledge (Light & Wallian, 2008).

Windshitl (2002) suggests educators have difficulty implementing constructivist instruction as they struggle to make:

personal sense of constructivism as a basis for instruction, reorienting the cultures of classrooms to be consonant with the constructivist philosophy, and dealing with the pervasive educational conservatism that works against efforts to teach for understanding. (p. 131).

Unfortunately, despite the apparent enhancements to be gained through adopting such approaches, physical education research also shows that pre-service teachers struggle to comprehend and implement effective constructivist environments and their espoused benefits (McNeill, Fry, Wright, et al., 2004; Randall, 2003).

Despite this apparent inability for PETE students to comprehend and implement effective constructivist environments, the participants in this research demonstrated a collective knowledge of psychological constructivist theory and indeed its implementation, through the use of appropriate instructional models. All of the students referred to physical education instructional models, such as Cooperative Learning and Teaching Games for Understanding, as a means of enacting constructivist learning theory. This appears congruent with much of the physical education research which make links between constructivist pedagogy and many contemporary curriculum aims (e.g. Hastie & Curtner-Smith, 2006; Kirk, 2006). Curriculum aims that reflect physical education content as more than skill performance, such as the NZC (MOE, 2007), promote a shift from didactic– direct, reproductive, or teacher-centred styles, to more student-centred and productive styles of teaching supported by the implementation of such models (Curtner-Smith et al, 2000; Kirk, 2006).

The common belief held by the participant students reflected that a variety of pedagogical strategies may be required to implement HPE in the NZC (MOE, 2007). This revealed that the participants were describing a continuum of teaching styles, consisting of a teacher-centred approach at one end and a student-centred approach at the other. What also became very apparent was that in describing this continuum, the participants saw merit in both teacher-centred and student-centred methods, and therefore allowing flexibility to choose where they would locate themselves. This also appears consistent with the notion that models based instruction presents a sound rationale for aligning and implementing

curriculum aims (Kirk, 2006). In this view, enacting constructivist pedagogies and therefore the emancipatory concerns of the NZC, is seen as a ‘teacher-centred’ to a ‘student-centred’ continuum.

Therefore in order to educate critically, humanistically and holistically one’s instructional practices would need to be very close to the student-centred end of the continuum while direct instruction would feature towards the teacher-centred end of the continuum. According to Nieuwerburgh (2010), this has merit because in this way, we could move to a genuinely student-centred approach by the very fact that pedagogical decisions would be based on the best interests of the student. That is, if the need is to develop independent thinking, self-esteem or self-confidence, the teacher and perhaps the student, would agree to use a more student-centred approach. On the other hand, if the student requires new skills or additional information, the teacher may employ a more directive approach. This could be interpreted as being ‘student-centred’ in the sense that the best interests of the student are being addressed as the professional knowledge and experience of the teacher enables and ironically empowers them to make such decisions.

Drawing on the work of Cassidy’s (2010) and Nieuwerburgh (2010), such thinking may support the assertion that humanistic and athlete/student-centred practices may not be synonymous. That is, a humanistic approach may be appropriate in some situations but in others, however, it may be more supportive to be more directive, for example, when students’ require new skills or additional information.

Interestingly, this interpretation appeared to have resonance with the Education Forum (1998), who voiced significant critique around the draft HPENZC (MOE, 1999). In their view, a similar notion of student-centredness was articulated where the teacher was the focal point of the learning process and notions of student-centredness appear to rely on decisions around teaching and learning in the best interests of the student. They stated;

Far from recognising its fallibility, the draft elevates the “needs” notion to the prime determinant of a needs-based curriculum poised on the principle of student-centredness ... a consequence of this needs-based approach is the significant sidelining of the work of the teacher to that of facilitator ... the notion of student-centred learning is woolly, imprecise, unanalysed and undefended. (Education Forum, 1998, p. 33)

Thus, with this belief, the Education Forum (1998) recommended to the government that it:

... reject the notion of child-centredness as promoted within the draft ... [and] note that there is a more academically credible and rigorous 'student-centred' approach which seeks to identify differences in modes of learning and consequently in effective teaching styles, maintains the importance of knowledge and disciplinary procedures, upholds the need for teachers who are authorities in both content and procedures. (p. 38)

This raises some concerns, particularly when it could be argued that unwittingly the BEd (PE) programme has influenced students to believe similarly, despite the documented argument from curriculum writers (Culpan, 2004) that the Forum's view was not congruent with the philosophical and pedagogical intentions of HPENZC (MOE, 1999).

This has major implications, particularly when PETE students look to implement the critical– humanistic philosophy of the NZC (MOE, 2007). If, as Richardson (1996) suggests, students find it difficult to alter their beliefs because historical knowledge acts as a filter through which new knowledge is acquired, there is the potential that this continuum may manifest itself as a *default mechanism* where, according to Windshittl (2002) teachers who struggle with the initial implementation of constructivist, student-centred environments may commonly revert back to the dominant teacher centred, direct instructional methodology. In this sense, student teachers may gain a sense of comfort through the re-enactment of direct instruction that they themselves endured as school students in the classroom (Lave & Wenger, 1991; Lortie, 1975).

6.6 Insights and Implications

A consideration in terms of this study, and importantly in the development of neophyte physical education teachers, is that teaching is a political act that is intimately linked with power and control. In particular, what constitutes legitimate knowledge and who holds that knowledge in the culture and profession (McLaren, 2007). This requires critically oriented PETE programmes and their students to consider the effect that power and influence has over the production or reproduction of knowledge. This relies heavily on an understanding of how power manifests itself in educational settings and the social and political way in which this power is derived (Macdonald, 2003). Without this awareness, or conscientized view of teaching and learning then it becomes difficult for deeply rooted beliefs to be altered (Richardson, 1996).

It appears that the participants in this study view critical theory, and its enactment through pedagogical processes, as being defined by psychological constructivism, and a limited form and understanding of sociological and critical constructivism. In this view critical theory, in relation to CP and the NZC, is limited and appears to manifest itself as a way to deconstruct the *external world* alone. The researcher believes there is a greater need and emphasis to be placed on critical theory from a sociological constructivist perspective. This is where PETE students examine the way dominant power influences and manages the production of knowledge in societal and physical education contexts. In particular, how this manifests itself and ultimately informs their own developing teaching behaviours. In doing so, PETE students may gain a greater sense of individual agency through an application to their own teaching behaviours and deconstructing dominant practices through a new understanding of critical reflection.

With these concerns in mind, in the researchers view, there appears to be a need to adopt, or at least explore in greater depth, the sociological perspective of constructivism, where, as Richardson (2003a) describes, sociological constructivists consider “the ways in which power, the economy, political and social factors affect the ways in which groups of people form understandings and formal knowledge about their world” (p. 1624). Specifically, PETE students need to explore and grapple with the content of critical constructivism and indeed examine how critical theory, humanism and pedagogy come together (Kincheloe, 2005). This should not be at the expense of the examination of psychological constructivism, where aligned instructional models may provide the means by which student teachers can explore student-centred approaches to learning. Rather, these should be complementary and enable PETE students to gain greater accessibility to the student-centred end of the teaching continuum with greater confidence and, therefore, looking to prevent a default to teacher-centredness.

In this sense, a major critique of CP is addressed, where, it is claimed by O’Sullivan et al. (1992), that critical perspectives within education assume a position of *moral superiority*, and are often criticised and alienated. This often results, at best, in a reluctant re-acceptance of a more traditional and conforming approach which tends to stagnate thinking and action in past boundaries. It is this position of “moral superiority”, writes Sicilia-Comacho and Fernandez-Balboa (2009), that “has been criticised, resisted and rejected” (p. 452). Such resistance has not gone unnoticed by researchers and scholars within PETE programmes. Ennis (1997), for example, drawing on Burbules (1993) notion of reasonableness, called for what she considered “... a more integrating and conciliatory perspective” (p. 212). This perspective, Ennis continues, enables teachers to feel capable and competent, not alienated, when implementing CP. Similarly, Tinning’s (2002) call for a ‘modest’ approach to this

concern, suggests that implementation of CP within PETE may require significant rethinking if it is to meet its intended aims and become widely accepted in practice.

More recently, and in further galvanising this thinking, Sicilia-Comacho and Fernandez-Balboa (2009), explore the Foucaultian notion of morality and ethics as a possible means of approaching CP in a less “universalising” and “imposing” manner. This resonates with the researcher’s own experiences of teaching within the BEd (PE) programme, which embeds its philosophy in, and promotes the use of, CP. The researcher concurs with their proposal that:

...far from preaching universalizing principles and imposing ‘liberating’ prescriptions and seeing people as objects to be liberated, recognizes people as ethical beings capable of reflecting on, deciding about and participating in, the construction of their own identity and their world. (p. 452)

Similarly, this discussion intends to be one which does not seek to be an *everythingism* with regard to CP but rather as being an alternative where PETE students can begin to “... explore their own ethics and activate their own sense of agency” (Sicilia-Comacho & Fernandez-Balboa, 2009, p. 456).

Indeed, this view subscribes more to the Education Forum’s (1998) definition of student-centredness and, therefore, conflicts with the curriculum architects definition and subsequent dismissal of the Forum’s position (Culpan, 2004), however, given the academic discourse calling for a reasonable and more conciliatory approach (Bain, 1997), and one which modestly (Tinning, 2002) promotes the coming together of critical theory, humanism and pedagogy (Kincheloe, 2005), the researcher believes that this is an appropriate compromise. The researcher believes that this is where, as a beginning point, PETE students can analyse their own subjectivities and realities of truth. This is seen as a starting point where PETE students feel confident to implement CP and critically reflect on their own practice, something that many ‘experienced’ physical teachers in this country have not taken the opportunity to do (Culpan, 2008).

6.6.1 Critically Reflective Practice as a ‘Dialogue’ on Reflection and Action

It is suggested that students’ entering ITE and PETE programmes do so with strongly held beliefs that are difficult to alter (Brookhart & Freeman, 1992; Doolittle, Dodds & Placek, 1993; Graber, 2001; Helfenbein, 2008; Hutchinson, 1993; O’Sullivan, 2005). These strongly held beliefs may conform to the traditional view of physical education and this, in turn may act as a filter through which they acquire knowledge (Rovengo, 2003). Traditionally physical education has been dominated by what Tinning (1991) has termed a ‘performance view’, where the role of the teacher becomes one of technical adviser. It appears that such views may become entrenched overtime as students passively absorb these practices as students themselves (Lortie, 1975; Lave & Wenger, 1991; Philpot & Smith, 2011) and are exposed to the social and political manipulations inherent in educational institutions (Gur-Ze’ev, 2006; Kincheloe, 2008).

Unless these historical personal beliefs are challenged, ITE programmes, it is contested, are considered to be weak interventions (Richardson, 2003b; Kennedy, 2005). Challenging core beliefs or creating cognitive dissonance is not easy and as Doolittle, Dodds and Placek (1993) suggested, teacher educators are often challenged themselves to sufficiently create environments where students’ beliefs are challenged in a meaningful and reflective way. PETE literature (Matanin & Collier, 2003; Curtner-Smith, 2007) appears consistent with these findings and indicates that PETE programmes may also have little effect on these deeply held beliefs. It also appears that PETE students are rarely challenged around these deeply-held beliefs and that these may remain unchanged unless deliberately confronted (Curtner-Smith, 2007).

In the researchers view, *praxis*, consisting of reflection and action (Friere, 1972, 1973; Kirk & Tinning, 1992; Hickey, 1997; Muros & Fernandez-Balboa, 2005) becomes the key to creating the cognitive dissonance required to change these deeply held beliefs. Drawing on the notion of praxis and dialogue (Friere, 1972, 1973), where, through ‘thought and action’ we begin to merge the concepts of ‘theory and practice’ (Kirk & Tinning, 1992). This, it is believed, may begin to allow PETE students the much needed flexibility to acknowledge the multiple views and complexity of issues confronting physical education student teachers.

There is no doubt in the researchers mind that, to varying degrees the programme promotes both reflective practice and also a need to enact this through pedagogical change. However, the *dialogue* informing the reflective process appears to only manifest itself in a superficial and non-confronting way. The students participating in this study appeared to have only superficial knowledge of the critical and humanistic underpinnings of the HPE in the NZC and limited knowledge and application of critical constructivism that is necessary to

deconstruct the teacher-learner relationship. In this sense, the 'dialogue' informing the reflective process may indeed manifest itself as 'blind activism' (Friere, 1972) and any attempts of the programme to better inform beliefs, and in turn through action change ones behaviours, becomes ill-informed and futile. Without an explicit and more confrontational challenge of these historical personal beliefs, the BEd (PE) programme and its replacement programme the BPE (Hons), may well be considered a weak intervention (Richardson, 2003b; Kennedy, 2005).

There is a need to expand the PETE students' knowledge around the concept of critical constructivism, where, drawing on the critical paradigm reflection is seen not only as a process of reflecting *on* and *in* action (for further discussion see Shön, 1983) but also is seen as a process of *taking action* to achieve social change. In this case, social change is aimed at that dominant teacher-student relationship and the power struggle that exists and dominates many contemporary education contexts.

Furthermore, the researcher is mindful of Fernandez-Balboa's (1997) argument that critical reflection should not just be about the past but needs to include the present, and inventing the future. He stressed that the purpose of the reflective process is to empower educators to seek defined alternatives so that the decisions they make are deliberate, conscious and intentional. The process can liberate teachers from traditional mind-sets reproducing 'what they know' (Harrison, Lawson & Wortley, 2005). It appears that by not promoting and encouraging PETE students to develop and use their ability to critically reflect and make decisions based on informed critical judgement, the BEd (PE) programme may unwittingly be locking the participating PETE students into 'business as usual' and therefore potentially reaffirming the low professional status of beginning teachers by exposing them to political manipulation.

At the conclusion of this research there was some evidence to suggest that the participants had begun to locate themselves within a critically reflective position. They were beginning to form a different view of physical education and indeed synthesising this into their own practice and in doing so started to become catalysts for change. However, the researcher is very aware of how the physical education literature on this topic is criticised for its lack of practical activism (Culpan & Bruce, 2007) and in this particular situation the participants may require more guidance in the development of pedagogies and other emancipatory techniques that will assist them in the process of praxis.

Furthermore, the development of critically reflective physical education teachers is a complex task. The complexity is due in no small way to teachers being passively socialised into their role. It was evident from this study that to develop the participant teachers' ability to be critically reflective, then critically oriented PETE programmes need to be coherently deliberate. That is, PETE students need to be placed in situations where cognitive dissonance is created through the utilisation of probing and challenging questions and experiences that enables them to identify challenge and abruptly confront assumptions not only about physical education and sport in general but specifically in relation to their own teaching practice. Opportunities to explore and discuss possible solutions and implement these opportunities can only then present themselves. Drawing from the work of Culpan & Bruce (2007) and Gillespie & Culpan (2000), critical PETE programmes will need to facilitate, evaluate, question, instruct for critical thinking, teach for transfer, cue student teachers for this and be prepared to allow them time to develop solutions, implement these and critically reflect on them.

7. Conclusions and recommendations

7.1 Conclusions

Based on the preceding discussion of the findings, several conclusions are drawn from this study. Research Question 1 explored the graduating BEd (PE) students' beliefs about the philosophy underpinning HPE within the NZC (MOE, 2007). The findings of this study suggest that the BEd (PE) programme had some impact on the philosophical beliefs of the 2009, graduating year group. It is most likely that these beliefs were influenced by the content, pedagogies and experiences within the programme. It is proposed that the reflective processes evident in the programme may have encouraged the participants to explore personal philosophical positions and question particular decisions regarding their personal beliefs. The net effect of this meant that the participating PETE students had begun to develop an evolving, practical dissection of their existing conceptualisation of physical education and physical education teaching. Specifically, the five participants saw, to varying extents, the underpinning philosophy of the curriculum as having multiple aims, where, through a variety of different contexts, not exclusively sport, students can develop holistically and consider this knowledge from a personal, social and societal perspective.

Research Question 2 investigated the graduating students' beliefs about the pedagogical strategies required to implement HPE within the NZC (MOE, 2007). Again, the findings from this study suggest that the BEd (PE) programme had some impact on the pedagogical beliefs of the 2009 of the 2009 graduating year group. The participants demonstrated, to varying degrees, an understanding and application of behaviourist and psychological constructivist teaching approaches. In conceptualising a teaching continuum, consisting of teacher-centredness at one end and student-centredness at the other, the participants believed that by employing a number of different instructional models one could effectively teach and implement the NZC through employing a variety of teaching styles. Depending on the nature of the students and the content involved, the belief was that the teacher could therefore make a decision around the best approach to choose.

At face value this approach may appear to connect philosophical theory with practice, and to some extent it does, however, through the study's deeper examination, it is suggested that the participants were still grappling with the theory and that they may still have some way to go before they can include and reflect such thinking into their practice. This appears to be, in part, due to a lack of knowledge, understanding and confusion around the philosophical underpinnings of the HPE learning area.

Specifically, the participants failed to demonstrate an understanding of critical theory, its relevance to critical constructivism and its use in deconstructing the teacher-learner relationship and how this may relate to their own epistemological position and resulting teaching behaviours.

A second source of confusion lies in the participants' apparent inability to articulate and conceptualise humanistic philosophy as this relates to the NZC (MOE, 2007). They could articulate an understanding of holism and need to holistically educate their students, but this appeared superficial at best. This articulation fell short of conceptualizing humanistic education as it is intended in the NZC (MOE, 2007) and, therefore, being used as a means of comparing and contrasting the traditional, dominant performance model with the humanistic view of education as proposed in the NZC (MOE, 2007).

7.2 Recommendations

With the above conclusions in mind, the following recommendations are suggested to those charged with the conceptualization, writing and implementing of the newly emerging BPE (Hons) programme. Also, it is intended that these recommendations, if implemented, will enhance the graduating students' curriculum and pedagogical content knowledge as required by the graduating teacher standards (NZTZ, 2007) as reflected in the official programme documentation (University of Canterbury, 2010).

Recommendation 1

Socio-cultural and pedagogy courses within the newly emerging BPE (Hons) programme should further develop notions of critically reflective practice. This should consider an emphasis of critical theory as it relates to critical constructivism and therefore enhance the students' personal deconstruction of the teaching and learning process.

Recommendation 2

Socio-cultural and pedagogy courses within the newly emerging BPE (Hons) programme should further develop notions of humanistic and holistic educational approaches as reflected in the NZC (MOE, 2007) and the supporting literature. These courses should explicitly conceptualize the concepts of humanistic and holistic education and emphasize a need for students to compare and contrast these with the traditional sport performance model.

Recommendation 3

Courses in pedagogy, including professional practice, within the newly emerging BPE (Hons) programme should emphasise critically reflective practice as this is conceptualized in Recommendation 1.

Recommendation 4:

Courses in pedagogy, including professional practice, within the newly emerging BPE (Hons) programme should continue to emphasise the use of model-based instruction as a rationale for enacting HPE in the NZC (MOE, 2007).

Recommendation 5:

Courses in pedagogy, including professional practice, within the newly emerging BPE (Hons) programme should emphasise the relationship between humanistic/holistic educational philosophy and student-centred instructional models. Importantly, this emphasis should demonstrate a clear rationale for accessing and implementing humanistic/holistic philosophies of teaching and learning.

7.3 Limitations of the Study

Whilst every attempt was made during the planning stage of the study to eliminate any potential limitations, there were some that became evident as the study proceeded. Specifically, a sampling limitation arose where the mixed methods nature of the research placed an emphasis on the qualitative case study findings. Therefore, consistent with Johnson and Christensen (2012) this negates the ability to generalise these findings to the entire cohort or to previous graduating year groups. However, given the nature and scope of the study it is important to note that the use of the quantitative survey questionnaire (N=28) prior to the case study interviews may have provided greater validity and reliability to the data and a greater ability to generalize the overall study findings to the entire 2009 graduating cohort.

A further methodological limitation arose in the cross-sectional nature of the qualitative phase of the study. Five purposively selected 'typical' students, who were between the age of 22 and 24 years (Mean = 22.6 years) were selected for the semi-structured interview phase of the study. It is possible that there may be important cohort differences related to age of the students in each graduating year group. Similarly, the offer to participate and subsequent selection of interview participants resulted in a cultural bias. Four European/Pakeha students and one Māori student were interviewed.

Again, this limits the ability of the study to generate information around possible cultural differences that may exist in the graduating students' beliefs around curriculum knowledge and pedagogical content knowledge.

7.4 Future Research Implications

When considered within the wider body of literature, the findings of this study have implications for practice and future research on critical PETE programmes. As discussed earlier, previous research has suggested that students entering ITE and PETE programmes do so with strongly held beliefs that may be difficult to alter (Brookhart & Freeman, 1992; O'Sullivan, 2005). However, similar to Philpot and Smith (2011) the evidence presented in this study suggests that students entering a New Zealand critically oriented PETE programme that challenges student beliefs, presents a differing conceptualization of physical education and asks students to reflect on their practice may indeed alter some of these beliefs.

With this in mind, further research is required to identify the key content and features of the programme that contribute to the reasons for these changes in beliefs. The key components comprise of, the PETE students, the content of the programme and the physical education teacher educators. Therefore, as well as further research on the students' beliefs, future research should investigate the programme and course content, the pedagogies modelled within the courses and the rationale behind these components. Also, as suggested and researched by Muros and Fernandez- Balboa (2005), the beliefs of the physical education teacher educators themselves is an important variable in determining the programmes aims and therefore also requires investigation.

Additionally, and as suggested in the 'limitations' section above, the study has some methodological implications that if addressed would strengthen any research in this area. Firstly, future research could look to expand the cross sectional nature of the study to include and evaluate any age, gender or cultural variances. Secondly, future research could look to identify and evaluate changes in PETE students' beliefs over time. In this sense a longitudinal analysis would look to follow and research a cohort and individual students within it over the entire programme and therefore strengthen the validity and reliability of the data. Additionally, research that examines more than one cohort longitudinally would strengthen the ability to generalise any results or findings.

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Appendix A: Ethical Approval Form

Ref: HEC 2009/56/CoEdn

7 October 2009

Glenn Fyall
School of Sciences & Physical Education
College of Education
UNIVERSITY OF CANTERBURY

Dear Glenn

The Educational Research Human Ethics Committee is pleased to inform you that your research proposal “Graduating student teachers’ beliefs regarding the philosophy and pedagogy of physical education within the New Zealand Curriculum” has been granted ethical approval at their meeting on 23 September 2009.

This approval is subject to the correct footers in the information and consent forms. In this regard, please note that the College of Education HEC has recently changed its name to the Educational Research Human Ethics Committee and they ask that you amend all of the information and consent forms accordingly.

Please note that should circumstances relevant to this current application change you are required to reapply for ethical clearance / approval.

If you have any questions regarding this approval please let me know.

We wish you well for your research.

Yours sincerely

Dr Missy Morton

Chair

Educational Research Human Ethics Committee

“Please note that Ethical Approval and/ or Clearance relates only to the ethical elements of the relationship between the researcher, research participants and other stakeholders. The granting of approval or clearance by the Ethical Clearance Committee should not be interpreted as comment on the methodology, legality, value or any other matters relating to this research.”

Appendix B: Participant Information Sheet



University of Canterbury,
College of Education,
School of Sciences and Physical Education.

Attention: Glenn Fyall

July 2009

Dear BED/GradDip(PE) student,

As part of the requirements of the Master of Education I am undertaking a research study on “Graduating Physical Education Student Teachers’ understanding and implementing of the New Zealand Curriculum”. Whilst this project is completed in partial fulfilment of Master of Education degree, the information gathered will also contribute to the ongoing evaluation and critique of our Bachelor of Education/Graduate Diploma (Specialising in Physical Education) [BED/GradDip(PE)]. Hence, the information will be highly valued by the School of Sciences & Physical Education and assist the school in the continuing evolution of the programme. It is also intended that the findings from the research will be published in an appropriate national or international journal with a view to contributing to the wider Physical Education Teacher Education (PETE) community.

The study will involve the year 4 graduating students from the BED/GradDip(PE). Students will be randomly selected and invited to participate in the study. It is intended that 8-24 students will participate in two informal group discussion interviews and 4-6 will be invited to participate in a 45 – 60 minute (approx.) individual semi-structured interview. Interviews will be voice recorded and transcribed to paper so the interviewer can examine these in greater depth at a later time. The group and individual interviews will take place in an agreed upon location. Focus group interviews will take place in semester 2, term 3 2009 and individual interviews will take place semester 2, term 4 2009 at the conclusion of the year 4 final teaching practice. The interview questions will explore your personal understanding of Physical Education within in the New Zealand Curriculum (2007) and will draw on the knowledge and experiences you have gained from your involvement in the Bachelor of Education/Graduate Diploma (Specialising in Physical Education) programme and associated professional teaching practice.

Considering this, it is worthy to note that **all information gathered will be strictly confidential**

- Strict confidentiality will be observed and pseudonyms will be used for all participants in any documentation.
- Participants will have the right to withdraw any information they have supplied at any time.
- Participants may withdraw from the research at any time.
- If the participant has any concern regarding the research process they will be guided to the University of Canterbury, College of Education complaints procedure process.

Thank you for taking the time to consider your participation in the study and I look forward to hearing from you soon. Should you have any questions or concerns about your participation, please contact:

glenn.fyall@canterbury.ac.nz

Yours sincerely

Glenn Fyall

Appendix C: Consent Form

University of Canterbury,
College of Education.
School of Sciences and Physical Education.
Attention: Glenn Fyall

July 2009

I _____, consent to participate in the study being conducted by Glenn Fyall at the University of Canterbury, College of Education. It is further understood that I have received the following information concerning the study:

- The study has been explained to me, I understand the explanation that has been given and what my participation will involve.
- I understand that my participation is voluntary.
- I understand that I am free to discontinue my participation in the study at any time without penalty.
- I understand that if I have any concern regarding the research process I will be guided to the University of Canterbury, College of Education complaints procedure process.
- I understand that the results of the study will be treated in strict confidence and that pseudonyms will be used in all documentation. Within these restrictions, results of the study will be made available at my request.
- I understand that the data gathered will be stored in a secure place at all times and will be destroyed 12 months after the conclusion of the research project.
- I understand that the interview will be audio taped and transcribed verbatim and I will have the opportunity to check the transcript if I wish.
- I understand that at my request, I can receive additional explanation of the study.
- I agree to participate in this study under the conditions set out in the Information Sheet.

Signed: _____

Name: _____

Date: _____

Appendix D: Survey Questions

Survey questions

Part A	1. What do you believe HPE within the NZC is all about? What is its philosophy?
	2. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about the philosophy of HPE within the NZ curriculum?
	3. How do you believe critical theory embeds itself in HPE in the NZC?
	4. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of critical theory as it is intended within HPE in the NZC?
	5. How do you believe humanistic theory embeds itself in HPE in the NZC?
Part B	6. Can you identify and explain any course experiences or practicum examples that clarify your beliefs of humanistic theory as it is intended within HPE in the NZC?
	7. What do you believe are the pedagogical (teaching) approaches that best suit and are consistent with implementing HPE in the NZC?
	8. Can you identify and explain any course experiences or practicum examples that clarify your beliefs about these pedagogical (teaching) approaches?

Part A: Questions relating to the NZC

Part B: Questions relating to the HPE learning areas