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**‘Change is a journey’:  
investigating the complex  
process of educational change  
within Scottish primary  
physical education**

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# **‘Change is a journey’: investigating the complex process of educational change within Scottish primary physical education**

## **Abstract**

This thesis investigates the experiences of generalist primary teachers, in Scotland, as they instigated curriculum and pedagogical change in physical education. Five primary teachers with an additional qualification in physical education, the Postgraduate Certificate in 3-14 physical education (PGCert), were followed within their school contexts over an academic year. In contrast to much of the preceding literature this research provides empirical work at the micro level on educational change from the perspective of the individual teacher: illuminating the reciprocal relationship between professional learning and educational change. A qualitative, interpretivist approach underpinned the gathering and analysis of data. This approach reflected the focus of the study which was to understand and make sense of the multiple realities, experiences and views of participant teachers evolving from their social, cultural and historical contexts. Data were gathered using semi-structured interviews, unstructured interviews about teachers’ planning and observations of physical education lessons. The theoretical framework that was used to interrogate the data incorporated situated learning theory (Lave and Wenger, 1991), professional learning and educational change literature; in particular the work of Fullan was utilised to explore his concept of ‘change agency’. The first line of analysis establishes how the participant teachers approached teaching and learning in physical education prior to engaging with the PGCert. Thereafter the PGCert is examined to ascertain how the format and structure of this professional development opportunity came to influence the participant teachers. In the final analysis, an over-view of each teacher’s narrative in regards to their role in the change process is presented, outlining the curricular and pedagogical changes they initiated within their school contexts. Taken together, these findings contribute to research on educational change providing detailed analysis over an extended period of time of the motivating factors, constraints and complex character of change from the perspective of teachers within their individual school contexts. In the present educational climate where teachers are expected to be leaders of curricular and pedagogical change this study provides empirical evidence of teachers exercising their autonomy and integrating professional learning within their practice as they initiate and implement change.

## **Declaration**

I hereby declare that I, Nicola Carse have composed this thesis. It is entirely my own work, other than the counsel of my supervisors, and has not been submitted for any other degree or professional qualification.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

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## **Chapter 1 - Setting the Context**

### **Introduction**

We need a new way of thinking about educational change that takes into account the complex nature of teaching, teacher learning and the change process. (Hoban, 2002, p. 21)

It is the intention of this study, within the context of primary physical education, to investigate the process of change from the perspective of individual teachers. In doing so, I examine the complex nature of teaching, and the role teacher learning plays within the change process. The focus of this study is on the experiences of five generalist primary teachers, following their engagement with long-term physical education professional development, as they instigated change in their practice within their school contexts.

There is a tendency within the educational change literature to comment on system change at a policy, state and school level. In comparison, my small scale and in-depth study provides a different way of thinking about educational change by focussing on the experiences of individual teachers. Priestley (2011) suggests that there is a gap between policy - innovation being introduced, and practice - the changes that occur within schools in response to such innovation. Investigating this gap between policy and practice from the teacher's perspective I examine how teachers can exercise their agency, acting as change agents to initiate change.

Before progressing into the main thrust of the thesis the remainder of this chapter explores the context of the study. The Scottish context of this study is compelling because of the major curriculum change embarked upon through the introduction of Curriculum for Excellence. One of the most significant changes emerging from Curriculum for Excellence was the introduction of Health and Wellbeing as a core curriculum area, alongside literacy and numeracy, within which physical education has been placed. By investigating the process of curriculum change in relation to physical education my study is able to examine in detail the shifting status of this subject area, from the periphery to a more central position within the Scottish curriculum. In an attempt to situate the study for the reader, in the first section of this chapter I provide a brief outline of Scottish primary education revealing the

policy, cultural and structural factors which influenced the teachers. Following on from contextualising the study in relation to Scottish primary education, I attempt to position the study within the physical education literature. In doing so I provide background information on the status of physical education as a subject area and explain why there have been calls for change within physical education. After situating my study within the physical education literature I then look at the current status of primary physical education within Scotland elucidating the multiple factors contributing to raising the profile of this previously marginalised subject. Finally, having situated the study in relation to the policy context in Scotland I outline my position as the researcher within the study before explaining how the research questions evolved and outlining the structure of the thesis.

### **Scottish Primary Education**

The last decade has heralded significant developments in Scottish primary education following the implementation of the McCrone agreement, ‘A Teaching Profession for the 21st Century’ (SEED, 2001); the National Debate on Schools in the 21st century undertaken in 2002 (see Munn *et al.*, 2004), and the subsequent introduction of Curriculum for Excellence (CfE) (Scottish Government, 2009). These background policy developments contextualise my study, influencing the participant teachers in relation to their engagement with professional development and their efforts to instigate physical education curricular and pedagogical change.

### **The McCrone Agreement**

The aim of the McCrone agreement was to improve conditions of service for the teaching profession incorporating significant changes regarding a reduction in class contact time for primary teachers and the introduction of a framework for professional development (Munn and Arnott, 2009; Robinson, 2010). For primary teachers the McCrone agreement introduced a reduction in class contact time to a maximum of 22.5 hours (SEED, 2001). However, implementing this mandate challenged both primary schools and local authorities. Blane (2004) comments on the various approaches taken by schools and local authorities in Scotland to meet the reduction in class contact time for teachers ranging from the use of specialist teachers



to cover the time to enhanced, extended school assemblies. The most common approach to delivering reduced class contact time employed by the majority of local authorities across Scotland has been to use specialist teachers in subject areas such as physical education, music and art. While this has emerged as the easiest solution it does raise the question of generalist primary teachers becoming deskilled in these subject areas. This issue will be discussed latterly in this chapter in reference to Scottish primary physical education.

The McCrone agreement aimed to modernise the teaching profession in Scotland, and addressing continuing professional development (CPD) was seen as central to achieving this aim (Robinson, 2010). Significant changes were initiated regarding the way teacher professional development was to be structured. Scottish teachers were contractually obliged to undertake a maximum of thirty five hours of CPD annually. The undertaking of this CPD was to be “based on an assessment of individual need taking account of school, local and national priorities” agreed as part of an annual CPD plan with senior management, additionally a record was to be maintained by individual teachers to evidence their professional development (SEED, 2001, p. 7). The thirty five hour stipulation was incorporated into a new framework for CPD established under the McCrone Agreement. This framework introduced a series of standards some of which teachers were obliged to complete and others they were entitled to undertake at various stages in their careers: the Standard for Initial Teacher Education, the Standard for Full Registration; the Standard for Chartered Teacher, and the Standard for Headship (Kennedy *et al.*, 2008).

Although the McCrone agreement appeared to confirm the importance of career long teacher professional development and introduced a framework for CPD, debate about the purpose and value of professional development has remained (O’Brien, 2011). Indeed, in the recently published Donaldson Review (Scottish Government, 2011) reporting on teacher education while CPD was recognised as having a significant contribution to make to teacher professionalism concerns were raised over the “lack of focus in CPD and coherence and progression within it” (p. 68) Concurrently, a key recommendation made by the Donaldson Review was that there is a need for

professional development to be evaluated in relation to the impact it has on children's learning in schools. Reflecting on the literature, I felt that it would be valuable to spend an extended amount of time with teachers observing them within their school contexts. I chose to incorporate this element of observation into my study as I felt that it would provide valuable insight into how teachers apply professional learning within their everyday practice in physical education, and how this is subsequently beginning to impact on the learning of the children they are working with.

### **Curriculum for Excellence**

Following on from the national debate in 2002, the Curriculum Review Group was established in 2003 to reassess the Scottish curriculum and subsequently *Curriculum for Excellence* (CfE) emerged. The development of the curriculum unfolded over a number of years supported by a range of documentation and a consultation process (see Priestley and Humes, 2010). The underlying premise of CfE was to achieve greater curriculum coherence across the age range of three to eighteen and beyond promoting lifelong learning, as Priestley and Humes (2010) note:

It [CfE] signals a serious attempt to provide a coordinated approach to curriculum reform for the full age range 3–18...and taking account of anticipated future needs deriving from economic, technological and social changes. The new curriculum is claimed to be distinctive in that it explicitly moves away from central prescription of curriculum, towards a model that relies upon professional capacity to adapt curriculum guidance to meet the needs of local school communities, drawing upon the arguably successful experience of prior initiatives such as Assessment is for Learning.

(Priestley and Humes, 2010, p. 345)

Although CfE had high aspirations to reform Scottish education in line with technological, economic and social changes in 21<sup>st</sup> century society the implementation of this curricular innovation has been a somewhat arduous task (Priestley and Humes, 2010). There were many elements of the curriculum applauded by practitioners and academics, such as privileging a more constructivist approach to teaching and learning (Reeves, 2008) and positioning teachers as curriculum innovators (Priestley, 2010). However, criticism of the content, structure,

and development of CfE has come to overshadow the implementation of this curricular innovation.

Reeves (2008) highlights that to achieve the lofty aspirations of a more constructivist inclined approach to curriculum and pedagogy, favouring interdisciplinary learning and requiring children to exercise greater autonomy over their learning necessitates: “developing new capabilities and capacities at an individual and organisational level in schools, other establishments, and local authorities” (p. 11). Concurrently, Priestley (2010) highlights the lack of capacity within the education system to negotiate curriculum change as a process rather than a product. He argues that CfE has largely failed to take account of “the professional judgment and agency of practitioners” (p. 25). My study is situated within this evolving policy context that has reignited debate regarding the conception of teacher professionalism within the education system (Kennedy, 2007). Recently introduced reforms hint at promoting a more distributed approach to leadership within schools, exemplified in the Standard for Chartered Teacher (Scottish Executive, 2002) and CfE positioning teachers as agents of change responsible for developing as well as enacting the curriculum (MacDonald, 2004; Torrance, 2009; Priestley, 2011). However, there is limited evidence to illustrate the influence of this “flatter” management structure within Scottish primary schools (Reeves, 2008, p. 12). My study seeks to contribute to this gap, exploring how generalist primary teachers with an additional qualification in physical education developed the capacity to take on a lead role instigating curricular change within their school contexts.

### **Physical Education**

This study takes place at a time when there is great momentum for changing the curricular and pedagogical practices of physical education (Penney and Chandler, 2000; Wright *et al.*, 2004; Bailey *et al.*, 2009; Thorburn, Jess and Atencio, 2009; Armour, 2010; Kirk, 2010). Questions have been raised about the way in which physical education is currently defined, structured and taught. Much criticism has been levied against the multi-activity block, sport orientated nature of the curriculum which has “legitimated a view of physical education as comprising merely a collection of activities” (Penney and Candler, 2000, p. 75). In particular, concerns

are raised that the delivery of such activities focuses on performance of specific skills, detracting from the educative, creative and connective potential of physical education. Much of the physical education literature highlights the need for connections to be made within the subject, with other curricular areas and beyond the curriculum into later life. Kirk (2010) presents a critical overview of contemporary physical education, drawing on historical developments and present-day practices. Three possible futures for the subject are suggested: 'more of the same'; 'radical change' or 'extinction'. Kirk contends that 'radical change' is required to secure the long term future of the subject.

The need for 'radical change' in physical education and a shift away from the dominant multi-activity sport orientated block model is also supported by Jess, Atencio and Thorburn (2011). Within a Scottish context, they suggest that complexity theory principles can be used to move physical education forward in 'new' postmodern times: "complexity principles describe our own 'messy' and diverse endeavours to provide a new curriculum and associated pedagogical strategies in Scottish physical education" (Jess *et al.*, 2011, p. 195). These critiques of physical education dovetail with challenges to the direct and behaviourist pedagogical approaches which have long held currency in physical education (Light, 2008; Hopper, 2010). Much of the recent physical education literature argues for the emergence of a more constructivist and collaborative orientated approach to delivering physical education, where more emphasis is placed on scaffolding knowledge and learning (Kirk and MacDonald, 1998; Dyson, 2002; Penney and Jess, 2004; Rovegno, 2006). Such an approach would arguably be better placed to respond to the socially and culturally changing times we currently live in by encouraging learners to engage with their environment and actively construct meaning rather than waiting for knowledge to be transmitted to them (Wright, 2004).

## **Scottish Primary Physical Education**

### **Influence of Policy**

Research on primary physical education in Scotland and other countries has shown that it has been a long marginalised area of the curriculum (Hardman and Marshall,

2000; Jess, 2011). However, current educational reform within Scottish education has contributed to raising the profile of primary physical education and provides a rich and unique context to frame this study. The report by The Review Group on Physical Education (Scottish Executive, 2004), published in response to the HMIE report (HMIE, 2001) and Physical Activity Strategy (Scottish Executive, 2003), made three key recommendations about physical education in Scotland:

- Schools should increase participation levels and opportunities in physical education
- Improvements should be made to the curriculum, reviewing guidelines for physical education and its placing within Expressive Arts
- To support teachers, investment should be made in physical education CPD opportunities and in supporting research to inform teaching and learning.  
(Scottish Executive, 2004)

Over the past five years these recommendations have begun to impact on physical education provision in Scottish schools.

With the development of CfE, physical education moved from being an Expressive Art to being part of Health and Wellbeing. Correspondingly, in an attempt to increase participation levels in physical education, the Scottish Executive set a target in 2004 that within four years all schools should provide two hours of quality physical education for pupils each week. Although all schools have attempted to deliver two hours of physical education each week, reporting in 2009 the Health and Sport Committee noted that they had received conflicting reports on the progress primary schools in particular had made to meet this target. In response, the Committee suggested that greater coordination was required between the Scottish Government, local authorities and schools to meet the two hour target (Scottish Parliament, 2009). Additionally, to support generalist class teachers to deliver 'quality' physical education the Scottish Government invested in training to support teachers, by funding postgraduate qualifications in primary physical education at the Universities of Edinburgh and Glasgow. Each university developed their own postgraduate certificate centring on primary physical education. The University of Edinburgh devised a two year part-time course, the Postgraduate Certificate in 3-14 physical education (PGCert), which all of the participant teachers from my study were graduates of (the PGCert is outlined in more detail later in this chapter). Taken

together these policy developments have contributed to raising the status of primary physical education within Scottish education (Jess, 2011).

### *Curriculum Developments*

Arguably, within the context of Scottish education, the physical education curriculum that has long held favour has been too outcome driven, with an over reliance on direct teaching of pre-determined subject matter, failing to take into account learner needs and interests (Thorburn *et al.*, 2009). Contrastingly, the PGCert espoused an alternative conception of physical education, highlighting a developmental approach that addressed the holistic nature of learning in physical education making connections within and beyond the curriculum. As generalist primary teachers graduate from the PGCert programmes they bring new knowledge and understanding of approaches to teaching and learning in physical education into their school contexts. Following their involvement with the PGCert I wanted to ascertain the extent to which the teachers from my study engaged with the alternative conception of physical education espoused by the course and how they applied it in their practice. It is vitally important that research in physical education explores the links between teaching and learning as well as considering the key features required in the design and implementation of a physical education curriculum that responds to pupil learning needs (Jess *et al.*, 2011). In response to this call for further research into Scottish primary physical education my study looks to investigate and provide a detailed account of the process of curriculum change in physical education that is beginning to occur in some Scottish primary schools.

### **Physical Education Specialist Teachers**

As well as reviewing policy factors influencing Scottish primary physical education my study explores the central role that physical education specialists have played in delivering physical education within Scottish primary schools. Petrie (2010) highlights that in a number of countries; New Zealand, Australia, Canada, England and Ireland, the responsibility for teaching physical education in primary schools has largely been assumed by generalist teachers. Therefore, Scotland operating a largely specialist approach to delivering primary physical education is placed in a somewhat

unique position. The conventional approach to delivering physical education in Scottish primary schools has been to employ a specialist teacher to work with class teachers to deliver physical education. These specialist teachers often had responsibility for delivering physical education to a number of schools within a local authority. Generalist class teachers were expected to observe physical education lessons delivered by the specialist teachers, and then deliver a similar follow up lesson.

Working co-operatively with physical education specialist teachers provided generalist teachers with a point of reference for their own teaching of the subject. However, the McCrone agreement signalled a change in the role of primary physical education specialists and their working relationship with class teachers. As previously intimated, across Scotland within many primary schools physical education specialist teachers and other specialist teachers (e.g. art and music) were asked to deliver the reduction in class contact time for primary teachers. Consequently, generalist teachers were no longer required to observe lessons delivered by the physical education specialist. Therefore, class teachers had less opportunity to observe and liaise with physical education specialist teachers or to personally deliver physical education. I wanted to investigate how the participant teachers from my study were influenced by the physical education specialist teachers they worked with and how this relationship was affected by the McCrone agreement. I also wanted to ascertain the extent to which the changing relationship with the specialist impacted on their confidence to teach physical education and if this contributed to the teachers seeking out the professional development opportunity provided by the PGCert.

### **Physical Activity: Active Schools**

In conjunction with the developments in Scottish physical education outlined above, there were also developments in physical activity which impacted on the profile of physical education and physical activity in Scottish schools. Most significantly, the Active Schools Programme launched in 2000 has become firmly embedded within Scottish schools offering children opportunities to be physically active before, during and after school, as well as in the wider community. Funded by the Scottish

Government and coordinated by sportscotland the programme operates through a network of local authority managers, school based coordinators in primary and secondary schools, along with volunteers delivering activity sessions in schools and communities across Scotland (Reid, 2009). Official reports on the effectiveness of Active Schools (sportscotland, 2006 and 2007) emphasised the significant impact the programme had on physical activity levels, particularly in primary school settings. In relation to my study, I was interested in finding out the extent to which the participant teachers were able to make connections between physical education and physical activity by making links with the Active School coordinators working within their school contexts.

### **The Scottish Primary Physical Education Project**

The postgraduate certificates in physical education devised by the Universities of Edinburgh and Glasgow commenced in 2006 with around 400 teachers. Subsequently a partnership evolved between the two universities, the Scottish Primary Physical Education Project (SPPEP). While both universities work in close collaboration on the SPPEP project as previously mentioned each offers its own version of the PGCert; the University of Glasgow developed the Postgraduate Certificate in Primary Physical Education (PGCPPE) and the Developmental Physical Education Group (DPEG) at the University of Edinburgh developed the Postgraduate Certificate in 3-14 physical education (PGCert). As of 2011, 1,200 Scottish teachers had enrolled in or completed the PGCerts at the Universities of Edinburgh and Glasgow (Jess, 2011).

### **The Developmental Physical Education Group**

The DPEG was formed in 2001 with the intention of promoting developmental physical education (see Gallahue and Donnelly, 2003) and reconceptualising physical education in Scottish schools (Jess *et al.*, 2011). Initially the DPEG focussed on devising a physical education programme for children aged between five and seven, *Basic Moves* (Jess, Dewar and Fraser, 2004). Developed with funding from sportscotland, *Basic Moves* aimed to:



Help pre-school and primary school age children develop a solid foundation of the travelling, object control and balance movements that underpin their future participation in all types of physical activity.

(Jess and Collins, 2003, p. 113)

As well as attending to physical development *Basic Moves* sought to address key cognitive, social and emotional factors. With a view to enhancing participation in physical activities across the lifespan *Basic Moves* attempted to move the early years physical education curriculum beyond the isolated learning of movement technique, injecting an element of adaptability and creativity into the curriculum (Jess and Collins, 2003; Bailey, *et al.*, 2009).

To disseminate the *Basic Moves* programme the DPEG initiated a CPD programme. Initially, the professional development sessions followed a traditional CPD format of two, day courses delivered with a supporting manual. While feedback was generally positive, problems with this form of CPD emerged as teachers did not feel supported when they returned to their school contexts (Atencio, Jess and Dewar, 2012). In response the DPEG introduced longer-term, more learner centred CPD, launching *Basic Moves* tutor training. The main premise behind the tutor training was to support teachers to develop a *Basic Moves* programme within their schools and cascade this approach with colleagues. Through the development of *Basic Moves* the DPEG were able to raise the profile of primary physical education within Scotland and experiment with different approaches to professional development (Atencio *et al.*, 2012).

Broadening their physical education curricular and pedagogical interests beyond the infant years, by 2005 the DPEG had extended their agenda to cover the three to fourteen age range. Building on *Basic Moves*, the upper primary and early secondary (UPES) curriculum was developed. The UPES curriculum advocated a more holistic approach to physical education taking account of core learning in the physical, social, emotional and cognitive domains, as well as promoting an approach to teaching and learning in physical education grounded in the real-life experiences of children (Jess, Carse, McMillan and Atencio, 2011). When the opportunity arose to develop the PGCert in 2006, it provided a medium through which the DPEG could combine and further develop their curricular and pedagogical efforts in primary

physical education. Additionally, they were able to draw on their extensive experience of delivering CPD to develop a professional development programme to best meet the needs of teachers as learners (Jess, 2011).

### **The PGCert and the SPPEP**

The origins of the PGCert stemmed from concerns voiced by central government and within wider society about the quantity and quality of physical education provided in Scottish primary schools, combined with the perceived ailing state of the country's health. In response to policy recommendations coming from HMIE and the Review Group on Physical Education the purpose of the PGCert was to extend generalist class teachers' knowledge and understanding of physical education. These societal and policy concerns about the quality and quantity of the provision of physical education in Scottish schools exemplify a top-down pressure for change. However, concomitantly by investing in a physical education professional development opportunity targeted at primary teachers across Scotland, and assigning the Universities of Glasgow and Edinburgh to work collaboratively to devise and deliver it I would argue the Scottish Government has, perhaps somewhat inadvertently, contributed to creating a potential hub for bottom-up educational change. Crucial to the ability of the participant teachers from my study to extend their professional learning into their schools, the PGCert afforded them time and space to examine and re-examine their beliefs, values and approach to teaching physical education. As this thesis progresses, it will become apparent that the teachers in my study were inspired by the PGCert to improve the quality of physical education experiences for the children they were working with.

The efforts of the DPEG to raise the profile of Scottish primary physical education did not start and end with the PGCert. As previously intimated, the partnership between the Universities of Edinburgh and Glasgow evolved into a research project, the SPPEP. Initially the focus of this research project was to evaluate longitudinally the effectiveness of the postgraduate certificates on teachers and their practice (Jess, 2011). As the SPPEP has evolved, to build on the PGCerts and continue to promote Scottish primary physical education the remit of the project has extended: developing further CPD opportunities; liaising with a variety of stakeholders to extend the scope

of the project and attempting to foster a network between PGCerts graduate teachers and other key physical education and physical activity stakeholders.

The current policy context in Scotland in regards to curriculum change and modernising the teaching profession along with the evolving revised conception of physical education provides a context framing this study. However, this contextual reasoning for my study does not explain my interest in the topic and I feel that it is relevant to present some background information about me and how I came to undertake this research.

### **My Background**

There are two areas of interest to me which have impacted most significantly on my professional life and my present research; education and politics. My interest in politics was ignited through my engagement with Modern Studies and History at secondary school. I was curious to learn about how our society and other societies had evolved. It was my interest in these subject areas that led me to study political studies as an undergraduate student at the University of Aberdeen. I found the degree fascinating and relished the opportunity to study the political systems of different countries, exploring in-depth the workings of these systems. I found as I studied politics I was drawn towards the concepts of equality and social justice which perhaps explains my interest in education. Following my undergraduate degree I undertook a postgraduate qualification in teaching and prior to studying for my PhD I had been working as a primary teacher for eight years.

While I was teaching I fully involved myself in the life of the school, seeking out opportunities to extend my role beyond the classroom. I believed that education needed to be grounded in real life experience and I strove to situate the learning of the children I worked with in this way. Pursuing this belief I worked alongside children on projects which contributed to the wider life of the school, in particular organising the school environmental group and developing a school parliament. Looking back now I would suggest that I viewed the school as a learning community, as I recognised that I could learn as much from the children as they could from me. However, as a teacher with a more holistic conception of education I struggled with

the emphasis placed on testing and targets by the education system. I felt demoralised and under-valued by successive changes that failed to become embedded and accountability measures that seemed to disregard the individual learning needs of children.

Although I valued the collegial ethos operating within my school, at times I felt like a lone voice operating on the periphery of the school community as few of my colleagues seemed to share the vision of teaching and education I had. Additionally, while my colleagues voiced their concerns about successive centrally driven reforms and accountability measures they remained compliant. In comparison, I sought out and experimented with a variety of approaches to teaching and learning which contributed to increasing my confidence in my teaching abilities. However, as my confidence grew so did my frustration with the education system. It was at this point in my career, when I was looking for career opportunities outside of teaching that I found out about the PGCert.

I had been teaching for seven years when I enrolled on the PGCert and without wanting to sound dramatic, this experience changed my life. From the very beginning of the course I relished the opportunity to engage with theory and I began to develop a better understanding of how this related to my practice and how I felt about teaching. Studying for the PGCert reignited the passion I had felt for studying during my undergraduate degree, I enjoyed engaging with the academic and policy literature, and writing the assignments. I was desperate to apply what I was learning in my practice. As well as experimenting with the new skills and knowledge I gained from the PGCert in the gym hall I also transferred them into my class teaching. Although I had attempted to apply ideas from CPD I had previously engaged with, in contrast the PGCert provided me with a feeling of confidence and competence I hadn't previously experienced. Subsequently, when the opportunity of the PhD studentship with the DPEG arose, I felt that it offered me an opportunity to further pursue my interest in education outside of teaching.

In devising my study, when I reflected on education literature I felt that insufficient attention was paid to exploring the stories of individual teachers, particularly within a Scottish context. This gap in the literature was made more compelling when I

reflected on my own professional life experience. I was curious to ascertain if other teachers undertaking the PGCert had the same experiences of the course as I did. Relating my professional life experience to the literature, I developed an interest in professional development, educational change and teacher change. Within this thesis I explore the relationship between these concepts and how, when taken together they have the potential to impact on enhancing the autonomy of both teachers and the young people they teach. Reflecting on both my personal teaching experience and current literature I made the decision to study in-depth the voices of a small number of teachers, in order to tease out their stories to establish how their background and the PGCert influenced their present teaching practice. Concurrently, I felt that my experience as a teacher along with my involvement on the PGCert gave me a point of entry to study the lives of teachers.

### **The Research**

Drawing on the policy context, published research to date and my personal experiences as a primary teacher I designed a small scale study, working with five teachers to gain a detailed picture of the complex nature of teaching, teacher learning and the change process. This small scale, in-depth study also complemented research into the effectiveness and impact of the PGCert undertaken on a larger scale as part of the Scottish Primary Physical Education Project (SPPEP). I wanted to know what impact, if any, the PGCert had on teachers' thinking and approach to teaching physical education. I also sought to ascertain what primary physical education looked like when taught by teachers who had engaged with the PGCert. This line of inquiry led me to devise the main research question for the study:

- How do primary teachers with a further qualification in primary physical education construe and take forward educational change in primary physical education?

This entailed asking three further sub-questions:

- In what ways have these individual teachers' experiences of professional learning in physical education shaped their pedagogy and the primary physical education curriculum in their schools?

- How have these teachers instigated and implemented curricular and pedagogical change in physical education?
- What factors facilitate and impede the continuation of the process of educational change?

I believed that, investigating the in-situ experiences of individual primary teachers would contribute to research into professional development and teacher change, which I perceived lacked in-depth empirical analysis from the perspective of individual teachers. Concomitantly, my study sought to provide valuable insight into primary physical education, an area which has received limited attention within the physical education literature.

### **Structure of the Thesis**

The purpose of this first chapter was to set the context for the study. In chapter two I embark on my review of literature which has informed my thinking and analysis. I review educational change and professional development literature, incorporated into this broad overview is a specific focus on the work of Fullan on educational change and Lave and Wenger in relation to the situated nature of learning. Education and physical education literature are drawn on in an interconnected manner throughout the literature review from a national and international perspective.

In chapter three I describe the methods used to answer the research questions. I explain the design of the study incorporating the research paradigm adopted in the study, the methods used and the sampling strategy. Following on from this account of, and rationale for, the design of the study the interrelated processes of data gathering and analysis are outlined.

Chapters four, five and six constitute the main analysis of the thesis. The data were initially analysed from a situated learning (Lave and Wenger, 1991) theoretical perspective which is interwoven through each chapter. To augment this theoretical perspective each chapter utilises a further theoretical lens from which to view the data. In chapter four I seek to establish the background of each teacher, Lawson's (1983a & b) model of teacher socialisation is utilised as a theoretical lens to trace the

physical education socialisation of each teacher. Subsequently, in chapter five the professional socialisation of the participant teachers is focussed on to ascertain how the structure and content of the PGCert influenced the participant teachers. Here the triple-lens framework developed by Fraser *et al.* (2007) is applied as a theoretical lens to evaluate the effectiveness of the professional development provided by the PGCert and how it contributed to teacher change. Leading on from the findings of chapter five, chapter six explores teacher change in more detail. The work of Fullan is utilised as a theoretical lens to explore the ‘change story’ of each teacher, identifying factors that facilitated and impeded their change efforts.

Concluding the thesis in chapter seven I reflect on the findings from the previous analysis chapters. I discuss what can be learned about the provision of professional development and professional learning. Additionally I consider the change story of each teacher to determine factors that facilitate and impede teachers as they instigate curricular and pedagogical change. In response to the findings next steps for my research are also outlined.





## **Chapter 2 - Literature Review and Theoretical Lenses**

### **Introduction**

This chapter is a discussion of the range of literature drawn upon to address the research questions used to guide the study. The main aim of the research was to investigate how generalist primary teachers with an additional qualification in physical education construe and take forward curricular and pedagogical change. While a wide range of literature was considered and consulted in relation to education and physical education, this literature review concentrates mainly on educational change literature, and literature on teacher professional development and learning. Concurrently, the overarching theoretical lens used to inform my analysis within this thesis was situated learning theory (Lave and Wenger, 1991). Situated learning theory was complemented by the use of three additional theoretical lenses which were used to illuminate specific themes emerging from the data. This body of literature is reviewed because it is of most relevance to my study and it informs my examination of the research questions guiding the study.

The first section of this chapter focuses substantively on the work of Fullan examining educational change at both a macro and micro level. The historical background of educational change is explored to identify societal and political influences that have, over time, competed to set the agenda for educational reform. A key theme emerging from the existing body of research is that change is “easier said than done” (Fink and Stoll, 2005). Correspondingly the literature is examined to identify the successes and failures of change initiatives both nationally and internationally, and to explore the positioning of teachers within educational change. Analysing change at a macro level, the impact of large scale centrally driven reforms are reviewed. Contrastingly, examining change from a micro perspective, literature is explored which focuses on the response of teachers to change.

Considering the impact of educational change and professional development on teachers much of the literature points to the need to take into account the professional identity of teachers. Correspondingly teacher socialisation literature is examined focussing in particular on Lawson’s (1983a & b) model of teacher socialisation as a

theoretical lens to analyse the background physical education experiences of the participant teachers from my study. Additionally in the second section of this chapter professional development literature is reviewed to: clarify the terminology used within the thesis; examine different approaches to professional development, and establish what constitutes effective professional development. The triple lens framework (Fraser *et al.*, 2007) is used within this study as a theoretical lens to analyse the structure and impact of the professional development undertaken by the participant teachers. I now turn to the first task of this literature review which is to clarify how the term “educational change” is to be used within this thesis.

### **Educational Change**

The extensive body of literature on the subject of educational change indicates that historically and internationally it has been an omnipresent feature within education systems (Ellsworth, 2000; Goodson, 2001; Fullan, 2007; Hargreaves *et al.*, 2010). Emerging from the literature is a pervading sense that: “reform attempts are endemic and ongoing; and these attempts have been largely unsuccessful in changing the underlying structures and axioms of schooling” (Priestley, 2007, p.18). Within the literature a myriad of educational change initiatives are examined and subsequently frameworks are proffered claiming to have the potential to support the initiation, implementation, and continuation of educational reform (see Ellsworth, 2000; Hargreaves and Goodson, 2006; Fullan, 2007; Hargreaves, 2009). Although a great deal of time and money has been invested in large scale educational change, historically many of the reforms have had little impact on the performance of school systems or on the life chances of young people (Harris, 2011). The attention afforded to large scale reform and the associated successes and failures neglects to provide detailed evidence of what change looks like in practice. While some reference is made to the role of the teacher within these large scale reforms and attempts are made to ascertain teacher response to change, there is a lack of detailed accounts of ‘bottom-up’ change (Fullan, 1993; Harris, 2011) initiated by teachers. This reveals a gap in the literature which this study seeks to address by providing detailed description of what change looks like at the ‘chalk face’; positioning teachers as initiators as well as recipients of change.

## **Defining Educational Change**

Attempting to define educational change in simplistic terms, I would suggest that it involves the introduction of an innovation with the underlying intention of modifying the status quo. This change can be initiated from the top-down by central government or from the bottom-up by schools and teachers (Fullan, 1993). This simplistic, linear cause and effect definition uncovers the fundamental purpose of educational change. However, it obscures the multifaceted description of educational change presented within the literature (Hargreaves, 2005a and b; Hoban, 2002; Fullan, 1993, 1999, 2003), incorporating discussion on related concepts such as innovation, curriculum change, pedagogical change, system change and teacher learning. Fullan (2007) further exemplifies the complex nature of educational change describing: the potential for change to be both voluntary and imposed; the uncertain nature of the change process; the need for simultaneous top-down and bottom-up influence on the change process, and how real change requires an alteration in beliefs as well as behaviour. When reference is made to educational change from a macro, large scale perspective this often refers to change across the education system as a whole incorporating a wide range of factors including higher and further education, schools, preschools, school buildings and initial teacher education (ITE). In contrast I take a micro, small scale perspective of educational change centring on the experiences of individual teachers. As I explore the individual experiences of each teacher in relation to educational change the complex and continuous nature of change as a process becomes increasingly evident (Fullan, 1993; Hoban, 2002). The micro educational change investigated in this thesis reveals interplay between professional development, professional learning, curricular and pedagogical change.

### ***The 'New Way' of Educational Change***

In the 21<sup>st</sup> century where it appears that “change is a mantra for the modern age” (Priestley, 2011, p.1), it is suggested that change should be viewed as a process rather than an event. Hoban (2002) asserts that “educational change is a complex process involving many interconnected elements that have a dynamic effect on each other” (p. 29). Hargreaves (2009) also intimates that there are a wide range of

interconnected factors which influence the change process. To respond to the challenges and problems society will face in the new millennium Hargreaves (2009) posits that it is time for a “New Way” of educational change. He suggests the ‘New Way’ should account for the interconnected factors influencing the change process by: looking to the best initiatives from the past learning from and building on these; developing an international perspective on educational change, and attempting to advance democratic and humanitarian values as well as economic values. In line with Hargreaves (2009) recommendation, I explore the educational change literature from an historical and international perspective. Additionally by focussing on the role of the individual teacher in the change process I look to illustrate how democratic values can feature in the change process as well as economic values. To begin my review of the educational change literature I turn to the past.

### **Learning from the Past**

Fullan (2009), Hargreaves (2009) and Goodson (2001) have all charted the history of educational change throughout the twentieth century and the varying impact it has had on education systems. Looking historically at educational change reveals the constraining and enabling factors that have affected previous change initiatives; this process of reflection is crucial in shaping future education policy, practice and research (Hargreaves, 2009). Goodson (2001) tracks the social history of educational change through the post Second World War period, into the twenty first century and beyond. He characterises the 1960’s and 1970’s as a period of internal change where educators exercised substantial professional autonomy playing a central role in initiating and defining educational change. In comparison the 1980’s and 1990’s marked a shift to a period of external change led by central government where educators were positioned as receivers of change rather than change initiators. This period wore down relations between the external (government) and internal (educators) forces of change, “people become conservative respondents to, and often opponents of, externally initiated change” (Goodson, 2001, p. 48). Hopkins and Reynolds (2001) note that during the late 1970’s and 1980’s there was an emphasis on organisational change within schools which failed to impact upon classroom practice and by the 1990’s there was growing evidence that national education

reforms instigated in a number of Organisation for Economic Cooperation and Development (OECD) countries had not proved successful.

In the new millennium Goodson (2001) acknowledges that to support and move forward educational change requires more than a balance between internal and external change forces, it also requires recognition of the role personal identity and perspectives play within change processes. Kirk and Macdonald (2001) found that large-scale health and physical education curriculum reform in Australia challenged the professional identity of teachers. Attempting to position the role of the teacher within curriculum change they purported that: “learners’ needs and abilities, teachers’ skills and motivation and the obdurate, practical features of classroom life are very real and significant considerations when teachers attempt to introduce reforms into their classrooms” (Kirk and Macdonald, 2001, p. 560). Day and Smethem (2009) suggest that the barrage of reforms that teachers have experienced over recent years has led to an erosion of their autonomy and identity. They stress that the success and sustainability of educational change requires an understanding of how teachers experience and respond to educational change. This is a gap in the literature to which my study seeks to contribute by describing the experiences of teachers as initiators of change. Reviewing the historical background of educational reform reveals how societal and political influences have, over time, shaped the education system and the teaching profession.

### **Societal and Political Influences**

A consensus emerges across the educational change literature emphasising the significant influence of the political and ideological background of education policy on the process of educational change. Underlying most centrally driven educational change is an inherently political agenda that often fails to take account of the realities of teaching and learning in school contexts (Alexander, 2008; Harris, 2011).

Viewing educational change from a historical perspective reveals how the origins of reform initiatives often stem from outside of schools and are grounded in demographic, economic, and political trends (Hargreaves and Goodson, 2006; Ball, 2008). As Alexander (2008) states:

Life in schools and classrooms is an aspect of our wider society, not separate from it...The character and dynamics of school life are shaped by the values that shape other aspects of our national life. (p. 16)

Educational change has often mirrored tensions in wider society, as initiatives are introduced in response to societal developments and dominant ideologies of the time (Bollen, 1996). Being “politically critical and more historically aware” contributes to understanding how to promote more sustainable educational change, along with the longevity of reforms over quick fix gains (Hargreaves and Goodson, 2006, p. 35). Looking historically at educational change reveals the influence dominant ideologies have had on government policy making over time and the shifting relationship between the two.

### *The Influence of Ideology*

Hill (2001) describes ideology as a “more or less coherent set of beliefs and attitudes that is regarded as self-evidently true, as ‘common sense’ in opposition to other belief systems” (Hill, 2001, p. 8). However, this simple description of ideology does not reveal the underlying complex nature of ideology and the impact it can have on government policy making and society. McLaren (1988), citing Giroux (1983), provides a more multifaceted description of ideology:

The production, consumption, and representation of ideas and behaviour, which can either distort or illuminate the nature of reality. As a set of meanings and ideas, ideologies can be either coherent or contradictory; they can function within the spheres of both consciousness and unconsciousness; and, finally, they can exist at the level of critical discourse as well as within the sphere of taken-for-granted lived experience and practical behaviour. (p. 168)

Simultaneously ideology is capable of positively enabling people to make sense of their social and political world while also negatively concealing social contradictions and conflict, duping them into going along with a potentially exploitative and oppressive system (Hill, 2001; McLaren, 1988). To understand the impact ideology has on education it can be viewed historically along a left-right ideological continuum; this continuum is commonly used to view how ideology has influenced economic and social policy (Hill, 2001).

Prior to 1944 education was dominated by a right wing conservative ideology with provision of schooling based on social class and gender. The end of the Second World War marked a move both ideologically and politically towards the left. A broader social democratic consensus on education emerged promoting equality of opportunity and experimenting with the concept of comprehensive schools. The subsequent economic crisis of the 1970's paved the way for a swing back to the right as the succeeding Conservative government began to pursue a neo-liberal political agenda. This was epitomised by the promotion of competition within the education system through school league tables and the introduction of a national curriculum<sup>1</sup>. Consequently ideological compliance was ensured while marginalising discussion of, and opposition to, alternative approaches to curriculum, teaching and learning (Hill, 2001). Following on from the individualism and capitalism that marked the 1980's and early 1990's, an ideological mix (Paterson, 2003; Ball, 2007) emerged under 'New Labour', the 'Third way'.

Focussed on 'modernisation', the 'Third Way' drew on elements of neo-liberalism while maintaining the influence of the state, encouraging the public sector to learn from and emulate the private sector; "controlled decontrol" (Ball, 2007, p. 21). Market principles were injected into the education system with an emphasis placed on performativity (see Lyotard, 1984), competition, new managerialism and public – private partnership. Government policy asserted that choice and entrepreneurial spirit were being injected into the education system to modernise it, with pupils and parents described as 'clients'. Yet, in contradiction to this, the government ensured it retained control and achieved 'value for money' through closer scrutiny of education and employing performativity measures, such as target setting and national testing (Hargreaves, 2004, 2009). The 'Third Way' ideology promoted under 'New Labour' illustrates the complexity of ideology and how it can be exploited by governments as they cherry pick elements of different ideological positions to push forward their political agenda. Looking historically at the impact of ideology on education policy

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<sup>1</sup> Although the education systems of England, Wales and Scotland are separate both systems introduced a national curriculum in the late 1980's. In England and Wales the national curriculum was established in law, this was not the case in Scotland where it was implemented as guidelines.

reveals how forces and structures external to education have, over time, defined educational practice.

Tracing the impact of different ideologies on education policy reveals that schools and teachers have been subjected to:

Waves of reform that define historical periods or directions that the schools [and teachers], depending on their identity, either embrace or resist. These waves challenge, then in turn revert to traditional grammars of schooling defined in terms of conventional academic subjects, schedules, tracking, and assessments.

(Hargreaves and Goodson, 2006, p. 15)

Whether teachers accept or resist change I would suggest that a pattern emerges within the literature; the most common response of teachers to change initiatives is to modify them to match their current practice, resulting in reform without real change (Halpin *et al.*, 2004; Lee and Yin, 2010; Harris, 2011; Hoekstra and Korthagen, 2011). Schools and practitioners may not entirely agree with education policy but adhere to it to be seen as legitimate and maintain the support of government and wider society (Goodson, 2005). This propensity towards compliance perpetuates the dominant ideology of the time, contributing to it becoming accepted as the norm within wider society. Ball (2006) posits that education policies are both 'systems of values' and 'symbolic systems', as they aim to manufacture support from practitioners and become integral to practice. Over time the continuous barrage of change stemming from a variety of different ideological perspectives has resulted in eroding the professional autonomy and judgement of the teaching profession, creating a culture of compliance (Hargreaves and Goodson, 2006; Harris, 2011).

### *A Culture of Compliance*

This culture of compliance is exemplified by MacBeath (2008). Interviews with twelve English head teachers (six primary and six secondary) revealed a range of views on school practice and the policy environment which could be placed along a continuum. At one end the policy environment was seen as supportive of educational change and at the other end the policy environment was viewed as oppressive, hindering educational change. Despite evidence of subversion amongst some of the head teachers, as they expressed an aversion to government policy, they



remained compliant expressing that they knew they had to ‘toe the line’ and ‘play the game’, particularly in relation to national testing, meeting targets and inspection (MacBeath, 2008). The lack of active dissent amongst those head teachers who could see the contradictions and conflicts present within government policy demonstrates the power of ideology: “the clearest message to emerge from these twelve extended interviews is the success of government policies in leaving a depth of imprint on school practice and shaping the discourse which accompanies it” (MacBeath, 2008, p. 144). Regardless of the dominant political ideology of the time it is apparent that:

The conveyor belt of new initiatives keeps moving, and the preoccupation is with securing change, any sort of change, rather than asking the questions of what the change is and most importantly, who it is for.

(Harris, 2011, p. 161)

Reflecting on the future of educational change, Clarke (2009) contends that education needs to move away from the influence of neo-liberalism and consumerist ideological perspectives that have enjoyed prevalence in recent times. Instead, it is advocated that educational change should be explored from a more ecological, context specific perspective, focussing on the interrelationships between individuals and their environments. In order to establish how individual teachers exert influence within their school environments to instigate change, it is the intention of this study to explore the process of educational change from a more context specific perspective. I contend that in their attempts to instigate change, the participant teachers from my study stand out from the culture of compliance that appears to have built up within the teaching profession because they were able to take ownership of and drive change.

### **‘Easier Said than Done’**

Fink and Stoll (2005) observe that educational change is ‘easier said than done.’ This is a theme that emerges from much of the theoretical and empirical literature both nationally and internationally in relation to educational change. It is evident that a wide variety of approaches have been pursued over time in an attempt to improve schools and raise standards. Yet the majority of these changes have

accomplished very little, with the basic composition of education remaining relatively stable. In the 21<sup>st</sup> century education remains a pillar of knowledge and learning within society incorporating the core elements of school, teacher, children, pedagogy, curriculum and assessment. Tyack and Cuban (1995) describe these static elements as the ‘grammar of schooling’, “the ways that schools divide time and space, classify students and allocate them to classrooms, splinter knowledge into ‘subjects’, and award grades and ‘credits’ as evidence of learning” (p. 85). They contend that within the United States of America, and I would add the United Kingdom, this ‘grammar of schooling’ has remained static despite decades of attempted reforms.

This relatively static view of education is also recognised within the physical education literature. Macdonald (2003) suggests that recent curriculum change within physical education has converged on the fixed ‘modernist’ features of education; subjects, teachers and lessons. This has resulted in physical education failing to take account of the post-modern outlook emerging in recent years, while also failing to connect with the real lives of the young people it is attempting to influence. To address this Macdonald (2003) advises that curriculum change within physical education: “must look to where and how new spaces and places for learning might be created” (p. 145). As this thesis unfolds it will become evident that in instigating curriculum change the participant teachers in my study sought to alter the traditional conception of physical education, exploring new ‘spaces and places’ for learning. In this respect I would argue that they were able to break the paradox that Priestley (2007) intimates emerges from much of the literature on large scale reform: “constant innovation and reform without change” (p. 21).

### ***A Paradox: Constant Innovation and Reform without Change***

The example of the failure of Education Action Zones (EAZ), introduced in England at the end of the 1990’s illustrates the reform without change paradox (Halpin *et al.*, 2004). EAZ’s were just one of many initiatives introduced by the Labour government, their aim being to provide participating schools with more flexibility and freedom to redesign the curriculum. However, with the enactment of EAZ’s it was clear that the schools had very little freedom and that the government was still

very much in control; as the schools continued to comply with national assessment regimes, focussing on 'basic skills'. This retention of government control stifled innovation and experimentation within the curriculum, prompting "symbolic innovation over substantive changes in practice" and consequently curriculum innovation proved exceedingly difficult to foster (Halpin *et al.*, 2004, p. 204). Mirroring this theme of innovation without real change, Curtner-Smith (1999) reporting on the introduction of the National Curriculum Physical Education (NCPE) in England indicates that it resulted in mainly superficial changes. This top-down change initiative did not result in any real pedagogical change. There was a tendency amongst teachers to simply tweak the new curriculum until it fitted with their existing practice. By concentrating on the system (policy and schools) and outcomes of change rather than people and the process of change, these initiatives failed to reflect the complex reality of teaching and learning (Durrant and Holden, 2006). These examples illustrate that in the 'real world' context of schools and classrooms mandating reform is, as Fink and Stoll (2005) posit, 'easier said than done'.

### *Affective Change*

Despite the largely negative picture painted by much of the educational change literature, within more recent theoretical and empirical literature evidence is emerging, both nationally and internationally, of more positive examples of educational change. While these still illustrate that educational change is 'easier said than done', they also highlight that the success of educational change is context dependent. To move initiatives forward much can be learned by reflecting on the mistakes made by others (Priestley, 2007). The implementation of a new national curriculum in New Zealand (NZC) in 2007 provides an example of schools and government engaging with the complex nature of educational change. Government reports published in 2009 and 2011 following up on the progress of the new curriculum highlight the successes and challenges associated with consolidating and sustaining the continuous process of educational change. In particular, Cowie *et al.* (2009) reflect on schools successfully implementing the new curriculum to share good practice and identify strategies to support schools struggling with the change process

Many of the schools successful in managing the change process recognised that collaborating with the wider school community (parents in particular) provided an opportunity to share the different forms of learning, knowledge and pedagogy that were integral to the new curriculum. Individual teachers collaborating with other teachers and the wider school community led to a deeper understanding and shared vision of curriculum change as a nonlinear and continuous process (Cowie *et al.*, 2009). The teacher was viewed as an inquirer and given space to experiment, reflect and share practice with others. Learning cultures were developed in the successful schools where professional learning was integrated and identified as having an essential role to play in supporting teachers to develop an understanding of the process of educational change. “Effective professional learning processes supported teachers to work collaboratively, using approaches such as brainstorming and small-group work that assisted them to develop a shared understanding of the intent of NZC” (Cowie *et al.*, 2009, p. 26). Within the successful schools structures had been put in place to support individual teachers and the school institution as a whole to implement and sustain the process of curriculum change: “The processes used were not one-off but were iterative and therefore enabled staff to revisit areas and build understandings over time” (Cowie *et al.*, 2009, p. 24).

The findings of Priestley and Sime (2005) reporting on an initiative, Assessment is for Learning (AifL), that instigated educational change within a Scottish primary school revealed similar themes as those outlined in the New Zealand example of curriculum change. The introduction of AifL within the primary school was deemed successful and Priestley and Sime (2005) highlight that developing an initiative such as AifL was a continuous process. The success of AifL within the school was attributed to a number of factors:

- the leadership instigated and actively supported the dissemination of the initiative throughout the school with the intention of maintaining the change
- AifL was a national initiative that was backed by the Scottish Government and local authority
- trust had been placed in teachers to experiment with AifL strategies and drive the change process

- opportunities were provided for teachers to collaborate, discuss and reflect on the AifL initiative
- the initiative started small and built on strategies the teachers were already using

Both the Scottish and New Zealand examples of educational change illustrate that it is a dynamic and complex process requiring both top-down (government and local authority level) and bottom-up (school and teacher) strategies (Fullan, 1993).

Concurrent with my study, these recent studies emphasise the integral role that the teacher plays within the process of educational change.

### **Fullan on Educational Change**

Turning now to look in more depth at the work of Fullan, an extensive list of publications spanning five decades, the frequency with which his name is referenced by others and his involvement in large scale change initiatives in Canada, the United States of America and England is testament to his prominence within the area of educational change (Noguera, 2006; Ellsworth, 2000). Throughout his work Fullan has ‘probed the depths of educational reform’ (Fullan, 1993) presenting arguments, advice and recommendations for stakeholders (teachers, school leaders and government) within education systems.

The work of Fullan which has been most influential to this thesis is the *Change Forces Trilogy* (1993; 1999; 2003) and the *New Meaning of Educational Change* (2007). This work engages in discussion on the position of the teacher within the process of educational change, therefore it is of particular relevance to my study as my focus is on bottom-up change and the ability of teachers to initiate reform. While there are many lessons of educational change to be learned from Fullan, his work is not without its critics. Noguera (2006) purports that Fullan does not look at the fine-grained detail existing within specific contexts of school systems and neglects “the basic questions about what it will take to serve the educational needs of children in poverty” (p. 131). Questions are also raised concerning the mixed messages that emanate from his work, where Fullan simultaneously appears to advocate teacher empowerment and bottom-up change whilst also advocating measuring the success

of change using accountability measures based on standardised testing and academic performance (Bennett, 2011).

Upon first engaging with the *Change Forces* trilogy and the *New Meaning of Educational Change* I felt that the description of educational change resonated with my personal experience as a teacher. The complex notion of change put forward by Fullan reflected my own experience of having centrally driven educational change foisted upon me whilst also attempting to lead innovations within my school context. Consequently I was curious to further explore the complex nature of educational change within my study. As previously noted, Fullan views educational change as a process rather than an event. Conceptualising change in this way reflects what Fullan (1993) describes as the mandatory nature of change in modern society: “we do not have a choice between change and non-change, but we do have a choice about how we respond” (p. 135). Accordingly, Fullan offers advice on how teachers can develop the capacity to assert their professional voice and schools can adopt a more proactive response to managing the forces of change. To illustrate the process of change Fullan examines international examples of change initiatives and proffers lessons perceived as integral to promoting successful educational change. In contrast my study investigates the process of change from the perspective of teachers within the ‘real’ context of the school. I explore in-depth Fullan’s work in relation to individual teachers and the process of educational change, an area which has received scant attention within the wider educational change literature.

Recent studies investigating the implementation of educational change within education in general (Priestley *et al.*, 2010) and more specifically within physical education (Cothran, 2001; Patton and Griffin, 2008) illustrate Fullan’s (1999) intimation that what works in one context cannot be directly transferred into another. Pivotal to the success of change initiatives is the ability of teachers to adapt innovations to suit their individual contexts (Patton and Griffin, 2008), understand the process of educational change (Ha *et al.*, 2008) and treat change as a learning process. While Fullan advocates the key role of teachers in educational reform, his commentary on this role is far from consistent as the following discussion will illustrate. In contrast to Fullan’s largely macro picture of educational change my

study sought to learn about the dynamic nature of educational change by exploring it at a more micro level, from the perspective of teachers.

### **Moral Purpose and Change Agency**

In the first book of the *Change Forces* trilogy, addressing the role of the individual teacher in educational change Fullan (1993) initiates discussion on “moral purpose” and “change agency” (p.8). It is suggested that harnessing moral purpose and change agency in teachers is essential for productive educational change:

Moral purpose and change agency – caring and competence – are intimate partners. Neither equity nor excellence by themselves get us anywhere. They must feed on each other.

(Fullan, 1993, p. 135)

Moral purpose is what drives teachers; the underpinning motivation for wanting to teach is to make a difference. This moral purpose keeps the teacher closely linked to the needs of children and has the potential to lead teachers to seek to bring about improvements in teaching and learning (Fullan, 1993). Closely linked to moral purpose is change agency which enables teachers to assert their moral purpose by embracing and instigating change in an attempt to make a difference for the children they are working with. As a change agent the individual teacher engages in a learning process that encompasses four core capacities: personal vision building, inquiry, mastery and collaboration (Fullan, 1993).

As Fullan (2003) develops his discussion of change agency he observes that teaching and learning for deeper understanding cannot be orchestrated from the centre: “for deeper developments we need the creative energies and ownership of the teaching force” (p. 5). It is suggested that in the twenty first century teachers require “informed professional judgement” to equip them to negotiate the process of educational change and that “the pathways for getting there will be enormously complex and different depending on the starting point” (Fullan, 2003, p. 5). Individual change agency alone is not enough to instigate and sustain educational change, institutional change at the school level is also required. Fullan (1993) proposes that the school should develop complementary core change capacities: shared vision, organisational structures, norms and practices of inquiry and

collaborative work cultures. The emphasis on the need for both the individual and the institution to work together within the change process stems from Fullan's (1993; 1999; 2003) assertion that successful change requires both top-down (at the government, local authority level) and bottom-up (at the teacher, school level) strategies.

Despite advocating bottom-up reform much of Fullan's work centres on critiquing large scale educational change initiatives. I would suggest that the final instalment of the *Change Forces* trilogy (Fullan, 2003), marks a move away from the teacher to concentrate on 'tri-level' reform from the perspective of the school, district and state, and the role that leadership plays within educational change. Again, although direct reference is made to the role of the teacher in the *New Meaning of Educational Change* (Fullan, 2007) the emphasis of this book remains on mapping out the process of change. While this analysis is informative, illustrating barriers and affordances to educational change, there are few examples provided of teachers' thoughts on, and experiences of, educational change. Indeed Fullan (2007) questions the capacity of the individual teacher to initiate change:

Most teachers do not have adequate information, access, time, or energy; and the innovations they do adopt are often individualistic, on a small scale, and unlikely to spread to other teachers. (p. 76)

I would argue that the small scale and individualistic nature of teacher initiated change described by Fullan (2007) requires further investigation to determine the motivating factors and constraints that are impacting on individual teachers' change efforts, issues to which my study looks to attend. The lack of detailed examples of bottom-up change in Fullan's work raises more questions than answers about the individual teacher's role in educational change, particularly regarding how to foster informed professional judgment and in turn teacher ownership of educational change (Fullan, 2003). The focus on system level change by Fullan reveals a gap in his work regarding teacher response to change. It is my intention to address this gap by providing a more fine-grained picture of teachers' experiences of educational change. Within this thesis I illustrate the lessons and advice espoused by Fullan whilst also revealing the personal and contextual factors that impact on teachers attempting to instigate change from the 'bottom-up'.



In an attempt to explain the position of the participant teachers in my study within the change process, I draw on Fullan's (1993) description of change agency and moral purpose together with literature that explores teacher initiated change (Miles, Saxl and Lieberman, 1988; Kirk, 1986 and 1988; Chen, 2005; Ertmer and Ottenbreit-Leftwich, 2010). In doing so, throughout this thesis I refer to the teachers' 'change stories'. The interrelated concepts of moral purpose and change agency highlight the emotional investment made by teachers to their work. Both Fullan (1993) and Hargreaves (2005a) recognise the "emotional labor" (p. 293) of teaching and stress that efforts at educational change must take account of this if they are to be successful. Hargreaves (2005a) goes on to suggest that there is a passion inherent within "good" teachers exemplified in their commitment to learning, relationships with their pupils and the enthusiasm with which they approach teaching. In chapter six, by exploring in more detail the change story of each teacher, I illustrate the passion and commitment to learning demonstrated by the participant teachers in my study.

### **Individual Teachers and Educational Change**

As previously outlined, historically although educational change has converged on implementing numerous grand innovations driven by centrally led policies very few have been sustained, resulting in a process of continual tinkering rather than deep and systemic change (Tyack and Cuban, 1995; Macdonald, 2003; Fink and Stoll, 2005; Priestley, 2007; Ball, 2008). This study argues that the fundamental failure of many past initiatives is not recognising the complex nature of educational change and a neglect of the pivotal role of teachers in the process. As previously outlined, Fullan (1993; 1999; 2003) maintains that it is moral purpose that drives teachers and has a crucial role to play in sustaining educational change. Correspondingly, Morgan *et al.* (2010) note that teacher motivation is underpinned by striving to 'make a difference' and 'enhance the lives of children'. They posit that this moral imperative of teaching is what motivates teachers on a day to day basis:

In considering the effects of various efforts to re-structure schools and motivate teachers through test results or through similar threatening factors, 'a better approach might be to strengthen and reward teachers' efforts to care about their students.'

(Cochran-Smith, 2003 as cited by Morgan *et al.*, 2010, p. 204)

The moral imperative that guides teachers illustrates that there is a strong relationship between emotion and change (Hargreaves, 2004). This emotional aspect of change is manifested in the response of individual teachers towards educational change initiatives which is often personal and complex (Levin and Nevo, 2009). Despite recognition by academics of the complex emotional nature of the response of teachers to change, within the policy arena this would seem to have been largely ignored. Rather, policy favours what Hargreaves (2004) describes as mandated change, imposed on teachers through an external force directed by bureaucracy, neglecting the realities of teaching. For teachers, positive change is grounded in being of benefit to students, and is connected to teaching and learning. All too often mandated change fails to meet these expectations resulting in negative emotional responses from teachers ranging from feelings of frustration and anger to upset and disappointment; "poorly conceived and badly managed change can inflict excessive and unnecessary emotional suffering" (Hargreaves, 2004, p. 288).

### **Teachers Side-lined by Policymakers**

Within the current educational climate both nationally and internationally there remains an emphasis on prescriptive centrally driven curriculum reform where teachers are positioned as recipients and deliverers of the curriculum (Kirk and Macdonald, 2001; Gray, Mulholland and MacLean, 2012). Commenting on teacher ownership of curriculum change Kirk and Macdonald (2001) draw attention to a tension between centralised control of education policy where teachers have little or no input and "rhetoric that suggests teachers are being given more autonomy and decision making at the school level" (p.565). This reflects the present situation regarding the introduction of *Curriculum for Excellence (CfE)* (2009) within Scotland. Initially it seemed from the rhetoric and documentation that the underlying premise of the new curriculum was to provide teachers with the opportunity to take ownership of curriculum change:

*A Curriculum for Excellence* challenges us to think differently about the curriculum and it permits professionals to plan and act in new ways

Teachers are the key to successful implementation of *A Curriculum for Excellence*.

(Building the Curriculum 1, Scottish Government, 2006, p. 1)

However, as analysis of the development of *CfE* has emerged (see Gillies, 2006; Reid and Thorburn, 2011; Horrell, Sproule and Gray, 2012; Gray *et al.*, 2012) it would seem that despite protestations of the central role of teachers within the process of curriculum change the views of the profession have been bypassed by the Scottish Government. Indeed the findings of Gray *et al.* (2012) reviewing the development of the *CfE* physical education policy documentation demonstrate the control exercised by government over the consultation process:

The process of developing the experiences and outcomes for PE was controlled by the government and this control limited the extent to which the participants [personnel involved in the curriculum development group] could make a genuine contribution to shaping the vision for PE within the health and wellbeing domain.

(Gray *et al.*, 2012, p. 73)

While some physical education teachers were included in discussion of the curriculum guidelines they, along with the other personnel (stakeholders with a background in physical education and/or physical activity) included in the curriculum development group, were relegated to an ancillary role (Gray *et al.*, 2012). The Scottish Government appeared to recognise the central role teachers play in the process of curriculum change particularly at the school level. Yet the language used in the *CfE* documentation, for example the use of the word “permits” in the above extract, along with the side-lining of the opinions and experience of teachers in the formulation of this documentation makes it clear that the government retained central control of policy development.

### **Teachers as Barriers to, and Agents of, Change**

The combination of a prevalence towards centrally led government initiatives, national testing and inspection has resulted in removing creativity from teaching, placing teachers in the role of technicians (Lingard, Hayes and Mills, 2003;

Alexander, 2008). In this role teachers demonstrate compliance, adopting specific teaching strategies and delivering a prescribed curriculum with the main aim of meeting national assessment targets. Alexander (2008) and Fullan (2003) highlight the National Literacy and Numeracy Strategies employed in England as ‘pedagogical prescriptions’ which imposed a lesson framework onto the profession for every teacher and school to follow. Viewing the teacher as a technician and maintaining central control of education has resulted in eroding teacher autonomy (Reeves, 2008) and ownership of curriculum and pedagogy (Day and Smethem, 2009). At the government level from which most initiatives have emerged in recent years, Priestley (2011) argues that the teaching profession has been perceived as a barrier to change. To counteract this, reforms have tended to be introduced as mandates which teachers are expected to adhere to. The following quotation from one of the teachers interviewed by MacDonald (2004) speaks to this notion of mandated reforms:

I remember having pale blue books which were the sort of consultation documents, but ... I don't remember any consultation. It was ‘this is coming’, sort of style, about to descend on us. And it did. (p. 422)

Hoban (2002) intimates that a one-step linear approach to educational change has been adopted by central government; the innovation arrives, the teacher uses the innovation and consequently the teacher changes. This mechanistic view of teaching and learning “promotes a sense of control over teachers by concentrating efforts for change on the presentation of independent skills and knowledge” (Hoban, 2002, p. 13). Teachers are effectively expected to follow a prescribed blueprint for change rather than reflect on and interpret change initiatives for themselves.

### *Teacher Response to Recent Curriculum Change in Scotland*

Alongside this view of teachers as barriers to educational change Priestley (2011) posits that a dichotomy exists, given that teachers are now also expected to be agents of change. As previously intimated, this dichotomy and the prevailing issues attached to it are illustrated in the introduction and implementation of curriculum reform within Scottish education. The new Scottish curriculum guidelines, *Curriculum for Excellence*, require teachers to be agents of change using their initiative to develop a curriculum that reflects their individual contexts and the needs of their learners based

on the experiences and outcomes provided by the curriculum guidelines (Reeves, 2008). However, as teachers have become accustomed to being told what to do and having their behaviour monitored by government, local authorities and school management they have not adapted easily to their new role as agents of change. The transition from a curriculum that commanded compliance to one that demands innovation has proven to be an arduous task for teachers and schools to manage (Reeves 2008).

The Scottish Government assumed that *CfE* could be rolled out in schools within the time scale of an academic year. However, over the course of the implementation year teachers, teaching unions and academics voiced their concerns over the content of the curriculum and the tight timeframe for implementation (Priestley and Humes, 2010; Gunn, 2010). Dissatisfaction with the new curriculum was particularly prevalent within Secondary schools. The Scottish Secondary Teachers' Association (SSTA) stated that their members felt the curriculum was not ready to be rolled out and demanded the education secretary: "fix it or ditch it" (BBC, 2010). I would argue this response to *CfE* reveals a culture of compliance within the teaching profession stemming from consecutive, mandated reforms that have neglected to consult teachers, effectively treating the profession as a barrier to change. This culture of compliance is epitomized in calls from the SSTA for; "clear and unequivocal information on curriculum structures, a list of the core skills to be taught for every subject area and working groups to develop core material" (BBC, 2010). Calls for the curriculum to be pre-packaged and presented for teachers illustrates how successive centrally driven prescriptive reforms often accompanied by one-off workshops and supporting resources in the form of lesson plans have stifled teacher autonomy (Lasky, 2005; Hargreaves, 2004; Hoban, 2002). Education and the curriculum have been neatly packaged into prescribed programmes that teachers are expected to follow and simply deliver to their students. This approach to instigating educational change favours efficiency and productivity over creativity; teachers stay within their comfort zone only thinking "inside the square" (Argyris and Schon, 1974 as cited by Hoban, 2002).

The development and dissemination of *CfE* illustrates how the combination of centrally led government initiatives, national testing and inspection has removed creativity from teaching and worn down the teaching profession. This example also echoes the findings of Hoekstra and Korthagen (2011) and Lee and Yin (2010) investigating the response of teachers to curriculum change in the Netherlands and China. Hoekstra and Korthagen (2011) observe that teachers' response to change is often to: "assimilate new notions into their existing belief systems and use new language to describe their teaching without really changing the underlying beliefs" (p. 77). Similarly Lee and Yin (2010) classified three types of emotional and professional response towards curriculum reform by Chinese teachers:

- *Loosing heart accommodators* were passionate at the beginning of the reform process but they lost interest as the reform was implemented and they met difficulties and constraints;
- *Drifting followers* demonstrated little excitement about the reform and simply followed what they had been told to do because it was national policy;
- *Cynical performers* inwardly were resistant towards the reform but outwardly, to please those in charge, they were obedient and adopted the new curriculum reforms.

These examples illustrate that positioning teachers as recipients of prescriptive curriculum reforms becomes manifested within the teaching profession as compliance. If, as is the case with *CfE*, central government want teachers to take a more active role in curriculum change greater consideration needs to be given to the role teachers can play in the development of education policy (Kirk and MacDonald, 2001). My study demonstrates that there is capacity within individual teachers to be innovators using their initiative, knowledge and experience to lead curricular and pedagogical change within their school contexts. However, for teachers to become active consumers rather than reactive recipients of change greater recognition is required of teacher autonomy. Concurrently supportive professional development opportunities are required that take account of teacher learning needs and make clearer links between theory and practice (Hoban, 2002). As research into teacher identity and educational change gathers pace it has become clear that understanding teachers is crucial in accounting for the success or failure of curricular and pedagogical innovations (Waugh and Punch, 1987; Lee, 2000).

## *Teacher Autonomy*

Despite the growing literature base highlighting the key role that teachers play in the process of curriculum change (see Kirk and Macdonald, 2001; Fullan, 2003; Priestley, 2010 and 2011), the teaching profession remains on the periphery of the development of education policy. Educational change efforts have misjudged the key role of the teacher in the change process and the impact teacher identity, motivation, emotions and beliefs can have on the success and sustainability of initiatives (Day and Smethem, 2009; Hargreaves, 2005; Geijsel and Meijers, 2005). Priestley (2011) suggests that translation of change into practice is very much dependent on teacher capacity and will. Reporting on the response of teachers in two secondary schools in Scotland to new curriculum guidance, Priestley (2011) found that the response of teachers to a new curriculum initiative was mediated by the interplay of cultural, structural and individual factors. Correspondingly the response of individual teachers to change was unique to the context they were working in. Priestley (2011) concluded that: “[teacher] agency is key to the success of innovation, especially in terms of its enactment in practice” (p. 20).

Similarly, Kirk and Macdonald (2001) looking at teacher ownership of physical education curriculum change in Australia recognise the central position of teachers in relation to the process of curriculum reform:

The teachers’ authoritative voice within these projects [curriculum reform] was located within the local context of implementation of the reforms and was based on their intimate knowledge of their students, their colleagues, their school structures and the resources available to them. (p. 552)

Despite their contextual knowledge, Kirk and MacDonald (2001) found that teachers were overlooked at the government level as regards policy making. Instead the focus of teachers’ work was at a local level, within their school contexts where they made: “an important and invaluable contribution to the reform process through their adaptation of the materials to fit their local contexts of implementation” (Kirk and MacDonald, 2001, p. 565). It is suggested that this top-down, bottom-up delineation between policy makers and policy enactors needs to be blurred, in order to give teachers greater ownership of educational change; this could be achieved by

strengthening partnerships between teachers and policy makers (Kirk and MacDonald, 2001).

While the educational reforms bombarding the teaching profession over the last decades, both nationally and internationally had the intention of improving teaching and learning in schools, many researchers conclude that in actuality they have merely resulted in intensifying the workload of teachers leaving them feeling increasingly disempowered (MacDonald, 2004; Priestley, 2011; Hoban, 2002; Hargreaves, 2004). This feeling of disempowerment is reflected in this extract from a Scottish primary teacher interviewed by MacDonald (2004):

Well I suppose at the end of the day you could say 'No I'm not doing it'. If more people said that it wouldn't happen. But we do it because an awful lot of us are law-abiding citizens and we do as we are told. (p. 425)

It could be argued that the teaching profession has adopted a stance of silent defiance and a coping strategy of cynicism as they 'carry on' as they always have to ride out the storm of educational change (Hargreaves 2004).

I think that the concept of educational change has worn teachers down to expect something that is going to be very temporary and that something else is going to be coming down the road, so we shouldn't get too enthused about it: we should continue to do what we really do and we will just sort of outlast this change.

(Hargreaves, 2004, p. 292)

While many in the teaching profession have accepted and complied with the onslaught of educational change, for others it has driven them from the profession. Lasky (2005) highlights the emotional pressure placed on teachers by educational change that can leave them feeling drained and deflated: "It's just taken so much. It's the passionate committed teacher who's had it. They're leaving in droves. The whole profession is changing. It used to be collegial, now it's managerial" (Lasky, 2005, p. 912). As this quotation from one of the Canadian teachers whom Lasky (2005) interviewed demonstrates educational reform brought new managerial expectations that stifled teachers' professional autonomy. The reforms failed to reflect the teachers' views of teaching as humanistic and founded on the connections they made with their students.



Ultimately what motivates teachers to engage with educational change is when they feel that change is inclusive. Often this requires teachers to be more involved in driving initiatives, which Hargreaves (2004) describes as self-initiated change stating that this can “evoke enthusiastic and effusive emotional responses from teachers who become energized and motivated by the benefit of fulfilment and accomplishment they see in their students and themselves” (p. 304). Self-initiated change does not just happen; Fullan (2003) contends that the prevalence of informed prescription and accountability measures have resulted in repressing the ‘passion and purpose’ of teachers. He goes on to assert that the future of educational change is reliant on mobilising the moral purpose of teachers, providing the opportunity to reflect and engage in dialogue on the purpose of educational change. Within the educational change literature there are few detailed examples of self-initiated change by teachers. Correspondingly my study describes how teachers self-initiated change and explores the various factors at play that influence and support the change process.

### **Teacher Socialisation**

In recent years, within the context of primary physical education there has been growing interest in understanding the non-specialist teacher and how their beliefs, emotions and identity impacts on the curriculum and their pedagogy (Ha, Lee, Chan and Sum, 2004; Morgan and Hansen, 2007; Morgan and Hansen, 2008; Morgan and Bourke, 2008; Elliot, Atencio, Campbell and Jess, in press). A key theme that emerges from this literature is that primary teachers often lack confidence and qualifications to teach physical education. A world-wide survey conducted by the International Olympic Committee (IOC) in 1998 also highlights this issue, noting that: “the generalist teacher in primary schools is often inadequately or inappropriately prepared to teach physical education” (Hardman and Marshall, 2001, p. 218).

This lack of confidence is manifested in favouring outside agencies such as sports development officers and physical education specialists to deliver physical education. Morgan and Hansen (2007) used questionnaires and interviews to ascertain primary class teachers’ perceptions of physical education and how it could

be improved. They found that the majority of teachers they interviewed saw external providers and physical education specialists as having greater expertise in the subject area and as being better equipped to deliver a consistent and interesting physical education programme that was beneficial to students. While some teachers saw the possibility of working with external providers and the physical education specialist as an opportunity to team teach and learn new skills others saw it as an opportunity to “transfer responsibility for teaching PE” (Morgan and Hansen, 2007, p. 103). As previously intimated in chapter one Scotland has been in a unique position internationally in that physical education specialists are used in most primary schools to deliver physical education. However, the relationship between generalist primary teachers and physical education specialist teachers is complex. In particular, in recent years with the introduction of the mandate that children must receive two hours of physical education each week, concerns have been raised regarding the possible deskilling of primary teachers. The evolving relationship between the participant teachers in my study and physical education specialist teachers is a theme which is further explored within this thesis.

The lack of confidence and poor skill level of generalist class teachers in physical education is not solely due to the reduction in their opportunities to teach the subject. Elliot *et al.* (in press) applying Lawson’s (1983a & b) model of socialisation purport that teachers “beliefs, attitudes, and practices are shaped by intertwined personal, professional, and organisational experiences” (p. 7). Analysing questionnaire and interview data of participants on the Post Graduate primary physical education courses at the Universities of Edinburgh and Glasgow, Elliot *et al.* (in press) posit that teacher attitudes and understanding of physical education are influenced by:

- I. their personal PE experiences in primary and secondary school (acculturation);
- II. the physical education training they receive as part of their initial teacher education (professional socialisation);
- III. how teaching physical education is approached within schools and the value placed on it as a subject area (organisational socialisation).

These themes are also reflected in similar work by Keay (2006a), Morgan and Hansen (2008) and Morgan and Bourke (2008). This work highlights the important

role that teacher background and teacher socialisation play in shaping teacher beliefs, attitudes and identity. Sammons *et al.* (2007) maintain that understanding teacher professional identity, what influences it and how it changes over time is essential to understanding teacher commitment, resilience and effectiveness. Therefore it is the intention of this study to explore the physical education and physical activity backgrounds of the participant teachers in an attempt to map out the varying factors that have influenced the way they think about, plan and deliver physical education. Investigating teacher background contributed to understanding the identity, motivation and attitudes of each teacher and the role these factors played in their commitment to initiate and implement curricular and pedagogical change in physical education.

### **Professional Learning and Professional Development Literature**

Professional learning can enhance feelings of motivation and confidence in teachers (Guskey, 1986; Fullan, 1993; Hoban, 2002; Ha *et al.* 2010; Hoekstra and Korthagen, 2011). These feelings of increased motivation and confidence then have the potential to enable teachers to engage positively with, and even initiate, educational change (Priestley and Sime, 2005; Atencio *et al.* 2012). However, examples of teachers engaging with professional learning opportunities and instigating change in their practice as a result are scarce. Moreover, much of the educational change literature highlights the inadequacy of the prevalence towards one-off, off-site professional learning opportunities (Hoban, 2002; Armour and Yelling, 2007; Darling-Hammond *et al.* 2009). Continuing professional development (CPD) in this form simply presents teachers with new ideas to be implemented and rarely leads to long term change in teacher practice (Armour and Yelling, 2004, O’Sullivan and Deglau, 2006). Professional learning opportunities are required that complement change initiatives and encourage teachers to engage in a process of development where they confront and reflect upon their own values, beliefs and norms and those circulating within the wider education system (Day, 1999; Cowie, *et al.*, 2009). Fink and Stoll (2005) describe this as “reculturing”:

Reculturing as an approach to change, seeks to find the ecological connections among the purposes of education, the organizational values of

schools, as well as its structures, cultures, leadership, and the work and lives of teachers.

(Fink and Stoll, 2005, p. 38)

My study illustrates how teachers entered a process of ‘reculturation’ and experienced improved confidence and competence by engaging with long-term professional learning in physical education. Before reviewing literature on professional learning in physical education it is important to identify how the terms professional development and professional learning are used within this thesis.

### **Clarifying the Terminology**

It is recognised within the literature that professional learning and professional development are contested concepts that are often used interchangeably (Day, 1999; Fraser, *et al.*, 2007; Rose and Reynolds, 2008; Groundwater-Smith and Mockler, 2009). Groundwater-Smith and Mockler (2009) contend that professional development has viewed teachers as ‘empty vessels’ to be filled with information through workshops and lectures. In contrast to this, professional learning has viewed the teacher as an active participant in a reflexive process; the purpose of which is for teachers to generate their own knowledge and understanding often through collaboration with others. There is a suggestion that the distinction between the two terms has become blurred: “‘professional development’ has often become re-badged as ‘professional learning’ by systems and providers of professional development without great concern for the underlying meaning” (Groundwater-Smith and Mockler, 2009, p. 56). Fraser *et al.* (2007) also highlight an ambiguity within the literature surrounding the definition of professional learning and professional development. Reflecting on the literature, and in an attempt to clarify the distinction between the two concepts, they make their own definition:

Teachers’ professional learning can be taken to represent the processes that, whether intuitive or deliberate, individual or social, result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers. Teachers’ professional development, on the other hand, is taken to refer to the broader changes that may take place over a longer period of time resulting in qualitative shifts in aspects of teachers’ professionalism.

(Fraser *et al.*, 2007, p. 157)

The definition provided by Fraser *et al.* (2007) of professional learning and professional development appears to be at odds with that of Groundwater-Smith and Mockler (2009), echoing the lack of consensus within the literature regarding the definition of these terms. What is clear from the literature is: “that the discourse about professional development is typified by ‘conceptual vagueness’” (Coffield, 2000 as cited by Fraser *et al.*, 2007 p. 155).

Despite there being an extensive amount of literature on the subject of teacher professional learning and professional development, as yet no clear universal definition of each term has emerged. In defining professional development reference is often made to Day’s (1999) comprehensive and extensive definition (see Duncombe, 2005; Fraser *et al.*, 2007; Rose and Reynolds, 2008):

Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers renew and extend their commitment as change agents to the moral purpose of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives.

(Day, 1999, p. 4)

Although Day (1999) provides an extensive definition of professional development in later work (see Day and Gu, 2007), the two terms, professional learning and professional development are used together indicating an inextricable link between the two. This link is reflected in the brief definition proffered for each term; professional learning as “unplanned, unrewarded, and often implicit” and professional development as “planned interventions in teachers’ learning lives” (Day and Gu, 2007, p.430). Within the context of Scottish education Fraser *et al.* (2007) also recognise the close relation between professional learning and professional development, suggesting that continuing professional development (CPD) encompasses professional learning and professional development embedded within the key concept of teacher change.

The description of professional learning and professional development within Scottish education as CPD and the debate it has generated resonates with the lack of clarity surrounding the definition of these terms in the wider literature. This study recognises the ambiguity surrounding the terms of professional learning and professional development, and that they are often used interchangeably. Rather than enter into a protracted debate on the definition of these terms it is the intention of this study to attempt to understand; how teachers learn, what they learn, and identify the potential outcomes of their learning. For this reason this study errs towards Groundwater-Smith and Mockler's (2009) and Hoban's (2002) perspectives on professional development and professional learning. Professional learning is viewed more as a process, into which the participant teachers from this study were immersed while professional development or CPD (a term used by the participant teachers throughout the interviews) is used to define "planned interventions" (Day and Gu, 2007) undertaken by the teachers which contributed to their professional learning. Corresponding with Hoban (2002) this study looks at professional development and professional learning as an intertwined continuous process closely associated with the process of educational change.

### *Continuing Professional Development within Scottish Education*

Within Scottish education, largely due to the McCrone Agreement (SEED, 2001), the terms professional learning and professional development have been usurped by the term CPD. Following the McCrone Agreement Scottish teachers became contractually bound to undertake thirty five hours of CPD per annum, to be logged in a personal record. Accompanying this CPD framework were a series of professional standards, as outlined in chapter one. This standards-based approach to professional development and professional learning favoured by Scottish education policy set competencies which teachers were expected to meet. Criticising the standards-based CPD framework Purdon (2003) observes that it promotes: "a certain way of thinking about teaching and teachers [rather] than about planning a coherent framework for the professional development of teaching" (p. 434). Purdon (2003) goes on to emphasise that central government control of the CPD agenda in Scottish education has side-lined the teaching profession: "it seems evident that the CPD agenda is

ultimately controlled by SEED [Scottish Executive Education Department], aided and abetted perhaps by a general acceptance of the inevitability of political control in education” (p. 435). While the Standard for Chartered Teacher and Standard for Headship are accompanied by programmes of professional development, outside these specific programmes responsibility for the provision of CPD and what it should encompass has remained open to debate (Kennedy *et al.*, 2008).

Introducing a mandate of thirty five hours CPD and providing scant advice on what this should entail resulted in many teachers feeling that yet another government directive was being thrust upon them, as one of the respondents in Kennedy *et al.* (2008) comments: “teachers ... have had this 35 hours foisted upon them, or that’s the way they might feel about it...” (p. 411). As a result of the push to meet ‘thirty five hours’ it is intimated that emphasis has been placed on the quantity of CPD undertaken rather than the quality, as the following comment from a CPD provider interviewed by Kennedy *et al.* (2008) indicates: “teachers are doing a lot of things to cover their backs rather than because they think they’re a good idea” (p. 411). In a climate where teachers are obliged to undertake professional development as part of a contractual agreement, responsibility for the provision of CPD for Scottish teachers has largely fallen on local authorities. Although some long-term accredited professional development opportunities are offered in collaboration with universities; to meet the demand for quantity and choice of CPD it mainly takes the form of one off, off site courses or workshops that focus on the individual teacher (Kennedy, 2005). Consequentially this has led to substantial variability in the provision of CPD across Scotland.

The standards-based approach to professional development incorporating the mandate of thirty five hours is at odds with the current move towards more collaborative approaches to professional learning (Kennedy, 2011). Kennedy *et al.* (2008) contend that this CPD framework could be perceived as a constraint on teachers engaging with professional development, restricting: “when and where CPD can be undertaken and what types of CPD ‘count’” (p.412). While there is increased evidence of teachers working collaboratively within Scottish education (Priestley and Sime, 2005; Priestley, *et al.* 2010) this is not necessarily being recognised as formal

professional development and learning because it does not fit the prevailing standards-based framework. As one of the local authority education officials interviewed by Kennedy *et al.* (2008) succinctly states: “my perception is that a lot happens in schools but I don’t think it necessarily gets credited and people still think that a lot of their learning, a lot of the professional development is happening outside schools” (p. 409). What is compelling about the format of the CPD (the PGCert) undertaken by the participant teachers in my study is that it was able to combine formal professional development with more informal professional learning. The structure of the PGCert and the influence it had on the participant teachers is analysed in greater detail in chapter five.

### *The Triple Lens Framework*

The triple lens framework (see table 2.1) posited by Fraser *et al.* (2007) is utilised by this study to analyse the complex relationship between the professional development (the PGCert) the participant teachers engaged with and how this immersed them in a process of professional learning leading them to instigate educational change within their school contexts:

One of the key reasons for viewing models of professional learning through different lenses is that the impact of professional learning, both positive and negative, cannot be felt or seen in a vacuum. Exploring the site of learning and the individual and profession-wide impact allows us to look at individual examples in a much more comprehensive and complex manner. It illuminates the temporal and qualitative differences in relation to teacher learning and professional development.

(Fraser *et al.* 2007 p. 160)

Each lens provides a different perspective from which to view the scope and influence of professional development and professional learning.



**Table 2.1 Triple lens framework (Fraser et al., 2007, p. 162)**

Framework	Terms of categorisation	What is being categorised?
Bell and Gilbert's three aspects of professional learning (amended)	Personal/social/ occupational	<i>Domain of influence</i> of professional learning
Kennedy's framework for analysing CPD	Transmission/ transitional/ transformation	<i>Capacity for professional autonomy and transformative practice</i> supported by the professional learning
Reid's quadrants of teacher learning	Formal/informal Planned/incidental	<i>Sphere of action</i> in which the professional learning takes place

One of the lenses draws on Bell and Gilbert's aspects of professional learning. Through this lens teacher professional learning is identified as encompassing three interrelated facets, personal, social and occupational. On a personal level professional learning impacts on teacher values, attitudes and beliefs and therefore also has the potential to shape teacher professional identity and confidence. The social aspect of professional learning highlights the interactive nature of learning, making reference to the interrelated concept of "communities of practice" (Lave and Wenger, 1991). At an occupational level it is suggested that professional learning should link theory and practice. This locates professional learning directly within the context of the school and classroom where teachers can experiment to make sense of new practical and theoretical knowledge in relation to the context they are working in. Using this lens to view professional development and learning reveals that impact, and effectiveness is determined by the interplay of various factors operating at different levels; learning occurs on a personal, social and occupational level. Applying Bell and Gilbert's lens to view the PGCert reveals to what extent this professional development opportunity was able to influence the participant teachers on a personal, social and occupational level.

While Bell and Gilbert's aspects of professional learning provide a lens from which to view the different levels of influence of professional learning, they do not recognise the different approaches to the delivery of professional development and associated outcomes. As the literature attests there are a wide range of professional

development opportunities available to teachers (see Kennedy, 2005; Darling-Hammond *et al.* 2009; Wang and Ha, 2008). Reid's quadrants of teacher learning place these opportunities on dimensional axes. Professional development can be experienced in a formal or informal environment; it can also be planned or incidental. Similar to Reid's quadrants, Kennedy's framework for analysing CPD models views the potential outcomes of professional development and learning along a continuum; 'transmissive', 'transitional' and 'transformative'. Short off-site courses exemplify transmissive CPD, delivered externally by a perceived 'expert', concentrating on improving skills. Transitional models of CPD are illustrated through coaching/mentoring while the construction of new knowledge, and linking theory and practice through professional learning is characteristic of a transformative model of CPD. Transformative CPD actively engages the teacher in an iterative process of professional learning where thinking and practice is altered by new knowledge. It is the intention to use the triple lens framework to structure a more in-depth discussion of professional learning and professional development in chapter five. When applied to the PGCert the triple lens framework illustrates the complex factors impacting on the participant teachers from my study as they entered a process of professional learning which involved them learning in both planned and unplanned ways.

### *Effectiveness of Professional Development*

In line with Day *et al.*, (2007) I would suggest that the earlier discussion of individual teachers and educational change reflects how:

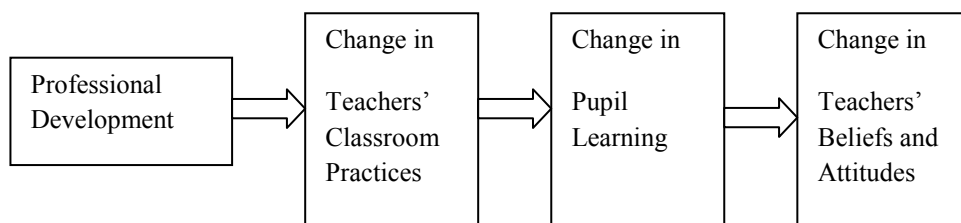
Models of teacher development adopted by policymakers have not adequately addressed teachers' learning needs over a career, or contribute to enhancing motivation and commitment essential to raising standards in the classroom (p. 33)

The ineffectiveness of CPD has been well documented within the professional development literature (Guskey, 2002b; Armour and Yelling, 2004; Bechtel and O'Sullivan, 2006; Darling-Hammond *et al.*, 2009; Hunzicker, 2011).

Correspondingly there have been attempts made within the literature to identify factors that contribute to effective professional development. Hunzicker (2011)

suggests that effective professional development is: “anything that engages teachers in learning activities that are supportive, job-embedded, instructionally focused, collaborative, and ongoing” (p. 177) Reviewing research into professional development Darling-Hammond *et al.* (2009) identify four basic principles for designing effective professional development, it should: be intensive, ongoing and connected to practice; focus on student learning and address specific curriculum content; align with school improvement priorities and goals, and build strong working relationships among teachers. While all these recommendations are commendable qualities to aim for in professional development, reflecting on the literature two key factors come to the fore in defining the effectiveness of professional development: interplay between teacher and pupil learning and taking account of the professional identity of teachers.

Firstly, I would argue that teachers CPD efforts are largely driven by the extent to which their efforts impact on children’s learning. This line of thinking draws on the work of Guskey who has written extensively about professional development (Guskey, 1986, 1994, 2002a, 2002b, 2003). Guskey (1986 & 2002a) advocates that one of the main determinants of effective professional development is pupil learning and presents a model of teacher change, see figure 2.1.



**Figure 2.1 A Model of Teacher Change adapted from (Guskey, 2002a, p. 383)**

This model intimates that it is experience of successful implementation, and seeing professional development impact on pupil learning that changes teachers' attitudes and beliefs. Secondly, in agreement with Day *et al.* (2007), I would suggest that effective professional development should take into account the shifting nature of teachers’ professional identities, offering professional development that matches the learning needs of teachers at different phases in their careers.

In later work reviewing what education research can tell us about the effectiveness of professional development Guskey (1994 and 2003) posits that there is little consensus on criteria for effectiveness. In the ‘real world contexts’ in which professional development is situated: “the complexities of these varied contexts introduce a web of factors that influence whether or not a particular characteristic or practice will produce the desired results” (Guskey, 2003, p. 750). It is the intention in this thesis to investigate what teachers thought about the professional development they had engaged with, the PGCert, to ascertain the ‘web of factors’ influencing how they responded to this professional development. Additionally analysis of the data sought to establish how the participant teachers perceived the ‘effectiveness’ of this professional development in relation to how it impacted on: them personally; their practice; the children they were working with, and their wider school context.

### **Collaborative Professional Learning**

As a result of increased interest in the social and situated aspects of learning, in recent years there has been a rise in the popularity of collaborative approaches to professional learning and professional development both in general education (Bolam *et al.*, 2005; Graham, 2007; Hipp *et al.*, 2008; Kennedy, 2011) and physical education (Duncombe, 2005; Keay, 2006b; Armour and Yelling, 2007; Wright *et al.*, 2008.) Reports relating to teacher professional learning and professional development published in Australia (Mayer *et al.*, 2002) the United States of America (Darling-Hammond *et al.*, 2009) and England (Bolam *et al.*, 2005) all advocate for collaborative professional learning/development opportunities for teachers, particularly through the establishment of professional learning communities. Bolam *et al.* (2005) observe that pupil learning was the foremost concern of people working in the professional learning communities they studied. They also found that as the professional learning community developed there was a more positive correlation between the two key measures of effectiveness, pupil achievement and professional learning.

Tracking the effectiveness of professional learning communities Bolam *et al.* (2005) were able to identify eight defining characteristics:

1. shared values and vision;
2. collective responsibility for pupils' learning;
3. collaboration focused on learning;
4. individual and collective professional learning;
5. reflective professional enquiry;
6. openness, networks and partnerships;
7. inclusive membership, and
8. mutual trust, respect and support.

Kennedy (2011) suggests that there is a twofold emphasis in this list: firstly, that “learning is the central focus of activity”; and secondly that “good relationships are seen as fundamental to providing conditions for effective learning” (p. 26). While the participant teachers in my study were not working in professional learning communities as described by Bolam *et al.* (2005) there was a collaborative element to the professional learning they undertook. Reflecting Kennedy’s summary of the characteristics outlined by Bolam *et al.* (2005), the PGCert centred on learning, both of teachers and pupils, emphasising the collaborative nature of learning. Within this thesis the collaborative professional learning experienced by the participant teachers is analysed from the theoretical perspective of situated learning (Lave and Wenger, 1991) and communities of practice (Wenger, 1998). This line of analysis is utilised in subsequent chapters, revealing the extent to which each teachers’ learning about physical education was situated in their past and present experiences.

### *Situated Learning and Communities of Practice*

Much of the literature on professional learning communities and schools as learning communities is grounded in the work of Lave and Wenger (1991) on situated learning and Wenger (1998) on communities of practice. Lave and Wenger (1991) explore the concepts of situated learning and legitimate peripheral participation, linking this into learning as a social practice, apprenticeship and communities of practice. Advancing the social aspect of learning, it is suggested that the process of learning is more than learning by doing and experiential learning. Lave and Wenger (1991) contend that learning occurs through the learning curriculum generated within a community not simply by replicating the performance of others or by acquiring knowledge transmitted by others. Central to the concept of situated learning is that

the process of learning involves people generating meaning and becoming full participants in the world. Full participation is achieved through legitimate peripheral participation as people negotiate a learning trajectory. Essentially Lave and Wenger (1991) contend that a shift is required in the analytic focus of learning, away from the individual as learner to learning as participation in the social world.

Considering the social nature of learning, Lave and Wenger (1991) posit that it is through participation in communities that identity is formed and learning occurs. Integral to situated learning and legitimate peripheral participation is the concept of the community of practice which has three dimensions:

- mutual engagement – relationships;
- joint enterprise – mutual accountability;
- shared repertoire – routines, words, tools, stories, symbols, actions produced and adapted by the community throughout its history that become part of its practice.

(adapted from Wenger, 1998, p. 73)

In an attempt to avoid romanticising communities of practice Wenger (1998) stresses that they are not necessarily emancipatory. However, he goes on to stress that it is through them that relationships form and meaning is negotiated, through the pursuit of joint enterprise and the production of a shared repertoire. Outlining the shortcomings and potential of communities of practice Wenger states:

Communities of practice are not intrinsically beneficial or harmful. They are not privileged in terms of positive or negative effects. Yet they are a force to be reckoned with, for better or for worse. As a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of enterprises such communities hold the key to real transformation – the kind that has real effects on people's lives.

(Wenger, 1998, p 85)

While Lave and Wenger (1991) explore the social nature of learning it is not portrayed in an idealistic way. Homogeneity is neither a requirement nor the result of a community of practice; it is not about peace, harmony and happiness with every member agreeing (Wenger, 1998). Rather, through the interrelated concepts of situated learning, legitimate peripheral participation and communities of practice it is possible to explore: how people interact; how learning emerges from this interaction, and the feelings of responsibility and mutual accountability that connect and

constrain people as they learn together. Situated learning and communities of practice is utilised within this thesis to conceptualise the interplay between the participant teachers' engagement with the PGCert community of practice their commitment to physical education and the development of their dual identity as primary teachers and primary physical education teachers.

### **Physical Education Professional Learning**

Wang and Ha (2008) provide an extensive review of literature focussing on the professional development of physical education teachers. They suggest that the majority of studies were published over two time periods; 1995 to 1999 and 2005-2008. The studies could be categorised as having three different foci of attention centring on: different approaches to, the impact of, and factors influencing physical education professional development. Similar to Day *et al.* (2007), Wang and Ha (2008) found that physical education professional development programmes varied to match the different stages teachers were at in their careers. The main benefits of professional development for teachers emerging from the literature review were improvement of skills, attitude and practice, and greater evidence of reflection. The literature review undertaken by Wang and Ha (2008) is valuable to my study as it enabled me to identify the scope of the present literature base on physical education professional development along with gaps in the literature. In particular I found that there was limited literature investigating the physical education professional development of generalist primary teachers. In line with the recommendations made by Wang and Ha (2008) regarding future research my study looks to explore the relationship between professional development and educational change.

#### ***Approaches to Physical Education Professional Development***

Within the physical education professional development literature a variety of approaches to professional development are highlighted ranging from; organisational partnership, small group and individual (Wang and Ha, 2008). Comparable with the general education literature, the physical education professional development literature criticises traditional one-off, off-site models as being fragmented and unrelated to practice within the school context (Armour and Yelling, 2004; Armour

and Duncombe, 2004; Bechtel and O’Sullivan, 2006). To counter this ineffectual traditional model of professional development, collaborative learning emerges as the main approach to professional development applied within physical education in recent years (Wang and Ha, 2008). While there is evidence of the positive effects of collaborative learning on teacher professional learning, barriers to this approach are also identified.

Duncombe (2005) investigates collaborative learning as a strategy for teacher professional development in physical education with generalist primary teachers. Her research produced mixed results on the effectiveness and impact of a collaborative approach to professional learning. Questionnaire data revealed that while teachers were able to identify the value of collaborative learning this did not translate into their own professional learning, leading Duncombe (2005) to suggest that collaborative professional learning “remained an elusive ideal in practice”(p. 170). Using Wenger’s (1998) Social Theory of learning Duncombe (2005) posits that barriers to collaborative professional learning can be categorised in three ways: personal, structural and practical. Personal barriers relate to issues of teacher identity, professionalism and trust between teachers. These personal barriers uphold an isolationist approach to teaching rather than a collaborative one. Social, historical, cultural and management structures encompass social barriers, which Duncombe (2005) claims within “individual schools may encourage or inhibit learning within a Community of Practice” (p.189). Practical barriers include physical and human resources such as time, money and space which Duncombe (2005) identifies as obstacles to collaborative professional learning. Reflecting on the findings of Duncombe (2005), my study sought to ascertain how collaborative professional learning was incorporated into the PGCert and the role communities of practice played in this form of professional development. The theoretical framework of situated learning (Lave and Wenger, 1991) and communities of practice (Wenger, 1998) is drawn on to determine the personal, structural and practical barriers the participant teachers experienced as they attempted to implement the physical education knowledge and skills gained from the PGCert.



## *The Impact of Physical Education Professional Development*

Considering the impact of physical education professional development Wang and Ha (2008) outline research (Ha *et al.*, 2004; Deglau and O'Sullivan, 2006) which illustrates that effective professional development has the potential to impact on teachers' beliefs and attitude towards teaching and curriculum change. As part of a monograph on physical education professional development, Deglau and O'Sullivan (2006) highlight the sense of ownership experienced by teachers participating in professional development through a community of practice. They noted how involvement in the community of practice "worked to influence teachers' thinking and beliefs about themselves, their role as teachers, their identities, and indeed their students" (Deglau and O'Sullivan, 2006, p. 394). Within their school contexts teachers chose how to employ the innovations they had been introduced to through longitudinal professional development and were encouraged by the positive response from the children they were working with. Also contributing to this monograph on professional development Bechtel and O'Sullivan (2006) reflect that:

High-quality PD [professional development] must address the needs of teachers and the contexts of their teaching lives while providing challenging and intellectually stimulating work that drives their thinking and critiquing what and why they teach and deliver physical education as they do. (p. 378)

Investigating the impact of the PGCert on the participant teachers from my study I examined the extent to which this professional development challenged them to think about and critique their delivery of physical education. I sought to ascertain if and how the PGCert impacted on the teachers' beliefs and attitude towards teaching and learning in physical education.

While the monograph incorporating the work of Bechtel and O'Sullivan (2006) along with Deglau and O'Sullivan (2006) provides in-depth commentary on professional development it focuses on physical education teachers. In contrast, and pertinent to my study, Ha *et al.* (2004) examined the impact of physical education professional development on primary teachers. Their findings revealed the value primary teachers placed on professional development which was intended to support them to implement curricular change in physical education. Provided in partnership with the

Chinese University of Hong Kong the professional development in their study took the form of conferences and workshops that encouraged collaboration amongst teachers and with the university. Survey data revealed that teacher response to this professional development programme was largely positive with teachers stating that they “felt more secure and confident about implementing the curricular change after being provided with support on a collaborative basis” (Ha *et al.*, 2004, p. 431).

Similar to the professional development opportunity provided for the primary teachers in Hong Kong, the professional development the participant teachers from my study engaged in, the PGCert, involved collaboration between the Scottish Government, The Universities of Edinburgh and Glasgow, and teachers. Research into the impact of the PGCert on primary teachers has been undertaken by the Scottish Primary Physical Education Project (SPPEP) through baseline and impact questionnaires along with telephone interviews. Reflecting the findings of Ha *et al.* (2004) preliminary analysis of questionnaire data reveals teacher response to the PGCert was positive and following engagement with this professional development teachers reported feeling more confident about delivering physical education within their school contexts (Atencio *et al.*, 2010). Contributing to the SPPEP my study explores the impact of the PGCert at a micro level investigating the relationship between professional development, and curricular and pedagogical change.

### ***Factors Influencing Physical Education Professional Development***

Wang and Ha (2008) found two main themes emerging from the literature relating to factors influencing teachers’ engagement with physical education professional development: personal factors and contextual factors. Personal factors included teachers’ vision and beliefs while contextual factors incorporated school culture along with support from colleagues, the head teacher and pupils. In discussion of how an in-service elementary school teacher enacted physical education curricular change in her practice, Rovegno and Bandhauer (1997) identify contextual factors and psychological “dispositions” that “facilitate and sustain knowledge development” (p.139). Contextual factors of particular significance emphasised by Rovegno and Bandhauer (1997) are support from the head teacher and colleagues. It is suggested that the presence of this support influences the extent to which teachers

are able to enact change within their school contexts following engagement with professional development.

Operating in tandem with contextual factors are psychological dispositions. The use of the term disposition refers to “people’s tendencies to put their capabilities into action” (Perkins, Jay and Tishman 1993 as cited by Rovegno and Bandhauer, 1997, p. 139). Seeking to ascertain what influenced the teacher in their case study to extend her knowledge and change her practice Rovegno and Bandhauer (1997) identified five significant psychological dispositions:

- 1) to understand content knowledge to enact change;
- 2) to accept that change is difficult to learn and requires clarification;
- 3) to justify and develop practice aligned with philosophy and theoretical foundations;
- 4) to change, learn and implement new ideas;
- 5) to suspend judgement of new ideas.

(Adapted from Rovegno and Bandhauer, 1997, p. 136)

Essentially, within these dispositions the key factors influencing change were: an openness to change; a commitment to learning which involved engaging with theory and content; and an understanding that change emerged over time through experimentation and reflection. These dispositions highlight that teaching is a process of continual learning and reveal how teachers can be supported to engage in professional development to enact change. Rovegno and Bandhauer (1997) indicate that acknowledging the iterative nature of learning frees teachers to experiment, take risks and make mistakes with innovative curricular and pedagogical approaches. Additionally, Rovegno and Bandhauer (1997) stress that rather than viewing teacher beliefs as an obstacle to be overcome, professional development should build on these beliefs making connections between prior thinking and new philosophies being introduced.

Crucial to the facilitation and sustaining of teacher knowledge is recognition of the power of passion: “passion supported the change process that in turn contributed to a

satisfying career” (Rovegno and Bandhauer, 1997, p. 152). Corresponding with the recommendation made by Rovegno and Bandhauer (1997) regarding future research; my study investigates teacher change with a small number of teachers in different school contexts, to determine their dispositions to change and the contribution they have made to curricular change within their school contexts. As this thesis unfolds, it will become clear the extent to which personal and contextual factors influenced the teachers’ engagement with professional development and with curricular and pedagogical change.

### *Primary Physical Education Professional Development*

Reflecting on the primary physical education professional development literature, it is clear that while teachers want resources to support them this can result in teachers becoming reliant on these resources and unable to think outside the curricular and pedagogical comfort zones these resources provide (Petrie, 2009; Harris, Cale and Musson, 2011; Key and Spence, 2011; Atencio *et al.*, 2012). Greater consideration needs to be given to how to balance teachers’ need for resources with supporting generalist class teachers to become independent practitioners in physical education able to critique, adapt and extend resources to suit their individual contexts (Petrie, 2009). To support primary teachers in England to employ physical education resources in their practice Key and Spence (2011) provided linked professional development. They recommend that professional development should be contextualised within the everyday work of teachers, an important factor contributing to this is “the use of pupils in the professional development activity... demonstrating how the resource can be adapted to make it relevant to different pupils’ needs” (p. 38). Additionally, it is stressed that professional development requires commitment from teachers and should be perceived as a continuous process. To support this Key and Spence (2011) advocate the forming of a community of practice to facilitate learning and the cascading of resources through professional development.

Similarly, within the context of Scottish physical education the PGCert attempted to go beyond the ‘tips for teachers’ approach to professional development embracing an approach to professional learning that draws on complexity theory and constructivist principles. From this perspective teachers are positioned as facilitators, co-learners

and co-constructors of knowledge and meaning (Jess *et al.*, 2011). Rather than prescribing specific approaches and resources for teaching physical education from a complex learning perspective the PGCert: “accommodates for self-organising, connected, adaptive and flexible curricular and pedagogical practices [in physical education]” (Jess *et al.*, 2011, p. 194). My study contributes to the growing literature base on primary physical education professional development providing empirical evidence of how generalist primary teachers can be supported to engage with physical education professional development.

## **Conclusion**

In summary, within this chapter I reviewed the educational change and teacher professional development literature. These areas of literature underpin later analysis within the thesis exploring the connection between professional development and the instigation of curricular and pedagogical change by teachers within their school contexts. I clarified the concept of educational change in order to explain how it is to be used within my study. Correspondingly I accounted for the micro nature of my research concentrating on educational change in relation to individual teachers rather than macro, large-scale system wide change, which most of the literature focuses on. In doing so, I identified a gap in the literature regarding research into self-initiated change by individual teachers, which this study seeks to address. My research attempts to move beyond the static perception of change presented within much of the literature as something that is ‘done to’ teachers.

In line with Fullan and Hoban I presented findings suggesting that change is a process which teachers can instigate, manage and embed within their practice. Teacher socialisation and situated learning theoretical concepts were drawn on as theoretical perspectives from which to understand the beliefs, attitude and identity of the participant teachers. Accordingly within the ensuing analysis chapters I utilise the literature to identify the social, contextual and individual factors influencing the participant teachers’ thinking about physical education, their engagement with professional development (the PGCert) and their predisposition to change. This review of literature revealed gaps within the educational change and professional development literature particularly with regards to the need for fine-grained research

investigating the links between teacher learning and teacher change. Additionally a lack of research specifically within the area of primary physical education was highlighted. With this in mind I made the decision to focus my research on the experiences of individual primary teachers attempting to translate their physical education professional learning into their school contexts to enact change. The following chapter outlines the research design and methods used to qualitatively investigate the professional development and change experiences of five individual teachers.

## **Chapter 3 - Methodology**

### **Introduction**

In the literature review existing literature was examined to ascertain the findings of previous empirical work and set the parameters of enquiry for this study. Building on the review's findings, this chapter outlines the aims of the research, its theoretical positioning and the methods used in data gathering (Silverman, 2010). This will be achieved by exploring:

- The rationale of the research study, identifying the underpinning research questions
- The reasoning behind the research design chosen to underpin the study
- Data gathering and data analysis methods used in the study
- Ethical considerations to be taken into account as part of the study

Throughout this chapter the research process is described with a view to demonstrating how the credibility of the research was considered at all stages. I begin by presenting the aims of the study, research questions and locating the researcher within the research process. The qualitative nature of the study is then outlined examining the theoretical paradigms and research methods employed to gather data. Finally the data analysis process is discussed to summarise how data collected was organised, scrutinised, theorised and interpreted to be presented to a readership (Ryan, 2006).

### **Rationale for the Research**

#### **Research Aims**

The aim of this study was to investigate the process of educational change in primary physical education concentrating on the role that individual teachers play within this complex process. The research focused on exploring how teachers put into practice knowledge and understanding of physical education developed through professional learning, and how they then used this to instigate change in the physical education curriculum and their pedagogy. Implicit in this aim was attempting to understand the

process of educational change from the teachers' perspective, viewing events and the social world through their eyes (Bryman, 2008). To achieve these aims the study followed the teachers over an academic year to find out how each individual teacher initiated and implemented change. This involved identifying factors that facilitated and impeded the continuation of the change process and establishing the teachers' perceived outcome of the change (Fullan, 1993). Research methods were chosen that created a space where teachers could comfortably and openly converse with the researcher to share their thoughts and experiences of physical education professional learning, curriculum and pedagogy.

Key to understanding the complex process of educational change was ascertaining from each individual teacher:

- What their physical education curriculum and pedagogy was like before undertaking the Postgraduate Certificate in 3-14 physical education (PGCert)?
- What impact, if any, the PGCert had on their thinking and approach to teaching physical education?
- What changes, if any, they made to the physical education curriculum, their pedagogy and how they achieved this?
- If and how these changes affected their school contexts (colleagues, pupils, parents and community)?
- Could they articulate perceived outcomes of the change process and why it was important?
- What happens next? How will the changes made be sustained?

## **Research Objectives**

The objectives of this study are:

- To contribute to literature on professional learning, providing a detailed description of how teachers apply knowledge and skills gained within their school contexts.



- To expand on Fullan's (1993) description of change agency and present empirical research that illustrates how teachers as change agents think and act.
- To contribute to literature on primary physical education, providing a fine-grained picture of how, in response to professional development, primary teachers instigate curricular change.

## **Research Questions**

The research questions guiding this study are:

- How do primary teachers with a further qualification in primary physical education construe and take forward educational change in primary physical education?

This entails asking:

- In what ways have these individual teachers' experiences of professional learning in physical education shaped their pedagogy and the primary physical education curriculum in their schools?
- How have these teachers instigated and implemented curricular and pedagogical change in physical education?
- What factors facilitate and impede the continuation of the process of educational change?

## **The Researcher**

My own experiences as a primary teacher and as a participant on the PGCert have shaped my understanding of physical education, professional learning and educational change. My initial interest in ascertaining the effect of the PGCert on primary teachers was driven by my curiosity regarding the impact it had on me. Participating on the PGCert changed how I thought about both physical education and education in general consequently prompting me to alter my career path, leaving teaching to engage in full-time educational research. My own experiences of this professional development opportunity led me to question the wider impact of

professional learning on teachers and what impact it can have on teachers' practice. By acknowledging my background in relation to the study I am able to address the issue of subjectivity that is often levied at qualitative research (Bryman, 2008). Vickers (2002) highlights how researchers will often engage in research that is connected to their personal history and interests. This can place them in the position of an 'insider' and "allows for insights into processes, phenomena, and individual, cultural, or group dynamics that others cannot witness" (Vickers, 2002, p 619). I recognise that as I was previously a primary school teacher and a participant on the PGCert this establishes a link between myself and the participant teachers in the study. Having worked in a similar context I understand the intricacies of teaching and this creates a common understanding between me and the participant teachers. Additionally having experience of the PGCert provides me with a similar knowledge and experience base. I would suggest that sharing my previous practitioner status with the participant teachers contributed greatly to my being able to gain their trust and respect. I retained considerable knowledge and experience of the profession and therefore maintained high credibility with the participant teachers (Robson, 2002). While there were many advantages to the 'insider' role afforded me as an 'ex-practitioner researcher' I also had to be aware of the preconceptions I would retain. In recognition of my ex-practitioner researcher 'bias' I attempted to maintain an open and enquiring mind throughout the study by reflecting on my own subjectivity (Bogdan and Biklen, 1982; Denscombe, 2007). As this chapter unfolds I will make reference to how this openness was achieved.

## **Research Design**

### **Research Paradigm**

"Before you can begin to conduct social research, you need to consider the relationship between theories and the empirical world" (Esterberg, 2002, p. 5). There are a wide array of interlinked methodologies, methods and theoretical perspectives presented within research literature and the "terminology is far from consistent" (Crotty, 1998, p. 1). This can make exploring the range of theories and research methodologies available an arduous task, and make it difficult to select between them (Gray, 2004). I therefore feel that it is important to begin this chapter

by outlining the terminology that will be used within this study. While many writing about research (see Macdonald *et al.*, 2002; Gray, 2004; Crotty, 1998) favour the use of the term theoretical perspective to outline the “assumptions brought to the research task” (Crotty, 1998, p. 7) I prefer to use the term paradigm (see Guba and Lincoln, 2005; Esterberg, 2002; Robson, 2002). Bogdan and Biklen (1982) describe a paradigm as a, “loose collection of logically held together assumptions, concepts, or propositions that orient thinking and research” (p. 30).

There is extensive discussion within research literature identifying different paradigms, outlining how they have developed over time and competed for prominence (Denzin and Lincoln, 1994; Macdonald *et al.*, 2002; Edwards and Skinner, 2009). Throughout much of the literature positivism is recognised as the dominant approach to research throughout the nineteenth and twentieth centuries (Bogdan and Biklen, 1982; Edwards and Skinner, 2009). From a positivist perspective, reflecting the scientific origins of this paradigm, research centres on establishing facts and causes of behaviour. There is also a preoccupation with measurement, reliability, prediction and replicability within research methods (Edwards and Skinner, 2009). This focus on prediction and control led to much debate as to the relevance and suitability of positivism within the social sciences and has consequently seen a number of alternative theoretical paradigms emerging. For example, Robson (2002) highlights relativism as an antithesis to positivism along with post-positivism, constructivism and emancipatory approaches. He then goes on to present realism and in particular critical realism as a research paradigm that carves a way forward between positivism and relativism. Contrastingly Guba and Lincoln (2005) present five paradigms relevant to qualitative research: positivism; post-positivism; critical theory; constructivism and participatory. Engaging with these different paradigms, it becomes apparent that there are a number of contradictions and confluences between them.

Rather than becoming embroiled with the ‘this or that’ debates surrounding the various paradigms, I felt that it was important to remember that: “paradigms are not provable...they are, essentially, matters of faith” (Esterberg, 2002, p. 9). Initially, rather than specifically aligning myself to a particular paradigm, discounting all

others I thought about what I wanted to investigate, the questions I wanted to ask and how these could be explored through different paradigms (Macdonald *et al.*, 2002). Similarly to Duncombe (2005) I approached the research process as a teacher. In this respect, when considering how to connect theory with practice I wanted to ensure that the paradigm and related theory I utilised was relevant to the intricacies and realities of the everyday work of teachers. Macdonald *et al.* (2002) assert that while it is important to utilise theory to shape and substantiate research, aligning to a particular paradigm should be approached with caution. They stress that care should be taken to ensure that theory in research does not “alienate the people that educational research is bound to assist” (Macdonald *et al.*, 2002, p. 149). Additionally they advocate that when considering paradigms to support research recognition should be made of the contribution that the use of a wide variety of paradigms has made to educational research. Researchers should be open to considering incorporating “both structural and poststructural perspectives in their work as appropriate” (Macdonald *et al.*, 2002, p. 150).

When exploring the contribution particular paradigms could make to this study consideration was given to the underlying beliefs and ideas shaping the paradigm and three basic questions were asked:

- Does (social) reality exist? – ontology
- Is it knowable? – epistemology
- How can knowledge be acquired about it? – methodological

(adapted from Corbetta, 2003, p. 12)

Asking these questions led me to the conclusion that while positivism has a valuable role to play as a paradigm within the social sciences and educational research (Macdonald *et al.*, 2002), it did not fit with my epistemological views (Gray, 2004). I acknowledge that there are many angles from which to see reality and it is for this reason that an interpretivist paradigm seemed best placed to capture the lived experiences of the teachers. In contrast to positivism where the purpose is to quantify and calculate scientifically, an interpretivist perspective places the focus on understanding and making sense of the multiple realities, experiences and views of

participants that are embedded in and evolved from social, cultural and historical contexts (Crotty, 1998). Essentially I felt that an interpretivist paradigm would best reflect the complex nature of teaching and learning in schools which was to be the focus of my study.

The interpretivist paradigm constitutes a variety of approaches (e.g. symbolic interactionism, phenomenology, hermeneutics) which have a shared notion that there are different perspectives from which to interpret reality (Edwards and Skinner, 2009), constructed by social actors (Esterberg, 2002). In comparison to positivism, (which tends to favour quantitative methods involving empirical analysis, proving theories and measuring cause and effect), interpretivism favours a more qualitative approach where the meaning of research is negotiated between the researcher and research participants. While the interpretivist paradigm has made a significant contribution to social science research, it is important to recognise possible shortcomings (Macdonald *et al.*, 2002). In particular, as an interpretivist researcher my ability to truly capture the experiences of the participating teachers in this study is limited, as it will be my interpretation of their stories; it is impossible for me to know for certain what is really going on (Geertz cited by Esterberg, 2002).

However, an interpretivist paradigm still seemed to best support this research study. Macdonald *et al.* (2002) recognise the value of the interpretivist paradigm to research within physical education. Of particular relevance to the focus of my study, they discuss how an interpretivist paradigm has been applied to understand how teachers and school cultures impact on the process of change. In my role as the researcher I sought to use the interpretivist paradigm as a lens. Through this lens I sought to view, and interpret the complex experiences and realities of the teachers within the social setting of the school, and in particular the physical education lesson. Using the interpretivist paradigm as a lens kept me alert to the fact that there are always different perspectives from which to look at research.

## Qualitative Research

Consonant with the interpretivist paradigm a qualitative approach to gathering data and making sense of it was adopted. Boeije (2010) uses the following definition of qualitative research:

The purpose of qualitative research is to describe and understand social phenomena in terms of the meaning people bring to them. The research questions are studied through flexible methods enabling contact with the people involved to an extent that is necessary to grasp what is going on in the field. The methods produce rich, descriptive data that need to be interpreted through the identification and coding of themes and categories leading to findings that can contribute to theoretical knowledge and practical use.

(Boeije, 2010, p. 11)

I would suggest that this definition reflects my reasoning behind using qualitative research in this study. Boeije (2010) proposes that there are three key elements within the definition: “looking for meaning; using flexible research methods enabling contact, and providing qualitative findings” (p. 11). In devising this study my first concern was to collect data from the ‘natural setting’ (Denzin and Lincoln, 1994) of the school. I felt that collecting data within the ‘natural setting’ of the physical education lesson would significantly contribute to developing my understanding of the meaning the teachers attached to the changes they were making to the curriculum and their pedagogy. My intention was to attempt to capture a detailed picture of the subjective reality of teaching primary physical education (Nias, 1993).

To generate such thick (Geertz, 2005) data required research strategies and methods of a qualitative nature. It is recognised that qualitative research is more emergent than its quantitative counterpart (Silverman, 2010; Edwards and Skinner, 2009; Boeije, 2010), therefore favouring a qualitative approach allowed the study more flexibility. This is not to dismiss the value of quantitative research, rather as I wanted to build a rapport with the teachers I would be working with I felt that research methods such as semi-structured interviews and observation stemming from the qualitative discipline were best suited to achieving my research aims. These research methods also supported the emergent nature of the research process as I collected data in cycles, reflecting on it and then feeding it back to build knowledge

(Boeije, 2010). The process of inquiry involved in this research study may have been of a flexible nature but it was still underpinned by a focussed research design incorporating: knowledge of relevant background literature and theory; coherent research questions and a well-formulated approach for collecting and analysing data (Mason, 2002). Punch (2009) suggests that a clear design is integral to the research process as it situates the researcher and demonstrates how the research questions and data are connected. Additionally this contributes to enabling qualitative research to move beyond simple description and link theory with practice.

A criticism often levied against qualitative research is that it is merely descriptive, while quantitative research is more focussed, offering explanation by investigating why and how things happen. Describing the ‘goodness’ of qualitative research, rather than simply defending it against quantitative research Peshkin (1993) attempts to “respect the integrity of the qualitative paradigm” by asking: “What is its generative promise?” (p. 23). In answering this question four categories each with associated sub categories are presented, to outline the potential outcomes of qualitative research: description; interpretation; verification and evaluation (see table 3.1). Rather than attempting to categorise the potential outcomes of qualitative research the purpose of this list is to identify the assortment of useful outcomes that emerge: “the variety of this array reflects the breadth of our need to know as we try to understand the inevitably complex phenomena of educational research” (Peshkin, 1993, p. 24).

**Table 3.1 Types of Outcomes from Qualitative Research**

**(adapted from Peshkin, 1993, p. 24)**

Categories of Analysis	Subcategories of Outcomes
Description	Processes Relationships Settings and Situations Systems, people
Interpretation	Explaining and creating generalizations Developing new concepts Elaborating existing concepts Providing insights that: change behaviour refine knowledge identify problems Clarifying and understanding complexity Developing theory
Verification	Assumptions Theories Generalizations
Evaluation	Policies Practices Innovations

### **Research Methods**

Having established the purpose of the study, the paradigm orienting the study and the research questions it is now the intention to provide an explanation of the methods adopted to undertake the study. The purpose of this section of the chapter is to outline the methods adopted by the study; the following section on data gathering will provide more detail of how each method was specifically applied out in the field.

Reflecting the interpretivist paradigm, within which my research study was situated, questioning the nature of reality led me to want to find out about the experiences and views of primary school teachers as they instigated educational change.

Concomitantly, as an ex-practitioner researching teachers I was aware that my



understanding of the world may be similar to theirs and therefore I would need to take account of my own positioning when interpreting their reality. In line with the underpinning ontology and epistemology, the methodological perspective guiding this study recognised that the methods used would need to allow for interaction between myself and the participant teachers. Most qualitative research literature (see Denzin and Lincoln, 1998; Denscombe, 2007; Punch, 2009) presents a number of different potential methodologies or research strategies (e.g. Case Study, Ethnography and Action Research) that can be used to drive research, suggesting that one strategy is eventually favoured over others. In contrast, Punch (2009) suggests that it is possible to combine elements of different research strategies. Rather than align with a specific research strategy the main concern in the design of this study was to ensure that the methods of research chosen were congruent with the research questions (Greener, 2011).

Within qualitative research there are a wide variety of research methods that can be employed (Punch, 2009). Formulating a research design is not about establishing a specific plan to be slavishly followed, rather it is about selecting approaches and methods that match up with the research aims and questions. Denscombe (1998) highlights that: “the crucial thing for good research is that the choices are reasonable and that they are made explicit” (p. 3). From the outset it was the intention of this study to gain a detailed account of educational change, spending an extended amount of time in the field, building a picture of the teachers’ lived experiences of instigating curricular and pedagogical change in physical education within their school contexts. Consequently, the research questions guiding this study sought to ascertain the various factors influencing how teachers construed and took forward educational change. For this reason methods were chosen that enabled me, as the researcher, to build a rapport with the participant teachers (Duncombe, 2005). Considering the feasibility (Esterberg, 2002) of the study it was clear that achieving this aim required working with a small number of participant teachers.

Working with a small number of teachers orientated the study towards interviews as the primary method of data gathering:

The use of interviews normally means that the researcher has reached the decision that, for the purposes of the particular project in mind, the research would be better served by getting material which provides more of an in-depth insight into the topic, drawing on information provided by fewer informants.

(Denscombe, 1998, p. 110)

Interviewing was viewed as a relationship (Esterberg, 2002) and an encounter taking into account that: “no matter how hard an interviewer may try to be systematic and objective, the constraints of everyday life will be part of whatever interpersonal transactions she initiates” (Cohen, Manion and Morrison, 2001, p. 268). Interviews were deemed appropriate as the primary method of data gathering as the main aim behind the research study was to investigate the opinions, feelings, emotions and experiences of a small number of teachers (Denscombe, 2007).

It is recognised that there are different types of interview available to the researcher (Cohen, Manion and Morrison, 2000; Esterberg, 2002; Gray, 2004; Denscombe, 2007 ; Punch, 2009). Punch (2009) presents a continuum for interviews ranging from structured to semi-structured and unstructured. For me, the main purpose of the interviews was to build a rapport with the teachers enabling open exploration of topics I wished to discuss while also allowing the interviewees space to express their own opinions. With this in mind the approach to interviewing adopted was semi-structured as it enabled a flexible interview schedule to be developed that took account of issues I wanted to cover but also allowed scope for probing and adapting questions to suit the direction the interview may take (Holstein and Gubrium, 2004).

In using interviews, particularly those of a semi-structured nature, it is imperative to consider the role of the interviewer and potential for bias. This raises questions about whether the interviewer and interviewee jointly construct meaning through the interview and how much of the self the researcher should reveal during the interview (Esterberg, 2002). Taking account of this I considered the interviewer effect, how my personal identity, self presentation and personal involvement could impact on the interview (Denscombe, 2007). In line with feminist thinking (Esterberg, 2002) I felt that my teaching background gave me a similarity with the interviewees and would help me to gain access and build a rapport with them. However I was also aware that

my ex-practitioner status could potentially lead to me developing too empathetic a relationship with the participant teachers. To counteract this while I shared my teacher status with them I also attempted to adopt a neutral stance so that I could actively listen to their words, respond and learn from them (Denscombe, 2007).

I felt that the semi-structured interviews would enable me to explore in detail the teachers' response to the physical education professional development (PGCert) and how they were instigating change. However, I did not think they were an appropriate method for gaining in-depth insight into the physical education curriculum the teachers were delivering and their thinking behind it. Drawing on my own experiences as a teacher, I considered the important role that planning plays within a teachers' professional life, and that it involves a complex and often creative thought process. I supposed that by using unstructured, open-ended interviews (Bogdan and Biklen, 1982) it may be possible to capture this thought process by asking the teachers to talk freely about their planning. In the field, these unstructured interviews encouraged the teachers to articulate the usually internal process of planning and enabled me to gain some understanding of their thought process (Denscombe, 2007).

I described these unstructured interviews as planning conversations, where I did not use an interview schedule and therefore afforded the participant teachers the opportunity to openly discuss their physical education plans and evaluation of these plans (Cohen, *et al.*, 2000). Unlike unstructured interviews the planning conversations were not entirely spontaneous (Esterberg, 2002) as the timing of them was planned in advance with the participant teachers, and I did have an idea of some topics I wanted to discuss with them. Similar to unstructured interviews the tone of the planning conversations was more conversational (Punch, 2009) as I often asked the teachers to simply share with me what they had been doing in physical education over a term and what they planned to do in the following term. As well as complementing the semi-structured interviews the planning conversations connected with the observations I made of physical education lessons.

To further support the interviews, observations were used within this study to provide a detailed picture of the: "interaction between structure and action - on how

people are embedded in larger social and cultural contexts and how, in turn, they actively participate in shaping the worlds they inhabit” (Gerson and Horowitz, 2002, p. 203). Gray (2004) describes observation as involving “the systematic viewing of people’s actions and the recording, analysis and interpretation of their behaviour” (p. 239). Observation occurs within natural settings and involves the researcher in direct observation to gather data out in the field (Esterberg, 2002; Denscombe, 2007). There are different approaches to observation: structured, unstructured, participant and non-participant (Punch, 2009). Reflecting the qualitative nature of my study, an unstructured approach to observation was adopted, making it more natural and open-ended (Punch, 2009). The observation I engaged in within the field linked with the main research question guiding the study. I wanted to see how the participant teachers were taking forward curricular and pedagogical change within their practice.

Consideration was given to how to approach the observations; what would be observed and why along with how to record the observations (Punch, 2009). During my initial observations of physical education lessons I attempted to record everything I could see occurring through field notes (see Appendix A for an extract from my observation field notes). As the observations progressed I focussed more on specific interactions between the teachers and the children they were working with. I attempted to gain a big picture view of the general content of the lesson by scanning the environment of the physical education lesson to see what was happening around me. Additionally, to gain a more fine-grained view of how the teachers worked with the children, how the children interacted with each other and how the children engaged with lesson content, I focussed in on more specific occurrences. Through the observations I was able to “attend to interactions, group processes, talk and evolving situations” (Gerson and Horowitz, 2002, p. 215).

The observations were analysed in a similar fashion to the interviews, linking themes and categories from my field notes with those that emerged from the interviews. In particular, the observations complemented the planning conversations offering me an opportunity to see how the teachers enacted and evaluated their plans. The observations contributed to the validity of the study as they allowed me to marry what the teachers were saying about their teaching and the physical education

curriculum during interviews with what they were actually doing in practice. The use of semi-structured and unstructured interviews along with observations as research methods within my study reflected: “an attempt to secure an in-depth understanding of the phenomenon in question, through triangulation” (Denzin and Lincoln, 1998, p. 4).

Triangulation involves looking at a phenomenon from more than one perspective (Denscombe, 2007; Boeije, 2010). Denzin and Lincoln (1998) suggest that triangulation contributes to validation, and citing Flick (1992) suggest that the combination of multiple methods in a study is a “strategy that adds rigor, breadth and depth to any investigation” (p. 4). There are a number of different ways that triangulation can be applied: methodological; data; investigator and theory (Denscombe, 2007; Cohen, *et al.*, 2000). This study made use of triangulation by applying three different qualitative research methods to gather data. As previously outlined the primary source of data gathering were semi-structured interviews complemented by unstructured interviews (planning conversations) and observations of physical education lessons. While the use of these research methods contributed to the reliability of the data, triangulation was not applied assuming there was a single reality to be known (Tracy, 2010). Multiple research methods were used to allow: “different facets of problems to be explored, increase scope, deepen understanding, and encourage consistent (re) interpretation” (Tracy, 2010, p. 843). From an interpretivist perspective I recognised that there were multiple ways from which to view the teachers’ experiences of professional learning and educational change. Through the combined use of interviews, planning conversations and observations I was able to develop a fuller picture of the teachers, developing my understanding of how they worked and how they were shaped by their circumstances.

### **Ethical Considerations**

The first ethical considerations made by this study were to adhere to the Moray House School of Education’s ethical guidelines. (Additionally as the research was to take place in schools I went through the process of receiving an enhanced disclosure from Disclosure Scotland.)

Boeije (2010) suggests that a common ethical principle in research is the umbrella term “beneficence” referring to: “maximising good outcomes for science, humanity and the individual research participants while avoiding or minimising unnecessary harm, risk or wrong” (p. 45). It is suggested that this principle is addressed in three ways through: informed consent, privacy, and confidentiality and anonymity.

Informed consent was sought from each teacher. When I approached teachers to become participants in the research I shared with them the aims and objectives of the study (an example of this information is provided in Appendix B). In addition to this, on my first meeting with each teacher I again explained the nature of the study and their involvement in it. At this first meeting written consent was asked for (Appendix B contains an example of the participant consent form), I explained to each teacher that their privacy would be respected throughout the study and that they could withdraw from the study at any time.

Respecting the teachers’ privacy I assured them that their identity would remain anonymous. To ensure confidentiality throughout the study, the names of the individual teachers and the names of their schools were replaced with pseudonyms. The pseudonyms used for the teachers throughout this thesis are Lara, Max, Imogen, Jackson and Geoff; the pseudonyms for their schools are respectively Bennachie Primary School, Cairngorm Primary School, Ben Nevis Primary School, Aonach Beag Primary School and Lochnagar Primary School. Additionally, in respect of the teachers’ privacy I asked them if they objected to interviews being recorded using a Dictaphone and stressed that information provided would be securely stored and sensitively dealt with. Despite the attempts I made to ensure confidentiality and anonymity I was aware that within such a small study, where some of the participants knew of each other, the maintenance of anonymity, particularly when out in the field, could prove challenging. To overcome this when I was with each teacher I made limited reference to the other teachers participating in the study. Throughout the research process I ensured that I continued to take into account the teachers’ rights as participants, negotiating the place and timing of interviews and observations with them. I also sought to keep them informed as to how the study was progressing.

As well as gaining the consent of each individual teacher taking part in the study I also approached the head teacher from each school. I shared with them the aims and objectives of the research and similarly to the teachers I assured them of confidentiality and anonymity. I explained to the head teachers of each school that while the study involved me observing physical education lessons the focus of these observations was not on the children but on the teacher, and the format and content of the lessons. Although the research did not directly involve children, depending on school regulations, I anticipated that I may have been required to obtain parental consent for the observations. In response to this, prior to meeting with the schools I prepared a letter (see Appendix B) that could be issued to parents providing information about the study and which gave them the opportunity to opt out of their children being observed in physical education lessons. Only one of the schools sought to directly inform parents about the study and they devised their own letter to do this. The other head teachers felt that observation was a regular occurrence, embedded within school life therefore they did not have concerns about me observing physical education lessons. These schools chose to inform parents about the study and my presence in the school through the school newsletter.

## **Sampling**

Coyne (1997) and Punch (2009) highlight the wide variety of terminology used to describe sampling strategies used in qualitative research (for example, purposive sampling, theoretical sampling, selective sampling and snowball sampling). When considering how to select a sample, Bouma and Ling (2004) suggest that the researcher first needs to ask what they want to know and about whom they want to know it. The general premise of this study was to find out about the connections between professional development and educational change in primary physical education, from the perspective of primary school teachers. From the outset I knew that the target population for the study were primary teachers who had completed the PGCert at the University of Edinburgh. This group totalled around two hundred students, and were focussed on because they had undertaken intensive professional development in physical education. I wanted to understand, in detail, what primary teachers who had engaged with the PGCert actually did with the knowledge and

skills they had acquired (Esterberg, 2002). Punch (2009) suggests that it is common within qualitative research to use some form of deliberate sampling rather than the probability approach to sampling used within quantitative research. This study set out with a deliberate approach to sampling (Silverman, 2010), purposively selecting PGCert primary teachers because they provided an opportunity to study the relationship between professional development and educational change.

Purposive sampling was used to select cases from within a defined research population to be examined (Boeije, 2010). I made the decision that I had to choose research participants who would provide me with “the greatest possible insight” into professional development and educational change in physical education (Esterberg, 2002, p. 93). Having identified the general target population for the study, I then had to consider the practicalities of conducting this research study (Denscombe, 2007).

As a lone researcher, with limited means I knew that it would not be viable to involve a large number of participant teachers in the study (Newby, 2010). As previously noted, I wanted to conduct a detailed study, over an extended period of time, using interviews and observation as the main methods of gathering data. Therefore, I felt that the purposes of this study would best be met by involving a small number of participant teachers (Denscombe, 1998). The main criteria for selection of participant teachers from the PGCert cohorts were to approach primary teachers who had responded positively to the course and were instigating change within their school contexts. These teachers were seen as best representing and having knowledge of the research topic (Morse *et al.*, 2002), and were most likely to “produce the most valuable data” (Denscombe, 2007, p.17). I was not selecting teachers to be representative of the populace of the PGCert; rather I was seeking out “special instances” that would illuminate the research questions (Denscombe, 2007, p. 30). I wanted to understand what change looked like in practice therefore I was looking to recruit teachers to the study who had been motivated to change so I could study the nature of their change efforts. While the research literature highlights the value of seeking out negative cases (Morse *et al.*, 2002; Boeije, 2010) this was not deemed appropriate for this small scale study as the focus was on teachers instigating change. It was pertinent to this study to focus on instances where teachers were



making substantial efforts to initiate change. However, during the course of the study researching negative cases emerged as a possible and valuable next step. Recounting the experience of recruiting teachers to the study reflects the complex reality of sampling. The first person recruited to the study was a former teaching colleague of mine, Lara. A criticism could be levied at the study that this was convenience sampling and questions the rigour of the research (Denscombe, 2007). Contrary to this suggestion, I would argue that the main reasoning for asking Lara to participate in the study was because she had completed the PGCert and was actively applying the knowledge and skills she had learned to change the physical education curriculum within her school. However, I acknowledge that recruiting Lara to the study was of benefit to me in a practical sense as I knew the school she worked in, it was easy to get to and that it would likely be hospitable towards me and the study (Stake, 1995).

The next teacher recruited to participate in the study was Max. Although Max was known to Lara as they had both been involved with the pilot of the PGCert she did not directly introduce him to me. I met Max through colleagues from the Developmental Physical Education Group (DPEG) at the University of Edinburgh. As course tutors of the PGCert they knew Max as a student on the course and had continued to work with him after he had graduated from the course supporting him as he made changes to physical education within his school. The relationship between Max and the DPEG is explored in greater detail throughout the subsequent analysis chapters of this thesis. The technique used for sampling here was akin to “snowball sampling” (Bouma and Ling, 2004; Newby, 2010; Denscombe, 2007) as I utilised my colleagues in the DPEG to introduce me to Max, and subsequently the other teachers I approached to be involved with the study. Max had been asked to speak at a National Conference in physical education at the University of Edinburgh in 2009 and it was within this forum that we were formally introduced. We engaged in an interesting discussion about physical education, the PGCert, the work he was doing in his school and the initial ideas of my study. It was during this conversation that Max expressed an interest in possibly being involved with my study. Following on from this initial meeting I made more formal email contact with Max. From this email contact a meeting between Max, his Headteacher and myself was organised at

his school where we discussed my study proposal and consent to participate in the study was gained from Max and the school.

Having recruited two teachers to the study I gave further consideration to the validity of the purposive approach to sampling. I recognised that while generalisability is difficult to attain in small scale qualitative studies, I did not want to shirk the responsibility of ensuring rigour (Barbour, 2008). Considering that “a sample is a selection from the population” (Robson 2002, p. 260) I wanted to ensure that the sample I made of the population of PGCert teachers encompassed, as far as possible, teachers with contrasting backgrounds and from a variety of school contexts. To support me to do this I constructed a sampling matrix of factors relating to the teachers and their schools that I could use to ascertain contextual similarities and differences between teachers participating in the study. To gather this information about the teachers and their schools, as I recruited each teacher to the study I asked them to complete a background questionnaire (see Appendix C). Additionally I accessed Scottish Government documentation, such as free school meals surveys and HMIE inspectorate reports, which provided supplementary information about the schools the teachers were working in.

The background questionnaire and subsequent matrix considered a number of factors relating to the individual teachers and their schools. For each teacher consideration was given to their gender, length of service, position in the school, the year group taught and which cohort of the PGCert they had been part of. School factors taken into consideration were: the socioeconomic status of the school determined by free school meals; urban/rural measure; location of the school, and the size of the school roll. I felt that it was important to identify salient sampling dimensions in the study and therefore used the matrix to gain an overview of the background of the participant teachers and their schools. In practice it was not possible to come up with a sample that exactly followed the structure of the matrix, however, it still had value as a conceptual framework and a way of describing the participants.

To complete the sampling process so that fieldwork could commence at the beginning of the 2010/11 academic year, during May and June of 2010, I sought to recruit two more teachers to the study. Consulting with colleagues in the DPEG a

number of teachers were identified as having responded positively to the PGCert. Email contact was made with these teachers initially through the DPEG administrative secretary asking if they would be interested in participating in a PhD study. A number of these emails met with no response but two teachers did respond; I was particularly keen to involve these teachers in the study because they worked in different local authorities to the teachers I had already recruited to the study. I met with one of these teachers, Geoff and his head teacher at Lochnagar Primary School in June, 2010 where consent was obtained from them to be involved in the study. I had a positive telephone conversation with the other teacher who registered interest in being involved in the study during which they agreed in principle to being involved in the study. However, when I attempted to contact them in the new school year I received no further response. Therefore, in August 2010 at the beginning of the fieldwork phase of the study I was still looking to recruit one more teacher.

I had been attempting to recruit teachers from different local authorities within the east of Scotland so that I could achieve some geographical variation in the sample. However, as time was of the essence and I had previously received a limited response from teachers based further afield I decided to refocus my search on areas closest to me. Again I consulted colleagues from the DPEG and one teacher in particular was identified, Imogen. By September of 2010 Imogen had agreed to participate in the study and the sample process for the study was seemingly complete. Yet this was not to be the end of the recruitment process. As is discussed in more detail later in this chapter by October 2010 a combination of factors (heavy work load, personal factors, distance between researcher and participant) had reduced Geoff's participation in the study and I recognised that it would be beneficial to the study to recruit a further participant. Coincidentally Max had told me about a former colleague of his, Jackson, who was just about to complete the PGCert and who he thought would be a good person to talk to. Snowball sampling occurred in this situation as Max put me in contact with Jackson and he consequently agreed to become part of the study. My experience of recruiting people into the study reveals how sampling is far from straightforward. When situated within the messy context of the research process it can be a long and complex task.

## **Data Gathering**

Having outlined the research methods adopted in this research study I will now provide more detail as to how these methods were applied during the fieldwork phase of the study.

### **Flexibility**

While establishing a framework for the study was important it also had to be flexible as I wanted to be able to respond to the emergent nature of the research process (Boeije, 2010). I wanted the study to be as unobtrusive as possible for the teachers, so reflecting the flexibility built into the research design, I attempted to fit interviews and observations around the teachers' busy schedules. Planning the research study I was flexible with the number of interviews, planning conversations and observations I intended to conduct. At the start of the study I shared an outline of the study with the participant teachers which provided them with information about the study and a rough idea of when interviews and planning conversations would occur. I stressed that the timeframe for interviews and observations was flexible and open to negotiation. Sharing this outline with the participant teachers helped build relationships as it provided them with an input into the research process and avoided treating them as simply research subjects (Bogdan and Biklen, 1982), something I was keen to avoid.

An example of the emergent nature of the research process is provided in the number of interviews and planning conversations conducted. My initial thinking when I started the study was to conduct up to four interviews and four planning conversations with each teacher, which roughly worked out at doing two interviews each term. However, during the course of the study it became apparent that this number of interviews would not be necessary or feasible. After the third round of interviews I found that significant overlap was beginning to occur between what the teachers were saying in the planning conversations and interviews. Additionally the interviews and planning conversations which I had intended to take around forty five minutes were often lasting for well over one hour. While this provided rich data I questioned if transcribing lengthy interviews and planning conversations where

repetition was beginning to occur was the best use of my time. I felt that the data had reached saturation point and therefore it was more productive to devote my time to early data analysis. Consequently during the fieldwork I made the decision to reduce the number of interviews and planning conversations conducted.

The observations of physical education lessons were an area where I knew from the outset I would need to be extremely flexible in order to fit in with the teachers' timetables. Therefore my thinking behind the observations was to negotiate with the teachers to conduct as many as possible during each term throughout the academic year. I felt that this would enable me to gain a holistic view of the physical education curriculum over an academic year and observe each teacher working with a variety of age groups. Adopting a flexible approach to the data gathering was essential because over the course of the academic year a number of factors beyond my control as the researcher emerged which I had to negotiate and which ultimately impacted on my fieldwork.

During the data gathering period of the study a number of issues arose which tested the flexibility of the research design I had developed. One of the first problems I had to negotiate was having difficulty retaining contact with Geoff. I had conducted a first interview with him at his school in June 2010. However when the new school year started it was very difficult for me to get in contact with him. I knew that as he had responsibility for both a class and physical education he would be really busy so I persevered trying both email and telephone to contact him. My main concern was to offer him the option to withdraw from the study if he felt that it was too much of a commitment for him. When I did manage to get in contact with Geoff, in October of 2010, he stated that he was still keen to participate in the study. To make it more manageable for him I suggested that I could conduct four semi-structured interviews with him over the telephone, and make arrangements to visit once each term to see him teaching. Not being able to get in contact with Geoff put me in the position where I had to consider what to do if he withdrew from the study. As previously intimated, I decided that the best course of action would be to recruit another teacher to the study. Subsequently, by November 2010, Jackson had agreed to participate in the study and had completed a first interview, planning conversation and observation.

During the study Geoff completed four interviews and was observed twice while the other participant teachers completed three interviews, three planning conversations and were observed between six and eleven times each. As a result of Geoff's reduced involvement in the study I made the decision to include data from his interviews in the first two analysis chapters but focussed only on Imogen, Max, Lara and Jackson in the final analysis chapter.

In December 2010 a further problem arose for the study in the form of the weather. Scotland experienced the heaviest snowfall for many years with many schools and roads closed for a number of days, consequently this impacted on my observation schedule as a number of planned observations had to be cancelled. The flexibility built into the study design, particularly regarding the observations meant that the disruption caused by the weather did not impact too greatly on the study as I could compensate for the missed observations by doing more in subsequent terms. The final stumbling block the study had to overcome was that two of the schools involved in the study received HMIE (Her Majesty's Inspectorate of Education) inspections during the academic year of the study. Imogen was informed in the second term of the academic year that her school was to be inspected in December of 2010 (as a result of the inclement weather the inspection had to be postponed until January, 2011). As Imogen was busy preparing for the inspection, during much of the second term I did not manage to do any observations with her. Additionally Geoff found out in the final term of the academic year that his school was to be inspected in May 2011; again this prevented me from getting to the school to do an observation. My experiences out in the field reflect that qualitative research within the natural setting is unpredictable, as the environment and the people within it are ever changing (Haggis, 2008). In the field it is important that the researcher is able to go with the flow; a focussed yet flexible research design supports this.

### **Interviews and Planning Conversations**

I had a clear focus for the first two interviews I conducted with the teachers. The first interview (see Appendix D for interview schedules) drew on the life history approach (Denscombe, 2007; Cohen, *et al.*, 2001; Boeije, 2010) as I wanted to obtain some background information from the teachers regarding their past perceptions of

physical education. Additionally as the main intention of the research was to investigate educational change it was important to obtain some understanding of any transformation the teachers had experienced and this required establishing how the teachers had engaged with physical education before they participated on the PGCert. Consequently, the questions asked required the participant teachers to recall their personal experiences of physical education and physical activity from their childhood to the present. The questions also asked the teachers to reflect on their experiences of teaching physical education prior to undertaking the PGCert. The purpose of these questions was for me to gain an insight into the previous content and format of physical education in their schools. I was aware that asking the interviewees to recall experiences from their past may not produce entirely accurate accounts.

Essentially, the validity of any life history lies in its ability to represent the informant's subjective reality, that is to say his or her definition of the situation.

(Cohen, *et al.*, 2001, p. 167)

Taking into account the possible subjectivity of the participant teachers as they recalled their past lives; I had to be alert in my findings to the possibility that the teachers may present themselves to me in the interviews as transformed from previously being less effective and less reflective practitioners. However, I still felt that asking the teachers to reflect on their past experiences of physical education was the best way to gain a big picture view of what the teachers thought about physical education and their approach to teaching it before engaging with the PGCert.

Following on from the first interview the second interview focussed on ascertaining from the teachers what physical education presently looked like within their schools and what contribution they were making to it as a subject area. Woven through these first two interviews I also asked the teachers to elaborate on the PGCert to ascertain what they thought of the course and what effect they perceived it had on their approach to teaching physical education. Reflecting on analysis of the first two interviews, I formulated a focus and schedule for the third interview (see Appendix D).

The first part of the third interview was used to gain a fuller sense of the participant teachers understanding of some key terms that had arisen during the interviews and planning conversations, in particular: physical education, physical activity and developmental physical education. These terms were specifically identified as they were used frequently and were closely associated with the rationale underpinning the PGCert. Following on from the definition of key terms, the main theme explored in the third interview was change. I wanted to establish if, and how the teachers had applied the knowledge gained from the PGCert along with the practicalities of doing this within their school contexts. Additionally I sought to gauge the participant teachers' feelings and attitude towards change they had experienced within education in general. Particular reference was made to *Curriculum for Excellence* as this was a significant, centrally driven (by the Scottish Government) curriculum change initiative, that was being implemented while this study was being conducted. Interwoven into the line of questioning used within this interview were attempts to ascertain if the teachers could identify affordances and constraints impacting on their efforts to instigate change. I also sought to establish if the teachers could articulate the benefits of the changes they were implementing for the wider school.

As previously discussed, the main intention behind the planning conversations was to encourage the teachers to talk openly to me about their plans and what they were teaching in physical education lessons. Initially I had planned for four planning conversations, as I felt that this best fitted with the teachers' planning within their schools. However, as previously intimated, this number was reduced to three in response to preliminary analysis conducted during the fieldwork phase. Drawing on my past experience as a teacher, I was aware that in most Scottish schools the academic year is planned over four terms. At the beginning of the year teachers produce a yearly plan and subsequently produce medium term plans at the beginning of each new term which outline what they intend to cover along with evaluations from the previous term. Consequently, I thought that conducting the planning conversations around the same time as the teachers were completing their medium term plans would not impinge too much on their already heavy workloads. At the first planning conversation the teachers provided me with their written yearly plans which we used as a stimulus for the conversation (Bogdan and Biklen, 1982). I used



these plans to ask each teacher what they planned to cover in the physical education curriculum across the year and their reasoning for choosing these activities.

Subsequent planning conversations built on the first one, providing the teachers with an opportunity to reflect on their teaching and share their evaluations of lessons as well as their plans for the coming terms. The planning conversations provided extensive detail about what the teachers were doing, why they were doing it and what they thought about what they were doing. The following vignette from a planning conversation with Lara provides an example of the reflective nature of the planning conversations:

### **Lara Vignette, Planning Conversation 1**

And I mean obviously with the Primary 4's the developmental stage they are at they are just so happy to be in the gym. And it's something that I know we've spoken about before with Basic Moves; how appropriate is it to carry it on into Primary 4 and how to use it? But they were completely motivated over the last few weeks, so I'm not so scared to go for more basic things. I think in the past I probably was, but I think with them especially I can really pull it right back much more than maybe I have done before. So when I'm looking at gymnastics with them (well already in the basic moves part I've brought in a springboard in the jump session), I'm thinking probably predominantly the basic sort of mat skills there and building them up with some kind of creative element to it. Last year I tied it in with what they were doing in topic...so they told the story of the Celts invading, so again trying to make links where I can. And that's obviously easier when I'm working with that year group [Lara had a Primary 4 class in the previous year].

And then moving into very much a generic invasion game aspect and I'm wanting to get in the sort of principles of attack and defence and building on the vocabulary from there on in. Talking about the badminton, I'm going to do central net but the focus being badminton whereas with the invasion games I will just keep it very, very generic, well that's what I'm thinking at the moment. And then at the end, I've gone for striking and fielding in Primary 4 and I was thinking some kind of like watered down Danish rounders or even less, even smaller. And my confidence grew a little bit last year with cricket and certainly baseball so again teaching the striking and fielding in a generic way. And looking at that object control but introducing the more complex scenario of the game. 'Cause my 4's last year hadn't even ever played rounders and I had assumed that they would've but they hadn't. So it'll be interesting to see where we get to with that but I think it's important to introduce some structure within it whether it's quick cricket as sort of an application of that.

Another stimulus used within the planning conversations was lessons I had observed, these provided a common ground from which the teachers and I were able to converse:

Interviewer to Jackson: I was going to say, it was interesting, the lessons that I've seen, the atmosphere that you create within the gym is positive and calming...How do you keep that going? (Jackson, Planning Conversation 2)

Interviewer to Max discussing an Outdoor Journey<sup>2</sup>: That's what struck me [about the learning experience]...I said to them [the children] "Well how do we get to the swimming pool?" cause I hadn't been before and they could tell me "We have to go here, we have to go past the bridge and we have to go past the river and we have to do this and we have to do..." They could explain the walk and then when we were on the walk they're looking around them and remember we saw the squirrel. They were quite aware of what was going on around them and talking about things that they saw along the way...You could tell that they were really engaged in the walk. (Max, Planning Conversation 2)

These excerpts demonstrate how I made use of the observations during the planning conversations to stimulate conversation.

In the final planning conversation most of the interview remained unstructured and was devoted to asking the teachers to share evaluations of their planning from previous terms. However, there were some lines of inquiry from previous interviews that I wished to follow up on. Firstly, and in line with Fullan's (1993) description of change agency, I asked the participant teachers to share with me their personal vision of physical education. In doing so I wanted to establish how the teachers conceptualised primary physical education and the reasoning behind their commitment to primary physical education. Concurrently, as it was the end of the field work phase of the research, I took the opportunity to ask the teachers to look to the future and share with me where they saw physical education developing in relation to their own teaching, and within the school. With this line of questioning I was attempting to ascertain how the teachers perceived the sustainability of the changes they had made within physical education and potential next steps. Within the final planning conversation I also picked up on some of the theoretical themes

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<sup>2</sup> Outdoor Journeys (Beames, Atencio and Ross, 2009) is an authentic application advocated by the PGCert that links physical education with outdoor learning. For a more detailed description of Outdoor Journeys see Appendix F.

(this will be elaborated on in the next section of this chapter on data analysis) that had emerged from early analysis of the interviews, planning conversations and observations.

The planning conversations generated descriptive data which proved particularly valuable in contributing to my understanding of the teachers' present practice in physical education. Initial analysis of this data when compared with the interviews and observations revealed that the teachers consistently reiterated their thoughts and experiences. As noted earlier, this supported my analysis, contributing to the reliability of the teachers' accounts. A further, unexpected yet positive aspect of the planning conversations was that the teachers commented that they valued the time spent talking to me about their plans, as this statement from Imogen illustrates: "I've enjoyed, as I said to you, just having you as a sounding board. As a result of talking to you it's helping me to work out things."

## **Observations**

The observations conducted as part of this study were unstructured but focussed. As previously noted, I was looking at the 'big picture' of the physical education lessons, while also focussing on particular occurrences. As an ex-practitioner, I was aware that within education observation is often used as a way to evaluate teacher performance (observations from school senior management, HMIE observations, and observations by local authority Quality Improvement Officers). I wanted the observations I made to fit in with the teachers timetables, be as unobtrusive as possible and I did not want the participant teachers to feel that they were being evaluated or judged. To provide the teachers with some control over the observations, initially I asked them if there was anything in particular they wanted me to look at during the lessons; I also felt that this would contribute to the rapport I was attempting to develop between myself and the teachers.

Bogdan and Biklen (1982) suggest that teachers participating in research may question what they will get out of it. I thought about this in relation to the observations, I supposed that the teachers may ask for feedback from the observations and while I wanted to share with them what I had observed, I did not

want to influence them too heavily. This deliberation led me towards adopting elements of the non-directive approach to observing teachers outlined by Freeman (1982). Within this approach the role of the observer is not to judge and evaluate, but to clarify and understand. This is achieved by the observer clarifying the teacher's goals and then "staying within the teacher's world", not imposing their own views or experiences on the observation (Freeman, 1982, p. 24). Adopting this approach enables the researcher to understand what the teacher is doing and saying, and be aware that when feeding back to the teacher they are offering a perspective rather than prescription or advice (Freeman, 1982). In line with concerns about validity this approach cautions the researcher against making generalisations, highlighting that observations are based on personal interpretation and there are multiple ways from which to perceive reality (Gray, 2004).

### **Data Analysis**

Within the research literature it is recognised that there are a variety of different ways of analysing qualitative data (Miles and Huberman, 1994; Punch, 2009; Greener, 2011). While it is recognised within the literature that there is no specific 'right' way to do qualitative data analysis a general consensus emerges that it should: be integrated with the purpose of the research; involve rigorous interpretation and, be clearly described so that the process is transparent (Punch, 2009). From an interpretivist perspective the aim of this research study was to explain the social reality of primary teacher's initiating educational change in physical education. I acknowledged the understandings and orientations I brought to the research process, therefore data analysis involved the interpretation of meanings made by the teachers and by me as the researcher (Miles and Huberman, 1994). I recognised that interpreting the raw data produced by the study would involve a constant process of "segmenting and reassembling" the data, which required time for both "thinking and doing" (Boeije, 2010, p. 77). Denscombe (2007) suggests that, common to all approaches it is possible to identify five stages involved in the analysis of qualitative data:

- Preparation of the data;
- Familiarity with the data;

- Interpreting the data (developing codes, categories and concepts);
- Verifying the data;
- Representing the data.

(Denscombe, 2007, p. 288)

These five stages were used to guide the analysis process throughout this study and will be used here to describe how the data were interpreted.

### **Preparation of and Familiarity with the Data**

The format of the data produced by this study predominantly took the form of interview transcripts (produced from the semi-structured interviews and planning conversations) and observation field notes. The semi-structured interviews and planning conversations were recorded using a digital recorder and transcribed using Microsoft Word. I transcribed most of the interviews and planning conversations. However, because of the large amount of data they produced and their extended length (a number of the later interviews lasted for over an hour) some transcribing was outsourced to a private company. Field notes were hand written in notebooks when out in the schools and then subsequently typed up, again using Microsoft Word. Dealing with the raw data in this way enabled it to be collated and stored in a compatible format to be analysed as text (Denscombe, 2007). Care was taken to ensure that the data were stored securely, in a way that they could be easily retrieved, and that back-up copies were made of all the computer files associated with the interviews, planning conversations and field notes (Boeije, 2010). With a view towards ethical considerations any information that could identify the participants, therefore compromising their anonymity, was removed from transcripts and field notes. Having organised and prepared the data for analysis my primary concern was to become familiar with the data.

In an attempt to gain a “practical understanding of meanings and actions” within the data I listened to the interviews and planning conversations, and read over the transcripts and field notes a number of times (Miles and Huberman, 1994, p. 8). This initial analysis immersed me in the data and enabled me to “load it into my memory” (Esterberg, 2002, p. 157). To ensure that the data gathering had a clear direction I engaged in analysis during the fieldwork phase of the study. As the interviews,

planning conversations and observations were completed in cycles, roughly following the school terms, this afforded time between each round of interviews to engage in ongoing analysis (Bogdan and Biklen, 1982). The purpose of this initial analysis was to develop a firm grasp of the data and identify points of interest to be followed up in subsequent interviews, planning conversations and observations. To complement this ongoing “analysis-in-the-field” more formal analysis was undertaken towards the end of the fieldwork. Bogdan and Biklen (1982) advise that new researchers, like myself, should strike a balance by completing some analysis during the study and leaving some until the end because “problems of establishing rapport and getting on in the field are complicated and too consuming for beginners to enable them to actively pursue analysis [while out in the field]” (p. 146). The first readings of transcripts and field notes enabled me to take a broad view of the data. Subsequent re-reading then enabled me to “read between the lines”, identifying meaning in the text and particular points of interest (Denscombe, 2007, p. 291). Thoughts I developed during these readings were recorded either on the text or in memos which could be referred back to and were used to support the coding of data; an integral part of the subsequent and more formal phase of the data analysis process.

### **Interpreting the Data**

Having read and reread the interview transcripts and field notes I made the decision to first analyse each round of interviews and then the planning conversations in more detail. To gain a deeper insight into the teachers and their stories I focussed on making sense of the data contained in each individual teacher’s transcript. I then further analysed the data identifying points of convergence and divergence emerging across the individual teacher’s responses (Cohen, Manion and Morrison, 2007). The first step in making sense of data in this more formal phase of analysis was to segment it and assign codes (Bogdan and Biklen, 1982; Esterberg, 2002; Charmaz, 2006; Punch, 2009; Denscombe, 2007; Boeije, 2010). There are many descriptions of coding within qualitative research literature, using a variety of terminology which can prove confusing (Punch, 2009). In the ‘real context’ of the research process while I drew on coding approaches described within the literature (Bogdan and

Biklen, 1982; Miles and Huberman, 1994; Charmaz, 2006) I did not align with a particular method of coding.

Ryan (2006) stresses that while it is useful to read around the literature to gain an insight into how researchers go about qualitative data analysis it is not necessary to strictly adhere to a specific framework. Rather, emphasis is placed on the need for analysis to make links between data and the questions and aims guiding the research. Table 3.2 encapsulates the main processes that featured in the analysis of data within my study.

**Table 3.2 The Coding Process**

<b>The Coding Process</b>	
Annotation	Chunk text and make notes to describe it.
Categorisation	Read text and annotations to establish patterns within the data and then use key words and phrases to organise the data into categories.
Emergent Themes	Compare and contrast the categories emerging from each individual interview highlighting themes and points of interest to be further explored. Refining the many categories into overarching themes for each round of interviews and planning conversations.
Focussed Coding and Theoretical Themes	Further develop emergent themes and categories Relate the categories and themes to relevant literature, specifically situated learning, teacher socialisation, professional learning and educational change.

This table communicates how I interpreted and deployed approaches and terminology that feature in the literature on qualitative data analysis. The data produced by this study was filtered through me alone. While I had a clear scheme for undertaking this analysis rather than adhere to a specific format for coding the data I followed the advice of Ryan (2006) “allowing the data to take me wherever it needs to go” (p. 95). As an aid to the process of coding, memos were used to record my thoughts about the data. Memos are a creative outlet for the researcher, a vehicle through which questions can be asked of the data and ideas can be explored (Esterberg, 2002; Denscombe, 2007; Punch, 2009). Over time I expanded these memos and began writing up these ideas which greatly aided the analysis process and made the task of trying to grasp what was actually going on within the data less daunting (Ryan, 2006).

Punch (2009) describes the process of coding as essentially labelling pieces of the data to attach meaning to it. Reading the data I was alert to “certain words, phrases, patterns of behaviour, subjects’ ways of thinking and events [that] repeat and stand out” (Bogdan and Biklen, 1982, p. 156). The first part of the coding process I described as annotation, I searched through the text line by line splitting it into chunks and then annotating these chunks of text to simply describe the data. Following on from segmenting the text in this way I then reviewed the text and the annotations to establish patterns and topics within the data which were assigned coding categories (Bogdan and Biklen, 1982), I described this as categorisation. For each interview and planning conversation I analysed the comments I had made when annotating and linked them into emergent categories, an example of how I organised annotations into categories is provided in Appendix E. Drawing on open coding synonymous with grounded theory analysis (Charmaz, 2006), the process of categorisation enabled me to retain an open mind towards the data, allowing categories to emerge (Esterberg, 2002). Having established patterns and categories emerging from the interview and planning conversation data of each individual teacher I then proceeded to explore the commonalities and differences emerging from the responses of all of the teachers across each round of interviews. In table 3.2, I describe this process of refining the categories as identifying emergent themes.

In this next phase of coding I used both my detailed knowledge of the teachers’ stories and the emergent categories to identify common themes running through all of the interviews and planning conversations. During this phase of data analysis I scrutinised the emergent categories establishing patterns, points of convergence and divergence within the data. This process involved comparing and contrasting the categories emerging from each individual teacher’s interview to identify overarching themes that emerged for each round of interviews. The process of categorisation and identifying emergent themes is exemplified in Appendix E. This Appendix contains examples from my analysis of the first round of interviews with each teacher, to demonstrate how the categories for each interview emerged and concurrently how the overarching theme for the first round of interviews emerged. As I compared and contrasted the categories I colour coded those which linked together into overarching themes. For the first round of interviews the overarching emergent themes were:



- Teacher Background – personal experiences of physical education and physical activity presently and in the past;
- Physical Education Curriculum and Pedagogy; School, Wider Community, Physical Education Specialist, and
- Teacher Reflections on Physical Education Provision.

The coding process was iterative, as I continually went through the data to further explore and hone the emergent themes and categories (Denscombe, 2007).

To complement the initial emergent coding I engaged in focussed coding, as outlined in table 3.2, which involved analysing specific themes or categories in more depth, comparing and contrasting these with background literature to develop theoretical themes (Esterberg, 2002). Focussed coding enabled me to expand on the emergent themes and categories incorporating them into the chapters of the thesis. For example, from the first round of interviews one of the main themes which developed into chapter four was, Teacher Background. This theme incorporated data about the teachers' childhood experiences of physical education and physical activity, their experiences of physical activity in later life and background information that revealed something about the character of each teacher. When the individual teachers' background stories were compared similarities and differences were pursued as points of interest. An example of a line of analysis I pursued further as I scrutinised this theme was questioning the impact the different childhood experiences of physical education encountered by each teacher had on their past and present attitudes towards physical education and physical activity. When this line of analysis was subsequently related to teacher socialisation literature (Lawson, 1983a & b; Morgan and Hansen, 2007; Morgan and Hansen, 2008; Morgan and Bourke, 2008), theoretical themes became apparent that linked the data with wider literature (see Appendix E for an example of these theoretical themes). Identifying these theoretical themes made it possible in the first analysis chapter to explain as well as describe (Peshkin, 1993; Punch, 2009) the central role that each teacher's background played in shaping their values, attitudes and approach to teaching physical education.

A further example of how I engage in focussed coding is in the formulation of the second analysis chapter. It became apparent early in the analysis process that the professional development the teachers engaged in, the PGCert, had a significant impact on their change efforts within their school contexts. In particular Max, Imogen, Jackson and Lara spoke at length throughout the interviews about the influence the PGCert had on their present practice in physical education. I felt that this was a major theme emerging from the data that supported the main research question and should therefore be specifically documented within the thesis. I wanted to ascertain how the structure and format of the PGCert had engaged the teachers and how this professional development related to the changes they were instigating in physical education within their school contexts.

Focussed coding was used to search all the interviews and planning conversations to find sections of text where the teachers discussed the PGCert and other forms of professional development. These segments of text were then placed in a Microsoft Word document so that the responses of each teacher could be further scrutinised. I looked for patterns and points of divergence in the teachers' recollections of the PGCert and professional development. I also analysed their experiences of professional development in relation to the existing body of research outlined within the literature review. This iterative process of coding the data entailed both induction and deduction. Ideas were formed inductively from the data by making connections between categories and "raising them to a higher level of abstraction" (Punch, 2009, p. 172). Correspondingly in a deductive manner the emergent categories were compared with relevant literature for verification (Punch, 2009). Inductively analysing the data I was aware of the high regard within which the PGCert was held by the participant teachers and that this was partly attributable to it being different from CPD the teachers had undertaken in the past. To probe deeper into how the PGCert was different and why it was valued by the teachers I examined the data in a deductive manner relating it to relevant literature, in particular, for this theme, the triple lens framework posited by Fraser *et al.* (2007). This framework provided a theoretical lens from which the format and content of the PGCert could be analysed to describe and explain the effectiveness of this professional development.

The field notes that documented the observations were coded in a similar way to the interviews and planning conversations. The main focus of the analysis of the field notes was to establish the format and content of physical education lessons. Initially the observations pertaining to each teacher were individually analysed. The first step taken to interpret the data was again to segment and annotate the text before identifying emergent categories. The observation field notes and categories were then analysed to look for patterns in the lessons and in each teacher's approach to teaching and learning. I then reviewed the interviews and in particular the planning conversations concentrating on segments of text where reference was made to curriculum and pedagogy. I then contrasted what the teachers said about curriculum and pedagogy with what they were doing in the observations. The purpose of this focussed coding was to find out if the descriptions provided by the teachers of the physical education curriculum and the pedagogy they used to deliver it matched the observations. Having established a big picture view of the format and content of the physical education lessons each teacher was delivering, I then brought all of the observations together to establish similarities and differences in the physical education lessons the teachers were planning and delivering. Although some reference was made to the observations in the first two analysis chapters they were predominantly used in the final analysis chapter. Drawing on the concept of teachers as change agents (Fullan 1993; Priestley, 2011), the final analysis chapter examined the participant teachers change stories. This argument was backed up with evidence from the planning conversations and observations demonstrating how each teacher instigated change within their school contexts.

### **Verifying and Representing the Data**

Throughout the research process it is important to consider how the data will be verified and represented. Greener (2011) states that in qualitative research:

The important thing is that researchers are able to account for what they have done in their analysis, and explain how it meets the demands of their research area and research topic.

(Greener, 2011, p. 104)

Considering the verification of my research, rather than attempting to demonstrate that my findings are true (Denscombe, 2007), I concur with Peshkin's (1993) observation that 'reality': "does not become clarified by any one person's construction or approach to inquiry" (Peshkin, 1993, p. 28). Correspondingly I viewed the research process as iterative and as a "quest for understanding" (Peshkin, 1993, p. 28), throughout which I sought to demonstrate the trustworthiness of the data. Morse *et al.* (2002) call into question the use of evaluation strategies to establish the trustworthiness of research at the end of a study. They contend that strategies should be built into the study so that the reliability and validity of the research is continually evaluated. I would argue that the description of the research process presented in this methodology chapter illustrates how consideration was given to the rigor of the research at the conception of the study and as it progressed.

From the outset, addressing the validity of the design of this study I considered the methods used by other researchers conducting similar research. In particular I referred to research carried out by Ha *et al.* (2004), Duncombe (2005) and Petrie (2009). While all these studies were larger scale than mine, they were all similarly concerned with ascertaining the response of primary teachers to physical education professional development. Reviewing the theoretical standpoint of these researchers along with the approaches to data gathering and analysis they used contributed to my understanding of how to achieve congruence between research aims and methods. Reflecting on recommendations made by these studies also revealed possible areas of inquiry for this study. Drawing on qualitative research literature and similar research studies within the same area of interest as this study ensured that I was aware of the need for my research to be based on recognised good practice (Denscombe, 2007).

### **Reflexivity**

Examining strategies that ensure rigor is built into qualitative research Morse *et al.* (2002) highlight the importance of the responsiveness of the researcher in the research process, indeed they suggest that "research is only as good as the investigator" (p. 10). There is a consensus within qualitative research literature that consideration needs to be made of the influence that the individual researcher exerts over the research process (Denscombe, 2007). It is essential for the researcher to

retain an open mind whilst also acknowledging their own identity, values and beliefs. Demonstrating how my identity and beliefs have had a role to play in the research process in the first chapter of this thesis I presented a reflexive account of myself as the researcher. Additionally at the beginning of this chapter I described myself as an ‘ex-practitioner researcher’ which I would argue further demonstrates how I acknowledged my ‘self’ within the research process (Denscombe, 2007).

Recognising the ways in which the researcher affects the research process Robinson (2010) highlights how “personal, professional and political histories, identities and dispositions will influence actions, reactions and interactions” (p.85). Being reflective about my personal values and biases contributed greatly to the validity of my research. Throughout the research process I considered the implications of who I am and my thinking on the research methods I adopted, the research process, and the knowledge of the social world the research would generate (Bryman, 2008). Self-reflexivity makes a significant contribution to the validity of research as it alerts the researcher to influences they may exert over the research process whilst also enabling the reader to understand the position of the researcher within the research (Creswell and Miller, 2000; Robinson, 2010). Adopting a reflexive position within the research process also alerted me to how the participant teachers may perceive me.

There were definite political, personal and professional drivers which influenced my decision to undertake this research. The main driver behind this research was my interest in teacher professional development and learning. Having personally experienced both the ‘highs and lows’ of professional development I was interested in investigating the key role it can play in enhancing teacher knowledge and skills. Investigating teacher professional development I wanted to move beyond the perception of professional development as a contractual obligation to highlight the integral role it plays in promoting lifelong, continuous learning – a central aim of Scottish education which has been raised to a position of prominence with the introduction of Curriculum for Excellence (see Scottish Government, 2006; Priestley and Humes, 2010). Concomitantly with my interest in teacher professional development and learning, my research was also driven by my interest in raising the profile of primary physical education. Physical education within primary education

has been much maligned and side-lined (see Hardman and Marshall, 2000; Jess, 2011); contrastingly within my research, analysing the influence of the PGCert, I wanted to explore and document the physical education curricular and pedagogical changes beginning to occur within Scottish primary schools.

Considering how the participant teachers would perceive me I recognised that as I was working with the DPEG, they could see me as part of that group and possibly as an ‘expert’ in primary physical education. I was concerned that the teachers’ perceptions of me as an ‘expert’ and their knowledge that I worked with the DPEG may influence the way they interacted with me and subsequently impact on the research. In particular, as Priestley (2007) highlights I needed to be alert to the participant teachers saying what they thought I wanted to hear because they perceived me as an ‘expert’ and a member of the DPEG. In an attempt to counteract this I shared with the teachers that I, like them, had been a primary teacher who had also undertaken the PGCert. I felt that disclosing this information contributed to me being able to build relationships with the participant teachers as I was making clear our shared experience. Additionally, when I engaged in discussion with the teachers about the PGCert I made it clear that while I valued the course, I also recognised that there were areas for development. During interviews I encouraged the teachers to share with me their perceived shortcomings of the course along with problems they encountered when attempting to implement skills and knowledge gained from the PGCert.

I never saw myself as an ‘expert’ within the research process and never knowingly portrayed myself in that way. Rather, when I observed the participant teachers teaching PE and engaged in planning conversations with them I highlighted their growing expertise and probed instances of teaching and learning that had interested me. While I didn’t perceive myself as an ‘expert’ I could not ignore, and indeed the participant teachers highlighted, the extensive studying and reading I had undertaken over the course of my PhD which greatly extended my knowledge of primary physical education, professional development and educational change. Working with the DPEG whilst studying for my PhD, I also gained extensive experience of

supporting the learning of both teachers and student teachers which again further extended my knowledge and understanding of teacher learning. I would suggest that personally engaging with professional development, delivering professional development with teachers and working with undergraduate student teachers placed me in a privileged position of being able to experience and explore teacher learning from a wide range of perspectives.

Throughout the research process I remained alert to my biases as an ex-practitioner researcher and attempted to counteract any negative influences this may have had on the research process. However, I strongly feel that the common education experiences the participant teachers and I shared, negotiating the same national education policies and sharing a broad set of lived professional experiences was advantageous to the study. Having experiences similar to the participant teachers' stories enabled me to: "appreciate their perspectives and be a more informed listener, reader and reporter of their accounts" (Robinson, 2010, p 87). I recognise that the commonalities I shared with the participant teachers affected the way we communicated and how I made sense of interview and observation data. Therefore I had to be mindful throughout the research process of my primary role as a researcher and keep my practitioner values and beliefs in check.

### **Member Validation**

Taking a reflexive approach to the research process not only alerted me to my position within the research process but also the positioning of the participant teachers. As previously discussed, I did not want the teachers to feel like research subjects; rather I wanted them to feel involved in the research process. One of the main ways I achieved this was to organise interviews and observations with the participant teachers at times that suited them, and by sharing with them how the research was progressing. A further way of involving research participants in the research process, and of adding to the validity of the research is member validation (Tracy, 2010 ). Member validation involves presenting findings to participants to check that they recognise what was said and observed during the research process, it also incorporates discussing preliminary results with participants (Boeije, 2010;

Tracy, 2010). I recognise that the main approach to member validation is by “taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account” (Creswell and Miller, 2000, p127). One of the main ways of taking data back to research participants outlined within the literature is to make field notes and interview transcriptions readily available. However, similar to Petrie (2009), who undertook similar research to mine interviewing primary teachers, I found that the participant teachers in my study did not have sufficient time to engage in member validation. The heavy workload of the teachers combined with the volume of data created by the large number of interviews and observations involved in my study meant that it was not possible to provide transcripts and field notes for the teachers to check. Consequently I had to find alternative ways of building member validation into the study.

When I started the observations my initial intention was to ask the teachers to provide me with a written reflection of lessons I observed. I asked them to remark on their thoughts about the lesson, elements of the lesson they would change and their initial ideas for future lessons. I perceived that this would be a way to compare and contrast my researcher perspective of the lesson with the teachers’ perspective of the lesson. However, as identified, because of the heavy workload of the teachers it was not possible for the teachers to complete the written reflections. In line with Petrie (2009) a further approach to member validation I used was to paraphrase the participant teachers’ responses with a view to clarifying statements made during interviews. Engaging in preliminary analysis of data throughout the research process also enabled me to revisit points for clarification in later interviews; this is exemplified in exploring the teachers understanding of the terms physical education and physical activity in interview three and asking the teachers to outline their personal vision of physical education. Member validation was further built into the study through the iterative planning conversations. As the planning conversations progressed I asked the teachers to share their evaluations of their plans with me which enabled them to verify what they had shared with me in previous planning conversations.



## Ensuring Rigor

As the study evolved I made a conscious effort to be proactive in taking responsibility for the rigor of the study. This is illustrated in the flexibility that was built into the research design and as previously outlined I engaged in analysis while out in the field forming “a mutual interaction between what is known and what one needs to know” (Morse *et al.*, 2002, p. 12). I also remained receptive to the data during the analysis process. Rather than slavishly following a specific approach to analysis I “listened to the data” to move beyond the technicalities of coding developing a process of coding that was responsive to the data and enabled me to engage in both inductive and deductive analysis (Morse *et al.*, 2002, p. 11).

During the analysis process I came to recognise that the identification of themes within the data were merely a starting point. From there I had to work with the data to further analyse the emerging themes and ideas, comparing them with wider literature in order to “build an argument that established the points I wished to make” (Bazeley, 2009, p. 6). Congruently, considering the objectivity of the research I remained alert to potentially disconfirming instances emerging from the data. Within the ensuing analysis chapters while I present patterns that emerged between the participant teachers’ stories I also present singular examples that contrast with these emerging patterns. Additionally utilising a range of theoretical lenses to analyse the change stories of the participant teachers demonstrates how I explored “alternative possible explanations” as I analysed the data (Denscombe, 2007, p. 302).

Providing an explicit account of research methods adopted in this study, the decision making process and the approach to analysis taken illustrates how validity and reliability were addressed. Throughout the remainder of the thesis it is the intention to continue to demonstrate the rigor of the study by producing a credible and coherent explanation of the findings. In the following chapter I begin the analysis process by examining the background physical education experiences of the participant teachers.



## **Chapter 4 - Teacher Background**

### **Introduction**

Anderson (2006) suggests that teaching is about experience and story. This study sought to capture the ‘change story’ of each participant teacher as they experienced, instigated and implemented curricular and pedagogical change within their school contexts:

In this way teachers are understood as living storied lives on storied landscapes, landscapes both in and out of schools, landscapes both past and present. Who people are is intricately interwoven with the lives they live and with the contexts in which they compose them.

(Clandinin and Huber, 2005, p. 44)

The intention of this chapter is to present a detailed and analytical overview of the physical education background experiences (Morgan and Hansen, 2008) of the participant teachers. The data used within this chapter stem mainly from the first interview conducted with the teachers as the primary purpose of this interview was to ask the teachers to recount their experiences as learners and teachers of physical education prior to engaging with the Postgraduate Certificate in 3-14 physical education (PGCert). The chapter opens by providing relevant contextual information about each teacher and their schools. Following on from this it is the intention throughout the chapter to build a picture of how teacher professional identity is influenced by personal, policy and organisational factors over time (Keay, 2006a; Sammons *et al.*, 2007). Teacher socialisation literature (Lawson, 1983a & b; Morgan and Hansen, 2008; Morgan and Bourke, 2008; Elliot *et al.*, in press) will be drawn on to establish how the teachers’ backgrounds influenced their perceptions of physical education and their actions as generalist class teachers.

The initial interviews will also be viewed from a situated learning perspective to highlight that the knowledge of physical education acquired by the participant teachers in this study developed over time and was located in their relations with others, their practice and their lived-in worlds (Lave and Wenger, 1991). Employing Lawson’s (1983a & b) model of teacher socialisation in physical education it will be

suggested that the socialisation of these teachers encompassed three interrelated and overlapping phases: acculturation, professional socialisation and organisational socialisation. During each of these phases a wide range of factors influenced the teachers' understanding and teaching of physical education. Connecting the socialisation model with situated learning illustrates that the physical education understanding and experiences of the participant teachers in this study have been in constant interaction and mutually constitutive (Lave and Wenger, 1991). Before moving into the analysis section of the chapter I introduce each teacher and their school context in order to familiarise the reader with the teachers and the contexts they were working in.

### **Introducing the Teachers and their Schools**

#### **Lara**

Lara is a primary school teacher with eleven years of teaching experience. She gained her teaching qualification through a one year postgraduate route at a Scottish university. All of her eleven years of teaching experience have been in Bennachie Primary. Lara is very positive in discussion of her experiences of physical education when she was at secondary school. While she spoke enthusiastically about her involvement with hockey, volleyball and athletics, Lara did not speak as positively about dance and gymnastics. She suggested that a combination of being tall for her age and a dislike of the teacher put her off these activities. Lara's interest in sport and physical activity continued into later life: running, playing hockey and volleyball, coaching basketball and playing the role of supportive parent to her children. Discussing her teaching of physical education prior to participating on the PGCert Lara described how she learned a great deal from observing the physical education specialist and Sports Development officers. Teaching physical education Lara tended to stick to activities she felt comfortable with such as hockey, athletics and basketball, and avoided teaching dance. She described a false confidence, thinking she 'knew it all' about physical education but participating on the PGCert forced her to confront her beliefs and understanding of physical education. Reflecting on her involvement with the course Lara stated "I think it definitely gave me a kick up the backside." Since completing the PGCert Lara has taken on the dual

role of class teacher and physical education teacher in her school, teaching in class two days a week and physical education for two and a half days.

### **Bennachie Primary School**

Bennachie Primary School is located in a small town<sup>3</sup> in the south east of Scotland with a population of around 9000. It is a middle-upper primary school the children attending the school are aged between eight and twelve. Based on Scottish Government pupil census information from August 2010 the school roll at the beginning of the study was 372, the proportion of pupils from minority ethnic groups was 0-5%<sup>4</sup> and the percentage of children registered for free school meals<sup>5</sup> was around 14%. The most recent HMIE report for the school was positive, highlighting the well organised curriculum and high levels of attainment and achievement. The school building is modern and open plan. As of the academic year 2010/11 there were twelve classes in the school, three at each stage (primary four to seven). The school accommodation also comprises a music room, drama room, ICT suite and library area. There is extensive outside space around the school consisting of a tarmac playground area, woodland area, Astro turf pitch and an outdoor classroom in the centre of the school. To accommodate physical education there is quite a large gym hall within the school that is also used for school assemblies and school lunches; the Astro turf pitch and playground space are used for physical education lessons. There is a large park and sports centre close to the school which can be utilised for physical education activities. The school is well resourced for physical education allowing for a wide variety of activities to be offered. Scant reference was made to physical education in the recent HMIE report but it was recognised as well-planned and beneficial to the children.

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<sup>3</sup> According to the urban/rural measure used by Scottish Government education statistics to describe school setting, the town is an accessible small town. An accessible small town has a population of between three and ten thousand and is situated thirty minutes from an urban town with a population larger than ten thousand.

<sup>4</sup> The figures used to provide information on the proportion of children from ethnic minorities enrolled within the participant schools comes directly from Scottish Government statistics.

<sup>5</sup> The percentage of children eligible for free school meals is used as a measure of deprivation.

## **Max**

Max is a primary school teacher who has been teaching for eleven years. His first degree in Geography and subsequent postgraduate teacher qualification were achieved at universities in England. He has been based at his current school, Cairngorm Primary School, for seven years, prior to that he had experience teaching at another school in Scotland as well as teaching in China and Poland. For the past three years since completing the PGCert Max has taken full responsibility for teaching physical education at Cairngorm Primary and also works one day a week teaching physical education at another school. The enthusiasm Max expresses for physical education started when he was a pupil at primary school where he recollected enjoying running and jumping rather than sitting still. Despite proclaiming he was “utterly rubbish” at most sports Max recalled how he played on many teams and particularly enjoyed the “camaraderie” this involved. Max was keen to recreate the positive physical education experiences he had at school for the pupils he worked with. Max still engages in physical activity, cycling to and from school and swimming. Prior to his involvement with the PGCert physical education was predominantly taught by the school physical education specialist and Max’s role was simply to follow these lessons. He praised the work of one physical education specialist in particular with whom he had the opportunity to teach with and from whom he learned a great deal. Reflecting on the PGCert Max described how it changed the way he thought about physical education, saying that from the beginning of the course he was “utterly, completely and utterly, totally hooked.”

## **Cairngorm Primary School**

Cairngorm Primary School caters for children from preschool age to the age of twelve and is located in a Scottish city. The school has a roll of 400 pupils including the nursery, around 33% of pupils within the school are entitled to free school meals and the proportion of pupils from minority ethnic groups is >20%. In the academic year 2010/11 when this study was undertaken the class streaming comprised a nursery class and a further thirteen classes, two of which were composite classes. The school was last inspected in 2006 where it received a positive review particularly regarding the pastoral care of pupils and the strong relationships that had been

established between the school and local community. The school is a modern building which was opened in 2003 after the merger of two primary schools. Inside the building is sectioned off into a lower primary wing housing primaries one to four and an upper primary wing housing primaries five to seven. These areas are of a similar design; semi-open plan with classrooms situated off a large communal area. While there are no doors on the classrooms there are sliding partition walls that can be opened and closed. The school also has a library, computer suite and dining hall. Outside the school there is green space to the front with a trim trail, around the side and rear of the building there is extensive tarmac playground space, grass area and an Astroturf pitch. The facilities for physical education are excellent; outside the Astroturf is regularly used along with the basketball court in the playground. Inside the school there is an allocated games hall and a wide variety of equipment is available to complement the physical education lessons. While the school is located in the city, there is green space surrounding the school which is utilised for physical education lessons.

## **Imogen**

Imogen gained her teaching qualification through a four year Bachelor of Education degree with honours at a university in Scotland. She has been teaching for sixteen years and in that time has taught at two schools. Imogen has been employed at her current school, Ben Nevis Primary School, for nine years and for the last two and a half years as well as her class responsibility she has been teaching physical education one day a week in the school. An interest in outdoor education during her initial teacher education which was carried into her later career sparked her interest in physical education. Prior to enrolling on the PGCert she had undertaken a number of professional learning opportunities related to outdoor education, for example, the Basic Expedition Leadership Qualification (BELA) and a trail cycle leader certificate. At primary school Imogen recalled little formal physical education happening and reflected that she gained physical skills and experiences by playing outside: running around; climbing trees; cycling; playing football, and playing tennis over a piece of rope. In secondary school although she admitted to being quite good at hockey and netball a lack of confidence led her to shy away from being involved

in these teams. During her schooling Imogen shared that she was more interested in music than sport. At the beginning of her teaching career Imogen worked with a physical education specialist, observing lessons and then teaching follow-up lessons. With the introduction of the McCrone agreement Imogen found that she had to take on more responsibility for planning and delivering physical education. Imogen tended to stick to activities she felt comfortable with and that she felt able to teach. Imogen has maintained an interest in physical activity outside of school predominantly through running. Subsequently this interest extended into school where she organised a running club for the children.

### **Ben Nevis Primary School**

Ben Nevis Primary School for children from nursery age through to the age of twelve is housed in a Victorian three storey building located in a Scottish city. With a school roll of around 400 children, including the nursery, during the academic year 2010/11 the school operated with thirteen classes. The school building comprises classrooms, library space, three hall spaces and separate rooms for music, ICT, art and science. According to the pupil census conducted in 2010 10-20% of the pupils in the school were from minority ethnic groups and around 9% of pupils were registered for free school meals. The school was inspected at the beginning of 2011, receiving a positive review and it was noted that the children were benefitting from two hours of good quality physical education. Facilities for physical education in the school are good. One hall is a dedicated gym hall and the other two halls can also be used to deliver physical education. In addition to the indoor space, the tarmac playground and nearby park are used to deliver physical education outside. Largely through Imogen's involvement in buying physical education resources, there is sufficient equipment to support a wide variety of activities and it is matched to the varying ages and stages of the children.

### **Jackson**

After graduating from a Scottish university in 2001 with a Bachelor of Education degree Jackson began his teaching career at Cairngorm Primary School, the same school as Max. In 2007 he began working at Aonach Beag Primary School, located



in the same city. Jackson found out about the PGCert when he was working with Max, who recommended it to him. After teaching at Aonach Beag for just over a year he approached the senior management team about teaching physical education in the school and enrolling on the PGCert course. The senior management team were very supportive and gave Jackson the opportunity to teach physical education full time, five days a week within the school. While Jackson highlighted an interest in physical education at secondary school which led him to take the subject as a higher, he did not take physical education as an option as part of his undergraduate degree. His reasoning behind this being that he felt that it wasn't really stimulating and lacked content. Despite his interest in physical education, when he was younger Jackson lacked confidence in his abilities and felt his potential wasn't really nurtured at school. In his later life this lack of confidence has led Jackson to steer away from team sports. He remains physically active through more individual activities; going to the gym and playing golf. Early in his teaching career Jackson identified the value of social and emotional learning and that physical education provided an opportunity to explore these elements of learning as well as the physical aspect. Reflecting on the PGCert experience, while he felt that it was perhaps slightly heavy on the theory side he felt inspired and motivated by the course: "I thought it was really exciting and wanted to be a part of it and thought I have gifts, skills I can contribute to this."

### **Aonach Beag Primary School**

Aonach Beag Primary School is a city school that has a roll of around 470 pupils including the nursery, the proportion of pupils from minority ethnic groups is >20% and the percentage of children eligible to receive free school meals is around 8%. In the academic year 2010/11 the school ran with fourteen classes. The school building is modern and consists of a main building on two floors and two annex buildings. Inside the school is open plan with class bays and open plan communal areas. There are separate rooms within the school for ICT, music and drama. The main gym hall is also used for school lunches, assemblies and school performances. There is an additional gym hall in one of the annex buildings. Outside the school there is a playground area with grass and tarmac that the children can play in. Next to the school there is open green space that is utilised for outside physical education

lessons. The equipment available for physical education is varied and adequately supports different activities within the curriculum. The school was last inspected in 2004. In the initial report while the school was praised in a number of areas including the high attainment of pupils in reading and writing there were also some areas identified that required to be addressed by the school and local authority. Consequently follow-up visits were made by HMIE in 2005 and 2006 along with a follow-up report being produced.

## **Geoff**

Geoff has been a primary teacher for twelve years. He works as a class teacher in his base school Lochnagar Primary School three days a week and teaches physical education in this school and another three schools within the local authority for two days a week. The local authority Geoff works in is situated in the north east of Scotland. Before working in his current local authority Geoff worked in a city school in the north east of Scotland and directly prior to enrolling on the PGCert he was seconded to work at an offsite behaviour unit within the city. In the academic year 2009/10 Geoff was seconded out from his present school to work on an ICT project for the local authority three days a week whilst teaching physical education in different schools for two days a week. Discussing his interest in physical education Geoff described himself as a “sporty” person, involved in a number of sports while at school and playing rugby league semi-professionally. Despite his wide interest and involvement in sport Geoff’s experience of physical education both at primary and secondary school was quite negative. The regimented nature of lessons and the patronising attitude of one physical education teacher in particular were prominent memories from his primary school physical education experience. At secondary school Geoff felt let down by a system that from his perspective seemed to favour those he called “physically attractive”. He suggested that these pupils who were all-rounders and good at everything received better grades and more favourable treatment compared to himself and others who stood out in one or two specific areas. Geoff is still involved in physical activity favouring outdoor pursuits such as rock climbing and canoeing. He is also currently involved with power lifting. He spoke with high regard for the specialist physical education teachers he worked with prior

to participating in the PGCert. Reflecting on the PGCert, while Geoff felt that he always got something from attending the sessions he had been looking for more of a practical element to the course.

### **Lochnagar Primary School**

Lochnagar Primary School is situated in a small town in the north east of Scotland, including the nursery the school roll was 250 in the session 2010/11. Based on Scottish Government pupil census information from August 2010 the proportion of pupils from minority ethnic groups in the school was 5-10% and the percentage of children registered for free school meals was around 23%. The school building is modern and open plan the gym hall is situated in the centre of the school and doubles as a space for lunches and assemblies. Leading off from the gym hall are two separate areas, an infant area and a middle/upper open plan area with open class bays. The school also has a music room, library area and computer suite. Outside the school there is a tarmac and grass playground along with open park space in front of the school building that can be utilised for physical education lessons. There are a wide range of resources available within the school to support physical education lessons. In May 2011 Lochnagar was inspected by HMIE, receiving a positive review and it was noted that the children were benefitting from two hours of good quality physical education.

### **Teacher Socialisation**

Lortie (1975) set out to “trace the development of selected characteristics of teaching” and “understand the social system which prevails in public school teaching” (p. 1). The aim of this chapter is similar as it seeks to trace the socialisation of the participant teachers to establish factors within their wider social systems influencing them at different stages in their lives. Since Lortie’s classic work, *Schoolteacher*, a number of researchers have investigated the personal and professional lives of teachers within the policy and school settings in which they work (Lawson, 1983a & b; Nias, 1989; Kelchtermans, 1996; Keay, 2006a; Day *et al.*, 2007; Morgan and Hansen, 2008; Morgan *et al.*, 2010). Congruent with this research, this study recognises that teacher identity, motivation, emotions and beliefs

impact on individual teachers' practice and their ability to deal with educational change. Teacher socialisation is a life-long process influenced by a variety of factors over time (Lawson 1983a). Within this chapter I use background information provided by the participant teachers to establish who these teachers are and how they have developed and changed their identity from primary teachers to generalist primary teachers who teach physical education<sup>6</sup>. Nias (1989) observes that as unique individuals teachers build up their own distinct ways of perceiving the world. The uniqueness of the teachers in my study is recognised by mapping out their professional identity in relation to their individual life experiences. However, patterns emerge from their experiences and applying Lawson's (1983a & b) model of teacher socialisation in physical education contributes to developing an understanding of the common factors impacting on them.

Analysis of the first round of interviews revealed common themes in the lived-in world (Lave and Wenger, 1991) experiences of the participant teachers influencing their beliefs, knowledge and understanding of physical education, these included:

- Childhood experiences of physical education and physical activity;
- Early career experiences of working with a primary physical education specialist teacher to deliver physical education;
- Physical education CPD;
- Direct teaching of a sport focussed, multi-activity block physical education curriculum.

To understand the multiple levels at which these experiences occurred these themes can be categorised according to Lawson's (1983a & b) model of teacher socialisation. Lawson (1983 a & b) labels early childhood socialisation as *acculturation*. The impact of initial teacher education (ITE) on teacher identity is categorised as *professional socialisation* and *organisational socialisation* refers to the values and skills associated with physical education developed by teachers within school contexts.

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<sup>6</sup> This was how Max described himself and I think it is apt as the participant teachers in this study trained as generalist class teachers and as a result of a further qualification they now teach physical education.

Lawson's (1983a & b) model of socialisation in physical education focuses on the experiences of physical education teachers. Therefore this model has been modified for the purposes of my study to describe the physical education socialisation of the participant teachers as generalist primary school teachers. I propose that in relation to the socialisation of the participant teachers from my study, the phases presented by Lawson (1983a & b) intersect contributing to the continuous nature of socialisation as a process. Within my study the phases of socialisation are defined in the following way:

- **Acculturation**, the participant teachers' childhood experiences of physical education and physical activity
- **Professional Socialisation**, while reference is made to the ITE physical education experiences of the participant teachers, in line with Elliot *et al.* (in press) it will be argued that more relevant to this phase of socialisation is the CPD they engaged with early in their careers. Additionally extending this argument I will suggest that central to the teachers' professional socialisation were their early career experiences of working with primary physical education specialist teachers.
- **Organisational Socialisation**, the physical education curriculum, and pedagogy used prior to the participant teachers' engagement with the PGCert.

Adapting Lawson's (1983a & b) model of socialisation illuminates how the individual identity of each teacher was built up over time. To complement this model, situated learning (Lave and Wenger, 1991) is utilised to view the connection between the socialisation of the participant teachers and the social system which enveloped them.

### **Acculturation**

All of the participant teachers expressed an interest in physical education and physical activity when they were younger and all were actively involved in sport at some level as they progressed through their schooling. This is congruent with much of the literature on the physical education socialisation of teachers as reviewed by

Morgan and Bourke (2008). They highlight the significance of teacher background and how both positive and negative past experiences of school physical education can impact on teachers' beliefs and practice. Morgan and Bourke (2008) and Morgan and Hansen (2008) present a simplistic description of teacher socialisation in relation to physical education. They posit that positive past experience of physical education results in teachers being keen to engage with physical education as a subject, contrastingly negative past experience of physical education has the opposite effect where teachers are more likely to become disengaged from the subject. While I do not intend to dispute the close association between past physical education experience and physical education teaching practice, I would argue that focussing on the experiences of a small number of teachers reveals a more nuanced, non-linear association.

### **Max and Lara's Positive Past Experiences of Physical Education**

Lara talked positively about her experiences of physical education, whilst at secondary school, in particular team games. The physical education department was somewhere where she felt a "sense of belonging" and this along with the feelings of "mutual respect" and "empowerment" that she gleaned from the physical education teacher who took her for hockey contributed greatly to her love of physical education. This love of physical education was then translated directly into her teaching practice where Lara gravitated towards teaching those activities she felt most comfortable with, such as basketball and hockey. Max also reflected positively on his sporting background and how he wanted to bring some of the positive experiences of participating in sport to the pupils that he worked with. As a result of their positive school experiences both of these teachers were enthusiastic and felt confident about teaching physical education. Morgan and Hansen (2008), citing Lortie (1975), suggest that through an "apprenticeship of observation" pre-service physical education teachers develop a "subjective warrant to teach", thinking that they already know how to teach physical education as a consequence of their positive prior experiences (p. 374).

The positive past experiences of Lara and Max clearly encouraged them to approach their physical education teaching practice with confidence. However, further

analysis of their interviews also reveals a more negative influence of their past physical education experience on their physical education teaching. Wilcox (1987) found that physical education teachers who replicated their school experience in their approach to teaching physical education demonstrated little appreciation for the nature and needs of students. The early teaching experiences of Lara and Max echo this. In their initial interviews it becomes apparent that their previous positive physical education experiences may have, to quote Lara, “blinded” them. This is exemplified in Lara and Max stating that in the past they chose activities in physical education that they personally enjoyed yet neglected to account for the different abilities of the pupils they were working with. Reflecting on her early career teaching of physical education Lara realised that previously her own sporting ability had prevented her from understanding why pupils couldn’t do things. She expected all pupils to thrive in the same way as she had. Max made a similar observation:

If I’ve loved playing sport and I’ve loved going to rugby clubs and things and been taught that sort of old skills and drills type way and that made sense to me and I grew up to be an ok rugby player and then if I see somebody else [the PE specialist] doing it perfectly well, why would I question it. (Max, Interview 1)

In the early stages of their careers neither teacher questioned the traditional sport focussed approach to physical education teaching which had worked so well for them as students of physical education.

Reflecting the findings of Morgan and Bourke (2008) and Morgan and Hansen (2008), these examples indicate that positive past experience can lead to increased teacher confidence in teaching physical education. However at the same time, Max and Lara’s positive experiences of physical education negatively impacted on their teaching practice resulting in the perpetuation of the traditional sport orientated physical education curriculum that they had experienced and enjoyed. Elliot *et al.* (in press) also report a dominance of competitive team sport in the past secondary school physical education experiences of the teachers they surveyed. Despite a strong disposition towards the traditional sport and team game focussed curriculum in schools and indeed wider society, this curriculum is much maligned within the physical education literature for disengaging students (Siedentop and Tannehill,

2000; Ennis, 2003; Kirk, 2004 and 2010; Kulinna, 2008; Thorburn *et al.*, 2009). The physical education biographies of Max and Lara exemplify the influence of acculturation, the past personal experiences of physical education, on teacher socialisation (Lawson, 1983a & b; Elliot *et al.*, in press). Through acculturation the ‘societal ideology’ is learned which in this example in relation to physical education was that sport and physical education are synonymous. Despite research evidence challenging the dominant meaning of physical education as sport, through acculturation this ideology was preserved and considered the ‘common sense’ approach to physical education.

### **The Past Physical Education Experiences of Imogen, Jackson and Geoff**

In contrast to Lara and Max the past physical education experiences of Imogen, Jackson and Geoff were less positive. Jackson and Imogen both remarked that they were relatively good at a few sports but they both lacked confidence in their abilities:

I didn’t really have the confidence to push myself forward and I guess I kind of look back on my secondary PE experience with sadness in a way because I just felt I had a lot more to offer than I was given the opportunity to do. (Jackson, Interview 1)

I think I didn’t participate maybe as well as I would, had I had the confidence to do it. (Imogen, Interview 1)

Geoff’s memories of his school physical education experiences still provoked negative feelings for him as he described how he felt “irked” and “angry” about the way he was treated by both primary and secondary physical education teachers. He recalled the regimented nature of physical education during his primary schooling, and at secondary school he felt that he was overlooked as he perceived the “all-rounders” got more recognition from the physical education teachers:

People who were... I remember I used that word in one of my assignments, physically attractive; they were all-rounders where I maybe was very good specifically at certain things. If they were general all round ‘okers’ they did better than people who sort of maybe stood out for rugby or basketball or that. (Geoff, Interview 1)



Jackson had a similar experience of secondary school physical education where he felt it was specific children who were celebrated and his “potential was never nurtured”. Yet despite these largely negative memories of school physical education, Jackson, Geoff and Imogen were not discouraged from teaching physical education.

In line with Morgan and Hansen (2008) it could be argued that there is a link between the relatively negative memories of school physical education and the lack of confidence towards physical education demonstrated by Jackson, Geoff and Imogen. Morgan and Bourke (2008) intimate that for the teachers they surveyed negative past experiences of physical education were: “a substantial barrier to effective teaching” (p. 4). While Jackson, Geoff and Imogen may have lacked confidence in their abilities to teach physical education their negative past experiences did not discourage them from teaching physical education. Rather their negative past experiences pushed them to think about how to engage pupils who found physical education a frustrating and unfulfilling experience. Jackson was indeed seemingly spurred on to enhance children’s confidence, describing how early in his teaching career he thought about creating opportunities within physical education lessons for social and emotional learning. Similarly, in contrast to his own negative experience of school physical education, the aim for Geoff was to give the children a positive experience of physical education:

Trying to give the kids a positive experience, I think that’s crucial in any lesson but obviously PE’s not everyone’s cup of tea so you’ve got to make it, you know, go that extra mile. (Geoff, Interview 1)

Imogen was also keen to progress the children’s learning, as well as her own knowledge in physical education. She did this by engaging with physical education CPD courses provided by the local authority. The knowledge and ideas she gained from the courses were then transferred into physical education lessons, one example she mentioned was a tag rugby course. I propose that underpinning the early career physical education teaching of Jackson, Imogen and Geoff was a ‘moral purpose’ (Fullan, 1993; Day, 2004; Morgan *et al.*, 2010), as the aim of the physical education they were delivering was ultimately to provide the children with a better experience of physical education than they had experienced. As my study progressed it became apparent that ‘moral purpose’ played a significant role in supporting all the

participant teachers to instigate and implement curricular change in physical education, this is elaborated further in chapter six.

While Jackson, Geoff and Imogen were striving to enhance the experience of physical education for the children they were teaching, the physical education curriculum they delivered was very similar to that of Max and Lara. Again the curriculum was very traditional with a sport or games focus and the activities were delivered in short blocks throughout the year. The following extracts from the first interviews with Imogen, Jackson and Geoff illustrate this:

Limited [activities] actually probably more of a games approach. (Imogen, Interview 1)

Researcher: So trying different activities but it was still quite sport driven?

Jackson: Definitely. (Jackson, Interview 1)

Well we had gymnastics, we had athletics, we had fitness, we had ball games, we had dance, we had cross country that kind of falls into athletics, we had field games. (Geoff, Interview 1)

This further supports the argument put forward earlier of the strong influence of acculturation on teacher socialisation. Despite the negative experiences these teachers reported of their own physical education experiences the multi-activity block, sport orientated physical education curriculum persisted in their teaching. As the dominant 'societal ideology' it was all that they had experienced and knew.

### **The Teachers' Past Experiences of Physical Activity**

The acculturation of the participant teachers in this study was not solely affected by their formal learning of physical education in school. The more informal learning experienced within physical activity settings also impacted on their socialisation in physical education. From lifelong (Penney and Jess, 2004) and situated (Lave and Wenger, 1991) perspectives of learning the experiences of the participant teachers in this study exemplify the continuous nature of the learning process. Their experiences also illustrate how particular interests, values and visions concerning physical education were ingrained within the wider social system that was the context of their learning.

*Max: The buzz of camaraderie*

Max had many memories of the teams and clubs he participated in outside of school:

I played in all the teams even though I was utterly rubbish at playing football and hockey and things but I managed to get in all the teams. (Max, Interview 1)

It may appear unusual that Max made such a self-deprecating statement yet was involved in so many activities; tennis, athletics - pole vault, rugby, hockey, football, cricket and still enjoyed them. However, elaborating on this initial statement Max revealed the main reason for his enjoyment of physical activity and involvement in various clubs, despite perceiving that he was not very good at some of the sports:

It's the total buzz about packing your bag the night before and getting your number ready to pin onto your athletics vest and the bus ride there and the tomfoolery and the sort of camaraderie and the high japes and things. (Max, Interview 1)

This 'buzz' around physical activity and participating in clubs is something which Max sought to recreate for the children he worked with.

In the early years I did a lot of extra-curricular things. When I was teaching in China and in Poland I took a basketball team in China and I did football teams in Poland and things. And on student placements when I went to a school I'd take a football team and that. Lots of extra-curricular: athletics, basketball, football, tennis, lots of different things throughout the years when I was a classroom teacher. (Max, Interview 1)

Additionally I would suggest that the positive physical activity experience and the accompanying 'buzz' Max enjoyed in his youth contributed to him remaining active in his adult life, despite an injury limiting what activities he can participate in:

I cycle to and from school most days and I go swimming, I'm going swimming in a very cold reservoir this evening for kicks. I went swimming in the sea last weekend in some epic waves and so I go swimming and I play a bit of badminton and I play a bit of squash and that's about it. (Max, Interview 1)

The importance Max placed on physical activity is reflected throughout the first interview and in subsequent interviews. Within these interviews Max talked extensively about the connection between physical education and physical activity

and the role he perceived he played in promoting that as a physical education teacher.

*Lara: Feeling empowered*

Lara also recounted in detail her involvement with extra-curricular clubs. The main activities she mentioned being involved with were hockey, volleyball and athletics. It becomes apparent from Lara's recollections that hockey was a substantial influence in her early life. Lara talked about how she felt the hockey teacher invested in her and this gave her a feeling of empowerment:

We had really good sports facilities where I was and it was very much a hockey school because of this PE teacher that I had. And also because in the 80's<sup>7</sup> there was the teachers' strikes children who were passionate about PE and wanted to continue on and play games, sports fixtures and things out-with [couldn't]. Because there was this hardcore group [who wanted to play] she invested in us and she set up fixtures with private schools so that we were still getting the experience. (Lara, Interview 1)

Lara described a two way investment between the teacher and the students, the students felt valued by the teacher who ran the hockey club because of the effort she put into running it. In recognition of this the students were enthusiastic about participating in the practice sessions and in competition. Additionally the hockey teacher had connections with the local hockey club which she encouraged students in the school club to attend. Lara's involvement playing volleyball in an after school context along with teachers from her school also reflected this reciprocal relationship. The positive experiences of extra-curricular physical activity Lara encountered made these clubs, for her, "a really nice place to be". Her interest in both hockey and volleyball has also been extended into later life:

Well not that long ago I dabbled in playing hockey again. I'm thinking about playing volleyball again following on from stuff that we've done at the university, sort of thinking why not? Even although I'm old I'm still running. (Lara, Interview1)

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<sup>7</sup> During the 1980's Scotland witnessed teachers' strikes over pay and work conditions. One of the results of the strikes was that many teachers stopped their involvement with extra-curricular activities and clubs.

Lara's positive past experience of extra-curricular physical activity prompted her to organise extra-curricular activities as a teacher; coaching the basketball team and leading lunch-time running sessions within her school.

### *Jackson and Geoff: Physical activity recreationally and in clubs*

While at school Jackson and Geoff both recollected playing sport recreationally and in clubs. Jackson played for the basketball team and the cricket team, along with pursuing an interest in badminton and golf. Geoff played badminton, rugby union and rugby league which as a student he was paid to play semi-professionally. The negative feelings Geoff harboured towards physical education from his schooling I would argue led him to focus all his enthusiasm and energy on physical activity opportunities outside of school. Concurrently a lack of recognition of his abilities within the school physical education setting made Geoff all the more proud of his achievements within a physical activity context:

I represented the Scottish students against England, so you know it's the sort of thing when I look back at early experiences in PE that makes me laugh in a way, you sort of think wait a minute, you know I've been sort of the top of the game. (Geoff, Interview 1)

Unlike the other participant teachers, Jackson did not reveal much detail about his past involvement in extra-curricular physical activity, going into more detail about his current physical activity. He reflected that in his later life he hasn't pursued many of the physical activities he was involved with when he was younger, particularly shying away from team sports:

I don't really do anything team sport wise and often when I do like for example I went along to the primary teachers' football with the guys from X school and I just felt like I was letting people down. I have the enthusiasm and I have the stamina but the technical skill's just not there... These guys are very competent, my self-esteem kind of plummets when I'm in that situation and I don't really want to do it. (Jackson, Interview 1)

This statement reveals an underlying lack of confidence which could stem from Jackson's early experiences of physical activity and physical education. Indeed he spoke about his dislike of football when he was younger and in reference to fundamental movement skills he didn't remember "ever getting particularly good at

anything”. Both Jackson and Geoff still enjoy physical activity but they now favour more individual pursuits. Geoff does some rock climbing but most of his time is spent training for power-lifting and strongman, while Jackson plays golf and trains at the gym: “I love the gym and I spend lots of time in the gym where it’s just me against myself.”

*Imogen: “What we did ourselves”*

Imogen’s physical activity took a more recreational format. Growing up in a village, she recounted that there were no formal sports clubs so most of her physical activity came from: “what we did ourselves”. Imogen depicted her childhood playing outside: climbing trees; playing tennis against a wall and over a rope and as the only girl in the village playing football with the boys. At secondary school Imogen was asked to play on the hockey team but didn’t go for a combination of reasons: as she lived in the country she couldn’t get to the matches; she was more interested in music, playing in the orchestra and brass band after school, and she didn’t have the “feeling of self-worth to go along.” Ultimately Imogen avoided participating in team sports:

I think stronger personalities; girls made me pull back a lot maybe not stand out too much and be part of the wall-flower at the back. (Imogen, Interview 1)

This quotation intimates she felt an underlying social pressure within the context of ‘the team’ and this has been maintained in her later life:

It’s team sports I don’t tend to be involved in...and again that maybe reflects back to what I’ve just said about team sports at secondary. (Imogen, Interview 1)

Imogen’s largely negative experiences of extra-curricular clubs at school did not prevent her from pursuing a wide variety of activities and attending clubs as a student at University: scuba diving, hill walking, volleyball and canoeing. However, she would still “pull back” from activities if she felt that she wasn’t fully accepted:

I went out and tried all of these things and it was where I felt I fitted was where I stayed. (Imogen, Interview 1)

In later life Imogen's interest in many of the physical activities she was involved with has waned, mainly due to work commitments. However, she has in recent years developed an interest in running, running in a number of half marathons and 10k races, which she enjoys as a stress relief. Throughout her teaching career Imogen has also been involved in organising extra-curricular activities ranging from mountain biking to a netball club and a running club.

Reviewing the physical education and physical activity experiences of the participant teachers in this study retrospectively reveals the particular influences and incidents that have proved powerful in shaping their sense of identity. Although each teacher has their own individual story to share, patterns emerge that reveal similarities in their experiences. Points of convergence are particularly evident regarding the reproduction of sport practices, techniques, beliefs and values within the contexts of both physical education and physical activity (Kirk and Macdonald, 1998). From a situated perspective, the physical activity and physical education experiences of the participant teachers illustrate that learning is multi-layered and is part of social practice (Lave and Wenger, 1991). Knowledge and understanding of physical education and physical activity was not built up in isolation by these teachers rather it was developed through participation in social practice with others (Lave and Wenger, 1991). Regularities and patterns of practices dominant within the wider social system were reproduced both in the context of physical education and physical activity. In a cyclical manner these regularities and practices, such as the multi-activity block curriculum, were experienced by the participant teachers as the norm and then subsequently incorporated into their later teaching practice becoming further ingrained within the social system.

## **Professional Socialisation**

### **Initial Teacher Education**

Literature on the ability of generalist primary teachers to deliver physical education suggests that they lack content knowledge and are uncertain of how to approach teaching physical education (Kirk, 1994; Hardman and Marshall, 2001; Ha *et al.*, 2004; Morgan and Bourke, 2008; Griggs, 2009; Petrie, 2010; Harris, Cale and

Musson, 2011). While, as previously indicated, this raises questions in relation to the past physical education experiences of generalist primary teachers (Morgan and Hansen, 2008) it also queries the initial teacher education (ITE) experiences of these teachers (Duncombe, 2005; Quay and Peters, 2008; Griggs, 2009). Within a Scottish context, Elliot *et al.* (in press) found that 45 % of generalist class teachers they surveyed felt their ITE training did not adequately prepare them for teaching physical education. Additionally 69% of the teachers they surveyed indicated that thirty hours or less had been allocated to physical education during their ITE. Common themes emerge between my small scale study and the larger study of Elliot *et al.* (in press) as regards the ITE experiences of generalist class teachers:

1. There is a general feeling that insufficient time was allocated to physical education during ITE.
2. The physical education training received during ITE has had little impact on teachers' practice.

In line with much of the literature, the physical education experiences of the participant teachers in this study during their ITE could be described as insignificant.<sup>8</sup>

Max and Lara both gained their teaching qualifications through a one year postgraduate route Max revealed that very little time was given to physical education, two sessions. Time for physical education training was also limited for Lara. She recollected receiving a block of physical education training during her ITE which rotated with the other expressive arts: drama, art and music. A similar story emerged for the four year Bachelor of Education (BEd) teaching qualification attained by Imogen and Jackson, they both recalled little time afforded to physical education. Jackson described the physical education he received during his ITE as “dull, uninspiring and forgettable”. While Imogen admitted that she graduated from the BEd course with very little knowledge of how to teach physical education:

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<sup>8</sup> The teachers were not directly questioned about their ITE experiences during the interviews. However, they were asked to comment on it as part of the background questionnaire they were asked to complete at the beginning of the study



I did enjoy going along to classes but I did come away thinking I really don't know what I'm doing when it comes to going to the gym hall. (Imogen, Interview 1)

I would argue that the comments from the participant teachers in this study on their ITE experiences and scant reference made to it throughout the interviews suggest that it had little impact on their teaching of physical education. The teachers referred more to their own early experiences of physical education and physical activity and their initial 'on the job' experiences.

In contrast to Lawson (1983a), who highlights the significance of ITE experiences on the professional socialisation of physical education teachers I would argue that for the generalist class teachers in my study their initial 'on the job' experiences were of greater significance to their professional socialisation. The initial 'on the job' experiences of the participant teachers incorporated a range of factors: working with the physical education specialist; working with sports development officers and other outside agencies; experimenting with the physical education curriculum and pedagogy, and participating in CPD opportunities. The pedagogy employed by the teachers and the physical education curriculum will be explored within the later section of this chapter on organisational socialisation. The following analysis of the professional socialisation of the participant teachers concentrates on initial 'on the job' influences that emerged as themes from the interviews: the physical education specialist and professional development opportunities.

### **Learning from the Physical Education Specialist Teacher**

There are a number of similarities in the experiences of the participant teachers regarding their contact with physical education specialists. The patterns emerging from their interview responses confirm the integral role that the specialist teacher played in delivering Scottish primary physical education. Before the McCrone agreement and the introduction of reduced class contact time all of the participant teachers from my study recalled working with physical education specialist teachers to deliver physical education, as the following statements from Lara and Imogen exemplify:

When I first started you observed your PE lesson. And the expectation within our school was that you observed PE and our PE specialist she drove that one hard. (Lara, Interview1)

When I first started teaching I had the specialist that I would go in and watch and basically she would plan the PE and I would follow the plan. (Imogen, Interview 1)

The participant teachers described observing the physical education teacher and learning from them, indeed Geoff stated that he “tried to model himself on the specialist.”

However, as outlined in chapter one the introduction of reduced class contact time resulted in less opportunity for the participant teachers to observe and work with the physical education specialist teachers. Imogen and Lara lamented this lost opportunity:

There was no liaison, there still is no liaison with the specialist, there’s no time allocated we don’t get to speak to the specialist about what the plan means. (Imogen, Interview1)

So pre McCrone you were expected to do a follow-up and then with McCrone there was much more of a feeling of perhaps two separate curriculums going on. (Lara, Interview 1)

The pattern that emerges from the interviews with the teachers is that pre McCrone they were able to work closely with the physical education specialists and learn from them. In contrast, post McCrone it seemed that the main responsibility of the specialist physical education teachers was to deliver reduced class contact time rather than physical education. As Max succinctly stated when asked about the purpose of physical education in his school post McCrone:

Researcher: What would you say in the past was the purpose of PE in the school?

Max: Non-contact cover.

(Max, Interview 1)

The extent to which the physical education specialist influenced the professional socialisation of each participant teacher varies. To illustrate this I describe in more detail the recollections of Max and Jackson regarding the physical education

specialist teachers they worked with. Their stories are compelling as Max describes at length the physical education specialist he worked with, Antonia<sup>9</sup>, and how she influenced him. In contrast Jackson reveals relatively little about the physical education specialist he most recently worked with. Partly due to the introduction of reduced class contact time, she had little direct influence on his teaching practice.

Max described the physical education specialist he worked with for seven years, Antonia, as: “by far the best teacher I have ever met in my life”. Antonia planned and delivered the physical education curriculum while Max was expected to observe and deliver follow-up lessons:

Antonia would email you plans each week with the lesson, and evaluation. I mean meticulous and then you would have to teach your lesson and you would have to email her back your evaluation of your lesson otherwise you would get a row. (Max, Interview, 1)

Max portrayed Antonia as a very enthusiastic and committed teacher who was “meticulous” and “rigorous” with her own set way of teaching physical education. In comparison the physical education specialist Jackson recollected working with was depicted as a background figure. He rarely saw the physical education specialist but he did receive plans which he attempted to follow:

It [the plan] was just emailed to me and that was really that...[The physical education specialist] would be rushing off to their next class, there wasn't really any email contact, there wasn't any face time that we had together. (Jackson, Interview1)

Jackson was left to deliver physical education relatively independently from the physical education specialist:

I developed my own kind of PE plan using that [The Borders pack, a PE resource] as a kind of basis to see what they [the children] needed to know then trying to develop my own ways of doing things. (Jackson, Interview 1)

Without the strong influence of a physical education specialist, such as Antonia, Jackson created his own physical education programme adapting and experimenting with resources he found within the school.

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<sup>9</sup> Antonia is the pseudonym given to the PE teacher that Max described working with at length in the years prior to his engagement with the PGCert.

In contrast to Jackson, while working co-operatively with Antonia was a positive experience for Max it did result in him becoming dependent on her:

I think when you're a class teacher PE comes in about number 472 in your list of priorities and if you've been given the answers by somebody and you don't have to think about something else then brilliant. (Max, Interview 1)

From the way Max spoke about Antonia I would suggest that, similar to Geoff, he attempted to model himself on the physical education specialist. Max perceived that the physical education programme Antonia delivered positively impacted on the children's progress and gave them enjoyment:

Very sort of progressive with the kids and everything sort of worked. And she got clusters together, doing things, getting kids packing their bags and going on buses. (Max, Interview1)

Crucially for Max the way Antonia taught physical education was very similar to the way he had been taught it himself which left him with no need to question her methods:

I grew up playing rugby like she taught kids to play rugby and I grew up playing basketball and I'm sure I got similar sorts of lessons at high school to what she was teaching primary six and primary seven. (Max, Interview 1)

Max's relationship with the physical education specialist elucidates the interplay between the phases of socialisation.

I contend that if what is learned during acculturation is then reinforced during professional and organisational socialisation it contributes greatly to perpetuating a specific 'societal ideology'. In the example provided by Max the synonymous relationship between sport and physical education is maintained. Max learned physical education and sport were synonymous because that was the social practice that was perpetuated in his lived-in world. From a situated perspective Max's reflections demonstrate that "learning is an integral part of generative social practice in the lived-in world" (Lave and Wenger, 1991, p. 35). The meanings Max formed in relation to physical education were grounded in his interactions with others. Initially he developed his understanding through his interactions with his peers,

physical education teachers and sports coaches. This meaning was later confirmed by his interactions with the physical education specialist he worked with.

The influence of the physical education specialist teacher on the professional socialisation of the primary school teachers in this study cannot be described in simple linear terms. Rather this influence has changed over time, mainly as a result of the McCrone agreement and changes in personnel employed in the physical education specialist role within the teachers' schools. While Jackson may not have been greatly influenced by the most recent physical education specialist he worked with, he did refer to another physical education specialist. Reflecting on his time working at Max's school Jackson mentions Antonia who would appear to have had a more positive impact on his teaching of physical education. He talked about learning about the value of peer feedback from her, something he has attempted to include in his own practice. Similarly while Antonia may have had a substantial impact on Max's early career approach to teaching physical education he too discussed other physical education specialist teachers who influenced him.

Working with these physical education teachers introduced Max to alternative ways of teaching physical education and led him to question elements of the physical education programme previously delivered by Antonia:

There was another specialist...she did an awful lot of different things to Antonia. She did a lot of creative dance and things were an awful lot more creative and an awful lot freer...And she kind of did a lot of things like Ultimate Frisbee and just things that I hadn't thought of teaching or doing before. (Max, Interview 1)

Since completing the PGCert and becoming a physical education teacher Max's views of Antonia as a physical education specialist have altered. While he recognised the impact she had on his physical education teaching he also detected flaws in the games, skills and drills curriculum she endorsed:

I probably think that Antonia was all that and that I'm all this and I'm sure there is a lot of grey in between. Antonia was the classic archetypal skills and drills teacher and I didn't question it. And she did lots of fantastic things but I kind of think because of the university and reading that book and

listening to Colin<sup>10</sup> for four years I think I now just imagine her to be the archetypal sort of Scottish country dancing, gymnastics teacher and me to be something different. (Max, Interview1)

This quotation is interesting as it highlights how initially and still to some extent the physical education specialist, Antonia, was a strong influence on Max's professional socialisation; it was from her he learned most about physical education during his early career. However, over time the main influence on the professional socialisation of Max changed, particularly when he undertook the professional development opportunity provided by the PGCert. Through the PGCert Max developed a relationship with personnel at the University of Edinburgh who began to influence his thinking on physical education. He confronted his beliefs and understanding of physical education which resulted in him changing his beliefs and his approach to teaching physical education.

### **Continuing Professional Development**

It will be argued in subsequent chapters that the professional development opportunity provided by the PGCert contributed greatly to the later professional socialisation of the participant teachers in this study. As this thesis develops, revealing the change stories of the participant teachers, it will become clear how the PGCert influenced them in diverse ways. Findings suggest that this professional development was the catalyst which broke down the long held beliefs and values the participant teachers had built up throughout the process of socialisation. The PGCert arguably challenged the teachers' previous beliefs and meanings of physical education. As they re-evaluated their understanding of physical education so the trajectory of their professional socialisation changed resulting in changes to the physical education curriculum and the pedagogy they used to deliver it. Prior to engaging with the PGCert the professional development that most influenced the participant teachers was informal, often collaborative and 'on the job'. The following quotation from Lara illustrates this:

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<sup>10</sup> Colin is the pseudonym given to the lead person who designed and delivered the PGCert. Colin delivered the course with other tutors who are also mentioned within this thesis by the participant teachers and have been given the pseudonyms May, April and Sara.

I learned an awful lot from people and the development officers coming in and I was like a sponge with these guys in the early days, they were a brilliant resource so I would steal their stuff. (Lara, Interview1)

While Jackson recounted utilising a variety of resources to gain knowledge about physical education, in contrast Imogen, Lara, Geoff and Max all felt that working with the physical education specialist contributed greatly to their knowledge and understanding of physical education. The following quotation from Max exemplifies this:

There'd be no need to talk about CPD in PE because to some extent you've got continuous professional development by working alongside a PE specialist. You know all this talk about CPD and PE and stuff is all great but to some extent it has to take place because nobody comes in the gym hall anymore 'cause they're all having their non-contact time and things. (Max, Interview 1)

In recent professional learning literature, both within physical education and education in general, there is growing recognition of the value of informal and collaborative forms of professional development (Duncombe, 2005; Deglau and O'Sullivan, 2006; Keay, 2006b; Armour and Yelling, 2007; Fraser *et al.*, 2007; Rose and Reynolds, 2008, Kennedy, 2011). Hoekstra and Korthagen (2011) raise a note of caution when considering the influence of informal professional learning on teachers. While they recognise that it is valuable, they suggest that changing teachers' beliefs and practice often requires more formal support. To top up the knowledge gained from ITE and informal 'on the job' experiences the participant teachers from my study sought out more formal physical education CPD. These CPD opportunities will be discussed in more detail to analyse how they impacted on the professional socialisation of the participant teachers prior to their involvement in the PGCert.

Jackson, Geoff, Imogen and Lara all engaged with formal CPD opportunities to varying degrees in their early careers. Max made no reference during the interview to formal CPD opportunities he undertook prior to participating on the PGCert. Rather, he stressed the important contribution the physical education specialist made to his early professional development. Jackson stated that he was mainly pursuing CPD opportunities in other subject areas prior to participating on the PGCert, but he did recall taking part in golf training and cycle training. Similarly Geoff mentioned

engaging with a golf course prior to undertaking the PGCert. While Jackson and Geoff sought out physical education CPD opportunities to increase their knowledge and skills as they do not go into detail about this professional development it is open to debate the extent to which it impacted on them. Lara and Imogen provided more detailed accounts of physical education CPD in their interviews, revealing how professional development impacted on their professional socialisation.

Imogen recollected always being keen to further develop her skills in physical education. Initially she pursued an interest in outdoor education through the Basic Expedition Leader Award which she applied in her practice taking children out on expeditions. Additionally Imogen achieved a trail cycle leader award which again she put to use within her school. In her previous school Imogen was financially supported by the head teacher to do these courses and then run a mountain bike club, and take the children out on expeditions. Lara also expressed an interest in outdoor education early in her career, for example, completing a course on hill walking. However, the main interest Lara developed during her early teaching career was basketball, running an after school basketball club and pursuing a coaching qualification. Both Lara and Imogen attempted to incorporate the qualifications they achieved into physical education and physical activity contexts. It could be suggested that similar to the PGCert these qualifications required longer term commitment from the teachers which much of the literature asserts is more likely to result in change in teacher practice (Ha *et al.*, 2004; Duncombe, 2005; Deglau and O'Sullivan, 2006; Petrie, 2009; Atencio *et al.*, 2012). Imogen and Lara pursued opportunities to apply professional development in their teaching practice, as Imogen affirmed: "I had the qualifications there and tried to use them." In this respect the professional development these teachers were pursuing was impacting on their professional socialisation.

The qualifications Imogen had attained also spurred her on to seek out more CPD opportunities to further her knowledge of physical education. Imogen actively sought out professional development opportunities to get new ideas that could then be employed in physical education lessons with the children. However, this could be a frustrating process when courses were cancelled due to lack of interest:



I would pick up any course I could find in the directory<sup>11</sup> and if there was a sports one I would often pick that up and go 'cause I was interested and wanted to move myself forward. The disappointing thing is you might say 'oh great there's a basketball course' and you put your name down for it and then you get the call it's cancelled because of lack of interest and that frustrates me 'cause I want to go to these courses to get ideas to help me. (Imogen, Interview 1)

Despite cancelled courses, Imogen continued to look and sign up for courses (tag rugby, mini kickers, jog Scotland) along with searching the internet for resources, for example through jog Scotland:

I got the jog Scotland pack off the internet, I don't think I'd even done the course at that point. I looked through that and I thought right I'm going to use this with the class. This is easy enough, I can understand where this is coming from, I can use some of these ideas for running activities. (Imogen, Interview 1)

Prior to engaging with the PGCert Imogen was determined to improve her knowledge and apply the knowledge she gained in her teaching practice. Lara too was keen to improve her knowledge of physical education. She recalled doing courses in rugby and hockey then supplementing this knowledge by adapting resources she found in the school and seeking out information on the internet. In comparison to Imogen, Lara because of her sporting background felt that these courses contributed little to her knowledge:

I can even remember feeling quite arrogant about some of the courses I went on because I was thinking probably very much about my own experience in teaching these children from what I had learnt as a teenager and as an adult. (Lara, Interview 1)

This statement from Lara again reflects the interplay between the phases of teacher socialisation (Lawson, 1983a & b) and demonstrates the strong influence of the acculturation phase on her socialisation.

The one-off, off-site type of CPD courses Imogen and Lara pursued have been criticised within much of the physical education professional learning literature as ineffective (Armour and Yelling, 2007, Duncombe, 2005, Atencio *et al.*, 2012) yet

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<sup>11</sup> The local authority Imogen worked for produces a directory of CPD courses so that teachers can choose courses to go on.

they appear to have been effective for Imogen early in her career. Harris *et al.* (2011) report on the impact of a physical education professional development programme that was largely delivered as one-off, off-site courses. They found that initially nearly all of the participant primary teachers reported a positive impact of the professional development on their knowledge and understanding of physical education. These findings reflect the initial response of Imogen to the courses she was participating in. However, Harris *et al.* (2011) also found limitations with this model of professional development, in particular there was limited evidence of how it was actually being applied in schools and some teachers commented on the inadequacy of one day courses. The experiences of Lara and Imogen were similar in that the professional development that was most influential on their practice was the accredited courses that required long term commitment. It could be suggested that in the context of inadequate ITE physical education training the most logical approach for Lara and Imogen to increase their knowledge and understanding of physical education early in their careers was to seek out CPD opportunities. However, similar to their childhood experiences of physical education and what they learned from the physical education specialists they were working with, the CPD opportunities they engaged with confirmed the 'societal ideology' they had developed; the synonymous relationship between sport and physical education.

For the teachers in this study inadequate physical education ITE meant that physical education knowledge had to come from somewhere else and this tended to be through collaboration with others particularly the physical education specialist, adapting resources and pursuing CPD opportunities. These all contributed to varying degrees to the professional socialisation of the teachers in this study. Collaboration was key, which highlights the situated perspective of learning where it is through interactions with others that meaning, knowledge and understanding develops (Lave and Wenger, 1991). I would suggest that acculturation and professional socialisation initially resulted in perpetuating the societal ideology and social practice of sport, games and physical education. This was further compounded by the organisational socialisation experienced by the teachers.

## **Organisational Socialisation**

Lortie (1975) contends that conceptions of education and teaching developed early in the process of socialisation are often reinforced by teacher education and later work experience: “Teachers do not, apparently, acquire new standards to correct and reverse earlier impressions, ideas and orientations” (Lortie, 1975, p. 81). Lawson (1983a) expands on this suggestion in relation to the socialisation of physical education teachers, positing that physical education teacher education programmes are effective “in the sense that their design and conduct often mirrors existing school programs” (p. 12). The examples discussed thus far in relation to the physical education socialisation of the generalist class teachers in my study reflect the arguments put forward by Lortie (1975) and Lawson (1983a). Tracing the physical education biographies of the participant teachers reveals how impressions, ideas and orientations developed during acculturation were largely preserved during their professional socialisation. The following section reviews the organisational socialisation of the teachers in this study in relation to physical education. Lawson (1983a) proposes that professional socialisation and organisational socialisation are often at odds for physical education teachers. Conversely, I found that the physical education teaching practice of the generalist class teachers in this study reflected what they had learned during acculturation and professional socialisation.

Lawson (1986) describes organisational socialisation as: “the process by which physical educationists learn the knowledge, values, and skills required by the work organisation” (p.108). The organisational socialisation of the participant teachers in my study is illustrated by outlining the physical education curriculum and pedagogy used to deliver it. Additionally the participant teachers’ perspectives on the status and purpose of physical education within the wider school are reviewed. This reveals the physical education knowledge and skills that are valued and expected to be reproduced by teachers as part of the physical education learning curriculum (Lave and Wenger, 1991) within schools. Exploring the organisational socialisation of the participant teachers in this study also illuminates the claims made by Lawson (1983a) concerning the impact it has on ‘schooling bureaucracies’:

Organizational socialization also may produce a cognitive style in which the maintenance of order, the uses of proper procedures in the name of routine, and the tacit denial of the need to individualize instruction and cater to the needs of students are prevalent.

(Lawson, 1983a, p. 4)

The recollections of the participant teachers in this study regarding the physical education curriculum they devised and the pedagogy used to deliver it, prior to participation on the PGCert, reveal a preoccupation with maintaining routine and order often at the expense of addressing the individual learning needs of their pupils.

### **Physical Education Curriculum and Pedagogy**

Both nationally and internationally there emerges from the literature an historical picture of physical education focussed on teaching sport related skills and team games, through a multi-activity block format, often to the detriment of pupils. (Kirk, 1994; Penney and Chandler, 2000; Kulinna, 2008; Thorburn *et al.*, 2009) The physical education curriculum that the participant teachers in this study experienced as students and delivered in their early careers reflects this. As previously discussed, the influences on the acculturation and professional socialisation of the participant teachers combined to legitimise a view of physical education as comprising merely a collection of activities (Penney and Chandler, 2000). This view has then been perpetuated into the teaching practice of these teachers, as the following discussion of their organisational socialisation demonstrates.

The physical education curriculum taught by all of the participant teachers took the form of blocks of activities, with a sport, games and fitness focus where the children had to be seen to be active. This type of sport and fitness orientated physical education curriculum is born from a complex history as intimated within much of the physical education literature (see Kirk, 1994; Capel, 2000; Laker, 2000; Hastie, 2003; Thorburn *et al.*, 2009). Stemming historically from the poor performance of soldiers in wartime and politically from statistics indicating low levels of youth fitness, Hastie (2003) describes how government and medical authorities have been vociferous in pushing for the inclusion of activities in physical education that address fitness. The influence of fitness on the physical education taught by the teachers in

my study is exemplified in a push to keep the children active. Lara discussed how she felt it was important to keep the class moving and she felt that spending lots of time talking to the pupils in a lesson was a waste of the physical education time. Geoff also confirmed the active nature of physical education lessons: “say we were doing games, we’d obviously talk about maybe tactics or whatever...but it’s more about being physically active.” Along with a fitness element present within the physical education curriculum, there was also a predisposition towards sport based activities delivered in short blocks, as the following statement from Lara illustrates:

I would possibly be doing blocks of say badminton, blocks of you know, it was very much based around the block system. (Lara, Interview 1)

The multi-activity block approach emerged from the interviews with all of the participant teachers as “entrenched and representative of what constitutes a physical education curriculum” (Thorburn *et al.*, 2009, p. 216).

Kirk (1994) highlights the common use of the 'whole - part - whole' approach to teaching skill development in physical education. This involves breaking down activities into individual skills to be practised in isolation and then putting them back into context. This was often the format adopted for physical education lessons by the participant teachers in my study, as this quotation from Imogen exemplifies:

Every lesson I would probably go through some sort of warm up then the actual teaching you would more go down the line of skill practice, drill practice of a skill and then you would put it if you could into a game. (Imogen, Interview 1)

Although skills and drills can be a valuable way of teaching physical education and developing specific skills, relying on this as a teaching method leads to skills being learned in isolation. Siedentop (1994) argues that rather than focussing on “isolated sports skills and less than meaningful games”, sport experience in the physical education curriculum should be more authentic, contextualised and developmentally appropriate (p. 8). The physical education curriculum that the teachers described prior to their involvement in the PGCert is reminiscent of the traditional physical education curriculum criticised by Siedentop (1994). Lara provided a stark example of this, describing “repeatedly dumping” pupils in game situations that would often

result in the children demonstrating negative sporting behaviours. Lara admitted that she felt comfortable teaching through skills and drills, often holding back from letting the children play the game. Consequently when she did thrust the children into large sided game situations they lacked the tactical knowledge and skills required to participate and as a result game play often broke down.

The descriptions provided by the participant teachers of the physical education curriculum they delivered establish that it took a very traditional form. Similarly their discussions of the pedagogy they used to deliver the curriculum also revealed a traditional approach. Prior to engaging with the PGCert four of the five teachers professed to having adopted a very direct teaching style where learners were simply expected to follow instructions. The following quotation from Imogen exemplifies this:

I was more the teacher who says this is how you do it and you'll go off and do it that way 'cause that's the way you've been told...it's just basically this is the way it's done, I'm telling you this is the way it's done, there's no exploration you just do it that way and that's how you do it and that's just how I was. (Imogen, Interview 1)

Just as the traditional sport orientated physical education curriculum devised by the participant teachers was couched in their own experiences of physical education, so too was the traditional teaching style they adopted. Indeed Geoff talked about his own primary school experience of physical education being very regimented and more a: "you will do rather than what do you think kind of PE." This teaching style was similar to the one he adopted to teach physical education early in his career where it was: "him saying and the children doing".

The consequence of this direct teaching style was that the focus was more on teaching than on learning, as Lara recounted:

I could walk away from say especially the basketball and go 'oh that was really good' because I felt confident delivering this, I was able to demonstrate well, and the children were able to carry out that instruction exactly how I had given it...It was probably more about me than the learners. What did I do well? (Lara, Interview 1)

During discussions of pedagogy the learner was described as the “doer” and the “listener”, given little opportunity to contribute to physical education lessons or take responsibility for their own learning:

The learner is the doer I think there was probably an awful lot less thinking.  
(Max, Interview 1)

Oh they [the children] had to listen to me! No, yeah, I didn't allow much opportunity for them taking responsibility. (Lara, Interview 1)

Prior to participating on the PGCert Lara, Max, Geoff and Imogen described delivering a physical education curriculum fixed into blocks, decontextualised because of the emphasis on practising skills in isolation and requiring only passive participation from pupils. Light (2008) and Jess *et al.* (2011) posit that these characteristics demarcate a behaviourist inclined curriculum and pedagogy which has formed the dominant view of learning in physical education for much of the twentieth century.

In contrast to this direct and behaviourist pedagogy intent on teaching seemingly fixed knowledges (Jess *et al.*, 2011), Jackson depicted having a more constructivist (Light, 2008; Rovegno and Dolly, 2006) approach to teaching and learning in physical education prior to engaging with the PGCert. Throughout the first interview he described being a creative teacher, keen to put his own slant on the physical education curriculum and tackle ‘head on’ weaknesses he recognised in his teaching practice: “trying to develop my own ways of doing things, I’m a creative person and thinking about interesting ways of introducing the kids to it [physical education].” Jackson’s awareness of his own preferred learning style made him more aware of his teaching style in relation to the different learning styles that would be present amongst the children he was teaching. In this respect he endeavoured to avoid talking at the children and tried to engage them actively in their learning both in physical education and the classroom: “so just really taking classroom techniques and bringing it into the gym hall not keeping them separate.” Applying classroom techniques in the gym hall is a theme that emerged from subsequent interviews with all of the teachers and will be elaborated on in chapter six. I would argue that this is perhaps what sets these generalist primary class teachers who teach physical

education apart from the physical education specialist teachers. What the generalist teachers lack in physical education content knowledge they make up in their knowledge and understanding of primary children and the style of pedagogy that most suits these children.

Jackson wanted to avoid creating a dependency culture on the teacher amongst the children in his class so he encouraged the children to work together and support each other:

I've always been keen to get them into groups, keen to get them talking, working together, peer support. I've been keen to introduce them to a skill and then have them go away and practise it and obviously using children to demonstrate I've done that from a very early stage. (Jackson, Interview 1)

This approach to teaching where Jackson recognised the social element of knowledge construction resonates with much of the physical education literature that highlights the potential value of social constructivist approaches to teaching and learning (see Azzarito and Ennis, 2003; Dyson, 2002; Rovegno and Dolly, 2006). In comparison to the other teachers in this study who developed a more social constructivist approach to their physical education teaching after engaging with the PGCert, this is an approach to teaching that Jackson embraced early in his career. Engaging with the PGCert did not necessarily change the pedagogy Jackson applied in physical education, as it did with the other teachers in this study. Rather the PGCert had more of an impact on his content knowledge and understanding of physical education.

### **Physical Education and Physical Activity within the School Context**

All of the participant teachers could be described as 'playing it safe' with the physical education curriculum they were delivering. Max, Lara, Imogen and Geoff rarely deviated from the plans provided by the physical education specialist and all the teachers, including Jackson, stuck to teaching activities they felt comfortable with as the following statements exemplify:

Maybe I would agree or disagree with what the PE teacher was doing but who was I to deviate. (Geoff, Interview 1)

I would probably only go down the line of teaching something I felt I knew a bit about and felt confident in teaching so anything else I didn't have a clue



about I wouldn't touch, I wouldn't go near like gymnastics. (Imogen, Interview 1)

For all of the teachers, within their schools, physical education was generally seen as just another subject area in an already packed primary curriculum. Lara felt that within her school physical education was simply just another box to be ticked. The main subject areas of concern for senior management and therefore for the participant teachers, as generalist primary teachers, were maths, reading and writing. This is not surprising as these curriculum areas are subject to testing and target setting and are the primary concern of parents, as expressed by Imogen and Max:

I think maths and language was I think it still is a priority because you have other pressures like test results and things like that. (Imogen, Interview 1)

The maths and the reading and the writing for a lot of teachers and a lot of parents it's the most important thing. (Max, Interview 1)

Throughout the interviews it became apparent that shaping the physical education curriculum was very much the responsibility of the visiting physical education specialists and the class teachers. The role that senior management generally played in promoting physical education was through the employment of a physical education specialist within the school and ensuring that class teachers delivered follow-up lessons, as Geoff recounted: "you would do your follow-up that was an expectation set upon [us] by management." While physical education could not be described as a priority curriculum area within the schools of the participant teachers, there was still a commitment to providing pupils with a wide variety of both physical education and physical activity experiences.

Early in their careers the participant teachers reported a small number of physical activity clubs operating within their schools run either by themselves, other interested members of staff or parents as Imogen asserts: "I think in my time I've been here, for example staff clubs I think all we had was netball that I can remember and then parents would run football." With the implementation of the Active

Schools<sup>12</sup> programme the number of clubs operating within the schools greatly increased, as Jackson recollected:

I just feel like in the last two or three years with the new active schools coordinator that we've got the opportunity to do more, the number of clubs has just exploded. (Jackson, Interview 1)

Active Schools maintained a visible and significant presence within the participant teachers' schools. Each teacher reported that there was an Active School coordinator attached to their school responsible for organising after school clubs, liaising with community clubs and making links between school physical education and physical activity. In subsequent interviews it became apparent that Active Schools was a valuable resource. Since graduating from the PGCert the participant teachers utilised Active Schools to make connections between the physical education they teach and physical activity. While the impact of Active Schools has been open to debate (see Reid, 2009), for the participant teachers from my study it has played a key role in promoting physical activity within their schools. This is a theme addressed in more detail in chapter six.

In addition to supporting after school clubs, sport festivals and competitions were also promoted within the participant teachers' schools. All of the teachers recalled limited discussion of physical education during staff meetings and when it was mentioned it was usually in reference to a specific event, as Lara commented:

When it [PE] was spoken about in staff meetings it was basically about things like health and safety, PE kits, earrings being worn that kind of thing. It wasn't really about the curriculum or the planning or the quality or the time necessarily. I would say we spoke about PE or sport when we were leading up to a competition and that would really give it a platform and very little any other time. (Lara, Interview 1)

Due to the interest shown by the children in sport and the large number of children at the school accessing sports clubs Imogen described her school as "quite sporty". Elaborating on the "sporty" image of her school, Imogen outlined the interscholastic sport competitions the school had competed in, often winning cups and medals which

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<sup>12</sup> Active Schools is a Scottish Government funded project coordinated by sportscotland with the aim of providing opportunities for children to engage with physical activity and sport. More information about this project is provided in chapter one.

she commented pleased the parents in the school as they “like success in sport”. While Imogen was keen to promote the competitive side of sport she was also keen for the children to be involved with other less competitive sporting opportunities such as sports festivals. At these events the emphasis was on taking part rather than winning, Imogen felt these were more inclusive and a better way of encouraging children into sport. As well as sporting competitions the participant teachers also recollected having outside agencies and local authority sports development officers coming into their schools as part of physical education and physical activity programmes. Geoff recalled a variety of outside agencies coming into his school: the local football club, kickboxing and skipping which was complemented by input from sports development officers in rugby, golf and cricket. While the input from outside agencies and sports development officers was greatly valued within the participant teachers’ schools both Imogen and Geoff drew attention to the cost of such initiatives.

### **Order, Procedures and Routine within School Physical Education**

Adherence to health and safety rules and other ‘proper procedures’ common to primary schools such as pupil to child ratios and permission to take children out of school grounds are elements that greatly influence the organisational socialisation of primary teachers. ‘Proper procedures’ can’t be taught as part of ITE courses as they are entrenched within the education system. Each school and local authority has their own specific procedures to follow. Viewing this from a situated learning perspective, while learning about teaching requires a combination of learning through instruction and replicating the performances of others, teachers also learn about teaching as a result of “centripetal participation in the learning curriculum of the ambient community” (Lave and Wenger, 1991, p. 100). Tracing the organisational socialisation of teachers and viewing their socialisation from a situated learning perspective exemplifies that it is ‘on the job’ that teachers learn many of the intricacies associated with teaching. Interviews and field notes from my study exemplify how health and safety and other regulations impacted upon the teaching of physical education by the participant teachers.

Geoff summarised the impact of health and safety considerations on his teaching of physical education:

Do we need to recap on the safety rules every time...sometimes people would say well it's a bit like home insurance don't really need it do you cause what's going to happen to your house but the day you don't have it is the day something happens. And then when there's a little inquest into it; 'Did you go over safety rules?' 'Oh no we did that on week one.' 'But this is week four should you not have revisited?' So it's the sort of thing, catch twenty two. (Geoff, Interview 1)

While he recognised the need to address safety rules in physical education Geoff queried the amount of time this took within lessons. The physical nature of the subject requires health and safety considerations to be adhered to. However, I assert that rather than protecting children and teachers, as these regulations are intended to do, they have actually resulted in limiting opportunities in physical education for children.

Many primary teachers are fearful of accidents happening in the gym hall and therefore may avoid teaching certain activities, as Imogen states:

Most of the time they're [the children] ok but you always have that worry they're going to get hurt and should that stop you doing it? No, you've got to let them experience that and learn that they might bump, so they've got to watch. (Imogen, Interview 1)

One of the activities within the physical education curriculum that the participant teachers were particularly anxious about teaching and admitted to previously avoiding teaching was gymnastics. This was an activity that posed greatest perceived risk of children injuring themselves and therefore required the teachers to adhere to specific procedures. Morgan and Bourke (2008) report similar findings in relation to factors causing non-specialist teachers to lack confidence in teaching physical education. They found that 75% of respondents were "anxious teaching certain PE activities" and that their least preferred activity to teach because of safety concerns was gymnastics (Morgan and Bourke, 2008, p. 20).

## *Unwritten Rules*

As well as there being established rules and procedures within their schools that the participant teachers had to adhere to, there were also unwritten procedures and rules that contributed to the maintenance of order. I would argue that these unwritten procedures and rules contributed to promoting tradition within the physical education curriculum. For example, Lara, Max, Imogen and Jackson all discussed the substantial role interscholastics athletics competitions played guiding the physical education curriculum during the summer term. All of the teachers also talked about the significant presence of Club Golf<sup>13</sup> within their schools. Scottish country dance was again another activity that could be described as a stalwart of the physical education curriculum. Tradition prevails within Scottish primary schools that in preparation for school Christmas parties Scottish country dance is incorporated into the physical education curriculum. As part of her own physical education experience Lara recalled whole year group Scottish country dancing in the gym hall at Christmas, a tradition perpetuated into her teaching practice: “we did our tokenistic social dance because we had to for the Christmas dance.”

Analysis of interview data revealed how routine and order became ingrained within, and guided, the physical education curriculum. The following reflection by Max exemplifies this:

I think this is all very interesting because in light of the sharing good practice [peer observation] that I've done recently with the staff here and in the fact that a lot of the staff here still worked with Antonia years ago and that my PE time now even though I've been teaching games for understanding and things for the past couple of years here my time's used as non-contact time. There's still that [referring to skills and drills approach to teaching PE] going on in that gym hall several times a week. I had a debate with a teacher last week about...skills and drills and actually putting kids into small sided games and not sitting them on benches and things. (Max, Interview 1)

This quotation demonstrates that once established routine and order are difficult to change. In the past the teachers in Max's school observed the previous physical education specialist teaching and then replicated her approach in their lessons so it

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<sup>13</sup>Launched in 2003 Club Golf is an initiative with the aim of increasing interest and participation in golf. The first step on the proposed developmental pathway is to introduce golf to children in primary schools.

became the accepted way of teaching physical education within the school. Since graduating from the PGCert and taking on the role of physical education teacher Max has adopted a different approach to teaching physical education. He has attempted to share the knowledge and understanding of physical education he has developed with his colleagues through in-service sessions. However, from Max's perspective, because the teachers don't watch him teaching physical education the old skills and drills format is retained as routine practice for most of the teachers in his school. Routine and order such as: timetabling the use of the gym hall; having set days for the physical education specialist to be in school and expecting teachers to complete follow-up physical education lessons contributes to ensuring the smooth running of the physical education curriculum. However, this routine and order can also hamper attempts to instigate and sustain change and innovation in physical education (Curtner-Smith, 1999; Macdonald, 2003).

### *Control*

From the teachers' descriptions of their teaching of physical education prior to participating on the PGCert it is clear that generally they were attempting to follow the routines and procedures that had been established within their school contexts. What also emerged from these descriptions was that the teachers felt that for their teaching to impact on the children, particularly in the alien environment of the gym hall, they had to be in control of the lesson and of the children as Imogen emphasised:

Whatever I was planning to do I always had to have control of it all 'cause I didn't want to lose control. I like to be a person who's on top of the children, I like the children to be free and expressive but I always want to know that I can pull them back. So I would say something that I was safe with and had control 'cause the gym hall is always a bit more dangerous than a class because people are moving and you always want to make sure that nobody is going to get hurt. (Imogen, Interview 1)

This quotation from Imogen reflects the themes of control, responsibility and concern Nias (1989) identifies as pertinent to primary teachers' professional identities. Nias (1989) posits that central to teaching is the relationship between children and the teacher, in this relationship "control makes possible the exercise of

responsibility and the expression of concern; together, these states enable you to ‘be yourself’ in the classroom and therefore to ‘feel like a teacher’” (p. 191).

The control exerted by the participant teachers in this study was born from feelings of responsibility and concern for the education of the children they were teaching. The following statement from Max affirms his confidence in the physical education curriculum because he could see, and experienced, the impact of the control the specialist maintained in lessons:

Confident because she was such an enthusiastic, committed teacher and the classes were taught with such rigour. It didn’t matter if she was in the gym or you were, the kids kind of had this level of expectation of how to behave and that carried through even when she wasn’t there. And so it was a very comfortable thing to go and teach. (Max, Interview 1)

The participant teachers discussed feeling comfortable and in control when they were organised and well-planned. This enabled them to approach teaching physical education with a sense of confidence, as Lara states:

It [teaching style] was very didactic, it was very much about control, it was I suppose much more behaviourist in its approach. I was a bit Sergeant Major... And it was all about exactly the way I wanted it done with all the children doing the same activities at the same time. (Lara, Interview 1)

For Lara, Max, Imogen and Geoff teaching whole class lessons and adopting a didactic style of teaching ensured the maintenance of control within the setting of the gym hall.

### *“Pressure to Perform”*

In his discussion of teacher vulnerability Kelchtermans (1996) advocates that early in their careers teachers experience a “pressure to perform”, which is compounded later in their careers by the “high visibility of their professional activities” (p. 312). In relation to the participant teachers in this study I would suggest that they felt a “pressure to perform” teaching physical education. Their main concern being to follow procedures and rules inherent to their school and ensure that they maintained control in physical education lessons. This was often achieved as Lawson (1983a) intimates at the expense of meeting the individual learning needs of their pupils.

While all of the participant teachers described a variety of forms of assessment employed in physical education lessons, differentiation was an area they admitted they gave little consideration to in the past. Max stated that he just didn't think about modifying games and equipment to differentiate in physical education. Indeed he shared his disbelief that he didn't apply his classroom approach to differentiation in the gym hall. Geoff admitted in "honesty" that he didn't differentiate in physical education while Jackson indicated that he lacked knowledge to differentiate and felt there was an "element of harassment" preventing him from doing so. Similarly Imogen expressed a lack of knowledge of how to differentiate; consequently all her pupils did the same thing in physical education lessons.

In contrast Lara recalled attempting some differentiation in physical education:

I'd get the really good ones to demonstrate. I would spend more time with the ones that were struggling. The wee kids that still can't catch a ball in primary seven, I've always wished for more opportunity for them to do something outwith core PE time but that would be basically it. I mean, there was no real planning around it although I might, I'm thinking back to behaviourally, I would offer children who couldn't cope with competitive situations or basically the hall and that sort of emotional side of PE there would often be strategies in place of them having an opportunity to have time out or to work with me so there was thought that went into individuals like that. That's probably more on the social/emotional side than the physical which doesn't make much sense but... (Lara, Interview 1)

I would argue that these accounts demonstrate that generally in the past the teachers' most important concern was their teaching of physical education rather than the children's learning. In this respect the individual learning needs of the children were often not taken into consideration, this is something that has completely changed in the participant teachers' practice since completing the PGCert and is discussed in detail in chapter six.

The impact that organisational socialisation has had on the participant teachers is exemplified by the largely traditional approach they took to both the physical education curriculum and their pedagogy early in their careers. The interviews reveal an underlying pressure on the teachers to conform to standards of teaching and specific procedures for teaching physical education within their school contexts. The teachers were often so preoccupied with meeting procedures and standards that these



were attended to at the expense of meeting the individual learning needs of the children they were teaching.

## **Conclusion**

Reflecting on theories of teacher socialisation Key (2006a) identifies that essentially “teachers define their roles through prior experience, in relation to the context in which they teach and through interaction with relevant others” (p. 373). Tracing the socialisation of the teachers in my study I have identified the experiences and interactions that have, over time, influenced their understanding and teaching of physical education. Drawing on Lawson’s (1983a & b) model of teacher socialisation enabled me to account for the interplay between these experiences and interactions within the lived-in world (Lave and Wenger, 1991) of the teachers. The childhood experiences of physical education and physical activity which were very much sport orientated influenced the teachers’ perceptions of physical education. These perceptions were confirmed by their early experiences of learning to teach physical education through their ITE, working with primary physical education specialist teachers and CPD. Taken together the acculturation and professional socialisation of the participant teachers resulted in embedding a multi-activity block, sport orientated approach to teaching and learning in physical education. Within their school contexts order, procedures and routine prevailed that further embedded this conception of physical education.

However, within this process of socialisation the teachers were not simply passive participants. In line with research on the concept of teacher agency (Lasky, 2005; Day *et al.*, 2006), analysing the socialisation of the participant teachers revealed how they have shaped and been shaped by the “structural and cultural features of society and school cultures” (Lasky, 2005, p. 900). While the teachers may have been constrained within their school contexts in their approach to teaching physical education they still sought out opportunities to enhance their practice particularly through learning from the physical education specialist and CPD. Day *et al.* (2006) stress that “agency is still exercised, for example, if teachers continue to teach within the constraints of any given school environment or set of policies or initiatives, or if they find ‘room to manoeuvre’” (p.610). I would argue that it is the agency

demonstrated by the participant teachers, their ability to pursue the goals that they valued (Day *et al.*, 2006) throughout their socialisation that contributed to their willingness to learn and ultimately attracted them to the PGCert. In the ensuing analysis chapters I will explore how the participant teachers realigned their professional socialisation through their engagement with the PGCert. I will then illustrate how following this professional development the teachers returned to their school contexts imbued with an increased sense of agency to revamp teaching and learning in physical education. They attempted to readdress the balance whereby rather than mediating the established procedures and rules within their school contexts the participant teachers attempted to generate new rules and procedures that challenged the embedded traditional conception of physical education. Like an archaeologist sifting through layers at a dig to make meaning, by reflecting on the background of the teachers I have unearthed the various influences that have, over time, shaped their identity and sense of agency (Lasky, 2005).

## **Chapter 5 – Professional Development and Professional Learning**

### **Introduction**

In the previous chapter I traced the physical education socialisation of the participant teachers. In doing so, it was possible to establish how the past physical education experiences of the teachers impacted on their approach to teaching physical education early in their careers. Each phase of socialisation embedded an outcome driven approach to physical education delivered through direct teaching of pre-determined content (Thorburn *et al.*, 2009). However, all the participant teachers were eager to increase their knowledge and understanding of physical education, exemplified in their engagement in CPD and their collaboration with physical education specialist teachers. In line with Keay (2006a), I would suggest that through CPD there is potential to influence and change teachers' perceptions of physical education:

Professional development can redefine roles but more quality development opportunities, which can be readily accessible to teachers, are needed. This may require a revision of venues, timings for external course opportunities in order to facilitate rather than militate against participation. (p. 381)

This chapter will reveal that engaging with a revised approach to professional development, the PGCert, challenged the prevalent one-off, content driven workshops traditional to CPD, leading the participant teachers in my study to re-evaluate their conceptions of physical education and their teaching practice.

The purpose of this chapter is to identify how engaging with the PGCert acted as a catalyst resulting in the participant teachers instigating pedagogical and curricular change within their own practice and within their school contexts. It will be suggested that through their involvement with the PGCert the professional socialisation of the participant teachers branched off in an alternative direction. They developed new knowledge about the purpose of physical education along with alternative approaches to teaching physical education that challenged the traditional multi-activity block, sport orientated curriculum (Thorburn *et al.*, 2009). As will be discussed in detail within this chapter the format and structure of the PGCert

supported the participant teachers to link theory and practice and therefore engage with physical education on a deeper level. Beyond improving their own practice the teachers attempted to raise the status of physical education by sharing their new knowledge within their school contexts.

Within this chapter the aims and structure of the PGCert are outlined to ascertain how they contributed to the effectiveness of this professional development opportunity. I open the chapter by describing the vision underpinning the PGCert and how this influenced the participant teachers' engagement with this innovative approach to professional development. Having established the rationale for the PGCert, the chapter then moves on to explain how and why the participant teachers became involved with the PGCert. Background factors within the teachers' professional identities are revealed that contributed to their commitment to the PGCert and motivation to initiate curricular and pedagogical change within their school contexts. The latter part of this chapter utilises the triple lens framework posited by Fraser *et al.* (2007) to explore the structure of the PGCert and how it impacted on the participant teachers' learning and development.

## **Professional Development: The PGCert in 3-14 Physical Education**

### **Origins of the PGCert**

The PGCert emerged from the work of the Developmental Physical Education Group (DPEG) at the University of Edinburgh. Between 2001 and 2007 the DPEG were involved in the development, dissemination and evaluation of *Basic Moves* within Scotland and also into pockets of England. In disseminating *Basic Moves* two approaches to professional development were employed: initially a 'top-down', one-off, off-site approach and then latterly a more collaborative school based approach, developing a network of *Basic Moves* tutors trained to deliver the programme within their local contexts (Jess, 2011). The experiences of developing and delivering *Basic Moves* highlighted to the DPEG the need for professional development to be "more situated, collaborative and, critically differentiated to meet the needs of various professionals" (Thorburn *et al.* 2009, p. 220). By 2006 the DPEG had begun to

extend their interest in primary physical education beyond *Basic Moves* into the three to fourteen age range. This coincided with the Physical Education Review Group report (Scottish Executive, 2004) to which the Scottish Government responded by approaching the DPEG at the University of Edinburgh, asking them to work in partnership with personnel at the University of Glasgow to develop and deliver a new postgraduate qualification in primary physical education (Jess, 2011). As outlined in chapter one each university developed their own version of the postgraduate qualification and over time the partnership between the universities evolved into a research project, the SPPEP.

The DPEG developed the PGCert after reflecting upon the experiences of delivering *Basic Moves* professional development. The theoretical framework guiding this initiative stemmed from a variety of perspectives; ecological systems (see Newell, 1986), dynamical systems (see Thelen and Smith, 1994), social constructivism (see Vygotsky, 1978), situated learning (see Lave and Wenger, 1991), brought together under the umbrella of complexity theory (see Davis and Sumara, 2008). Through complexity theory, “notions of self-organisation, emergence, collaboration and authentic learning” (Jess, Carse, McMillan and Atencio, 2011, p. 43) were incorporated into the DPEG’s conception of the primary physical education curriculum and associated pedagogy as well as into the format of the PGCert.

Promoting collaboration, a conscious effort was made through the PGCert to involve teachers in their professional learning rather than treat them as passive participants of professional development. Concurrently, in line with notions of self-organisation, emergence and authentic learning a central element of the PGCert was to encourage teachers to adapt the content provided, over an extended period of time within their school contexts. The following quotation from Max illustrates the alternative approach to professional development pursued by the PGCert:

It's completely open to interpretation, the whole DPEG course is...I really, really enjoyed it because it was a bit shocking and...chaos theory and it's like well we're purposefully not going to tell you how to do this stuff we're just going to tell you kind of why you should be doing it and the pedagogy should be like this and shouldn't be so direct. (Max, Interview 3)

Rather than prescribing specific knowledge and skills to be learned, the PGCert content was open to discussion and individual interpretation by teachers within their school contexts. The vision underpinning the PGCert was to promote a shift in emphasis from linear behaviourist conceptions of knowledge and learning to a more complex view, exploring the non-linear and unpredictable nature of learning (Jess *et al.*, 2011).

### **Content and Structure of the PGCert**

The PGCert was divided into three modules; the first module connected contemporary theory in physical education with practice. The teachers were encouraged to reflect on their own beliefs and practice in relation to physical education and engage with current physical education literature. The following extract from an interview with Jackson emphasises the value he placed on the opportunity to engage with and discuss theory and practice in relation to physical education:

I really enjoyed starting out and having the rigorous discussions that we did. Talking about what was your experience of PE looking back to our pasts, understanding where PE is at in Scotland, the need for making a change, what's happening in terms of change and actioning change. What I can actually be doing and being a part of this revolution. I thought it was really, really, really exciting and [I] wanted to be a part of it and thought I have skills I can contribute to this. (Jackson, Interview 1)

The first module stressed the need for physical education to be developmentally appropriate, inclusive, connected and lifewide (see Appendix F for a more detailed outline of the PGCert). The developmental approach to physical education links with the work of Gallahue and Donnelly (2003) which focuses on: “learning to move and learning through movement in a manner that is both individually appropriate and age appropriate” (p. 2).

The following two modules introduced the teachers to developmental physical education through a mix of both practical sessions and theory. Through these modules emphasis was placed on the connected nature of learning in physical education by advocating the concept of core learning and highlighting the links between psychomotor, cognitive, social and emotional learning in physical

education. The second module focused specifically on early years physical education (ages three to eight years) introducing *Early Moves* and *Basic Moves* as curricular and pedagogical models. Subsequently the third module examined the upper primary, early secondary years (ages eight to fourteen). Addressing the concept of authentic learning, developmental and authentic applications were presented locating physical education learning within the lived-in worlds (Lave and Wenger, 1991) of the children. Specific reference was made to physical education curriculum and instructional models, such as *Sport Education* (see Siedentop, 1994) and *Teaching Games for Understanding (TGfU)* (see Bunker and Thorpe, 1982; Kirk and MacPhail, 2002; Griffin and Butler, 2005), which involve children more directly in their learning.

Taking account of research into professional learning in physical education (Armour and Duncombe, 2004; O'Sullivan and Deglau, 2006; Armour and Yelling, 2007) the PGCert was, as previously intimated, structured to incorporate a more participative approach to professional learning. This participative approach was achieved by facilitating a mix of regular short seminars interspersed with more intense whole day sessions. Structuring the PGCert in this way enabled teachers to attend professional development sessions at the university and then continue their professional learning within their school contexts where they attempted to apply their new knowledge, as Lara reflected:

I learn a lot from other people. So hearing the other people on the course, hearing the lecturers, that sort of sharing and the penny dropping. And then going back and teaching and reflecting that sort of 'tooing' and 'froing' if you like between the class and the university and the theory. (Lara, Interview 1)

Additionally the assessment tasks that are a prerequisite of the course were designed in such a way that teachers were compelled to investigate primary physical education within their own school contexts. Rather than treating the participant teachers as 'empty vessels' to be filled with physical education knowledge they were recognised as self-organising individuals (Jess, 2011). In this respect the course content challenged the teachers to confront their beliefs regarding physical education and question their practice:

The course is designed in the way it is to initiate thought, well to provoke thought and to promote flexibility and adaptability as well with the whole sort of looking at the environment, ecological perspective which permeated the whole course so when you came out you were aware that you hadn't been handed a quick fix, you were aware that you had to still do the leg work but what they'd given you was a platform and an understanding to work from. (Lara, Interview 3)

This quotation from Lara illustrates how the structure and content of the course supported her to revise her conception of physical education and motivated her to apply what she had learned within her school context.

### **Teacher Ownership of Learning**

While feedback for the PGCert has been generally positive, criticism has been levied towards the course regarding the amount of time allocated to the practical element. This was recognised by the participant teachers in my study, where Geoff stated throughout the interviews that he felt there could have been more practical content on the course. Additionally, Max made an interesting observation that while he was content with the practical input from the course, he recognised that other teachers on the course may have found it lacking. However, he pointed out that he felt that to top up his practical content knowledge it was his responsibility to seek out further CPD opportunities. This observation made by Max echoed one of the main premises of the course which was to encourage the participant teachers to take responsibility for their own professional learning.

Although at times the complexity orientated approach to teaching and learning advocated through the PGCert proved to be uncomfortable for the participant teachers, ultimately they gained greater ownership of their learning as the following quotation from Imogen exemplifies:

I think the two [courses] that I got most from were definitely the second module and the third module 'cause it was more about what you were going to use to develop your PE teaching. Initially with the *Basic Moves* I was a bit lost as to what I was meant to be doing...you'd have your travelling, your object control I understood those bits but it was when you had to use it through paths, that was a bit puzzling, it was almost like a formula you were having to put together... I think more when you take it back and do it yourself you start to learn 'cause I'm more of a learn by do rather than a learn by read. (Imogen, Interview 1)



Rather than simply providing teachers with lesson plans or resource cards, as has often been the approach adopted in primary physical education professional development (Petrie, 2009; Keay and Spence, 2011; Harris *et al.*, 2011), the PGCert challenged the teachers. I would argue that the participant teachers in my study were challenged by the PGCert in the sense that through the tasks, group discussions and assignments the course generated as many questions as answers. Within their school contexts the participant teachers had to use their initiative to problem solve developing physical education programmes specific to their contexts and that met the learning needs of the children they were working with.

### **The Teachers' Involvement with the PGCert**

#### **Teacher Professional Identity**

In line with much of the literature on professional learning in physical education my study recognised that it is important to establish the impact and effectiveness of professional development (Ha *et al.*, 2004; Petrie, 2010). However, lacking from the effectiveness and impact research into physical education professional learning is exploration of the relationship between professional development and teacher change (Wang and Ha, 2008). Crucial to understanding this connection is building up a picture of the professional identity and agency of teachers as this contributes to explaining the predisposition of some teachers to change following professional development (Lasky, 2005; Day *et al.*, 2007). Much of the literature on teacher professional identity highlights that it is dynamic; developing over time and that it is determined by events and experiences occurring within teachers' professional and personal lives (Kelchtermans, 1996; Day, 1999; Day *et al.*, 2007; Hoekstra and Korhtagen, 2011). Expanding on the discussion of teacher socialisation instigated in chapter four the professional identity of each teacher is analysed in more depth. I draw on findings related to teacher professional identity from the VITAE<sup>14</sup> project (Variations in Teachers' Work, Lives and their Effects on Pupils) a large scale, extensive study of teachers' work and lives commissioned by the Department for

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<sup>14</sup> The main researchers involved with VITAE were Christopher Day, Pam Sammons, Gordon Stobart, Alison Kington and Qing Gu. Following the project a number of papers were published with different lead authors along with a book, *Teachers Matter*, which draws on the published papers.

Education and Skills (DfES) in England (Day *et al.*, 2007). This line of analysis reveals how the background of each teacher in my study facilitated their engagement with the PGCert while also contributing to understanding teacher agency: the ability of the participant teachers to enact and effect curricular and pedagogical change within their school contexts (Lasky, 2005).

Sammons *et al.* (2007) posit that “teachers’ identities seem to be closely bound with their professional and personal values, aspirations and changes in their sense of effectiveness” (p. 687). Three dimensions of teacher identity are identified: professional, situated and personal, influenced by a number of factors. Sammons *et al.* (2007) suggest that the balance between each of these dimensions impacts on teacher agency, perceived effectiveness and resilience. Professional identity is influenced by policy factors and wider social trends, the situated identity of teachers is influenced by the school context and personal identity refers to teacher’s lives outside of school (Sammons *et al.*, 2007). In relation to my study and the participant teachers’ involvement with the PGCert I would argue that these identity dimensions were in balance which contributed to the teachers’ motivation and commitment. At a professional level support came in the form of the introduction of two hours of physical education as part of *Curriculum for Excellence* combined with Scottish Government funding for the PGCert. Within their schools, at a situated level, the main factor which supported the teachers to pursue the PGCert was gaining support from their head teacher. Congruently on a personal level the participant teachers were in a relatively stable period within their personal lives that supported them to take on the two year commitment the PGCert required. Taken together with the analysis of socialisation undertaken in the previous chapter the work of Sammons *et al.* (2007) exploring teacher identity reveals teachers’ work as complex and influenced by a range of factors over time.

### **Professional Life Phases**

Day *et al.* (2007) identify “key influences on teachers’ work in different professional life phases and the differential impact of these on teachers’ commitment and perceived effectiveness” (p. 66). Drawing on these findings it is possible to explain the disposition towards change and learning evident amongst the participant teachers

in my study. Extending the work of Huberman (1993), Day *et al.* (2007) suggest that there are six professional life phases experienced by teachers which correspond with number of years teaching (see table 5.1).

**Table 5.1 The Professional Life Phases of Teachers**

(adapted from Day *et al.*, 2007, p. 69)

Professional Life Phases	Characteristics
0 - 3 years	Commitment: Support and Challenge
4 - 7 years	Identity and Efficacy in Classroom
8 - 15 years	Managing Changes in Role and Identity: Growing Tensions and Transitions
16 - 23 years	Work–Life Tensions: Challenges to Motivation and Commitment
24 – 30 years	Challenges to Sustaining Motivation
31 +	Sustaining/Declining Motivation, Ability to Cope with Change, Looking to Retire

For Day *et al.*(2007) viewing the career development of teachers using these professional life phases reveals important influences in teachers’ professional and personal lives that subsequently impact on their commitment, motivation, effectiveness and sense of identity:

The interaction between a range of influencing factors in their [teachers’] work and personal contexts is a sophisticated and continuous process, and impacts differentially on teachers’ perceived effectiveness both within and across different phases of their professional lives.

(Day *et al.*, 2007, p.100)

It is suggested by Day *et al.* (2007) that greater account needs to be taken of the professional life phases of teachers, particularly in relation to how they impact on teachers’ receptivity to change, their commitment to teaching and their attitude towards professional learning. Concurring with this supposition, reviewing the professional life phases of the participant teachers in my study enabled me to identify background factors in their professional and personal lives that impacted on their

receptivity to the PGCert and to initiating curricular and pedagogical change in physical education.

Day *et al.* (2007) stress that the professional life phases they define are not static. The participant teachers in my study had been teaching for roughly the same length of time, between nine and fifteen years placing them in the 8-15 professional life phase. Despite some of the teachers being in the later end of the 4-7 professional life phase when they began the PGCert; reflecting the fluid nature of the professional life phases I would suggest that all the teachers' displayed characteristics congruent with the 8-15 phase. Day *et al.* (2007) suggest that the 8-15 professional life phase is a "key watershed". During this phase, to a greater extent than previously, teachers may have to cope with and manage change within both their professional and personal lives. Additionally during this professional life phase teachers may find that they are taking on increased responsibilities. Two sub groups are identified within this professional life phase; sustained engagement and detachment/loss of motivation. Those teachers experiencing a sense of sustained engagement are likely to seek opportunities for promotion and/or opportunities to enhance their practice. In contrast loss of motivation can result in teachers becoming so disillusioned with the profession that they leave to pursue an alternative career. The characteristics of the 8-15 professional life phase as outlined by Day *et al.* (2007) place teachers at a crossroads in their careers. In line with this premise, I would suggest that the teachers in my study had reached a transition in their careers which involved them actively seeking out opportunities to change their teaching role.

While my study recognises the uniqueness of each participant teacher in terms of their identity and experience, when analysing the teachers' reasoning for becoming involved with the PGCert common patterns emerged. Lara, Max and Jackson all spoke of feeling like they were at a crossroads in their teaching careers:

I was at the point within my career, where I wanted to look for more of a focus to have more of an interest and to just spark me a bit more. (Lara, Interview 1)

So after that summer break I was coming back as the PE teacher. So, yeah, it was just really a change, I was looking for a change, really liked the idea of specialising in something. (Jackson, Interview 1)

I'd been thinking that I was getting a bit jaded with class teaching...and I was kind of just thinking about different ways my career could go, 'cause I was kind of thinking that class teaching wouldn't be me until I was sixty. (Max, Interview 1)

Similarly while Geoff and Imogen didn't directly speak about being at a crossroads in their careers the two secondments Geoff was involved with, one prior to and one while completing the course, would suggest that he too was looking for a change. Additionally Imogen intimated that her reasoning for doing the course was partly to "move herself forward". The active attempts made by the participant teachers to seek out change in their careers corresponds with the suggestion by Day *et al.* (2007) that during the 8-15 professional life phase teachers can experience a "transitional" period in their professional lives. During this "transitional" period in the professional lives of the participant teachers in my study a pattern emerged: they chose to commit to two years of part-time study through the PGCert. As will be further discussed, in the remainder of this chapter and in chapter six, the participant teachers were so affected by this professional development opportunity that in addition to altering their teaching practice, they adopted additional responsibilities beyond those of class teacher.

### **Effectiveness and Influence of the PGCert**

For the participant teachers in this study the PGCert immersed them into a continuous process of professional learning and reculturation (Fink and Stoll, 2005), as the following quotations from Jackson and Lara illustrate:

I really do appreciate what we were exposed to in the 3-14 but I feel in a sense it almost just whetted my appetite and I feel I really need to get more of this. (Jackson, Interview 3)

Researcher: You didn't do the course and then you're learning stopped?

Lara: No, no quite the opposite, the greater proportion of the learning went with experience during and thereafter.

(Lara, Interview 3)

As will be outlined in the remainder of this chapter, through the PGCert the participant teachers experienced increased feelings of confidence in their knowledge and understanding of physical education. This feeling of confidence motivated the

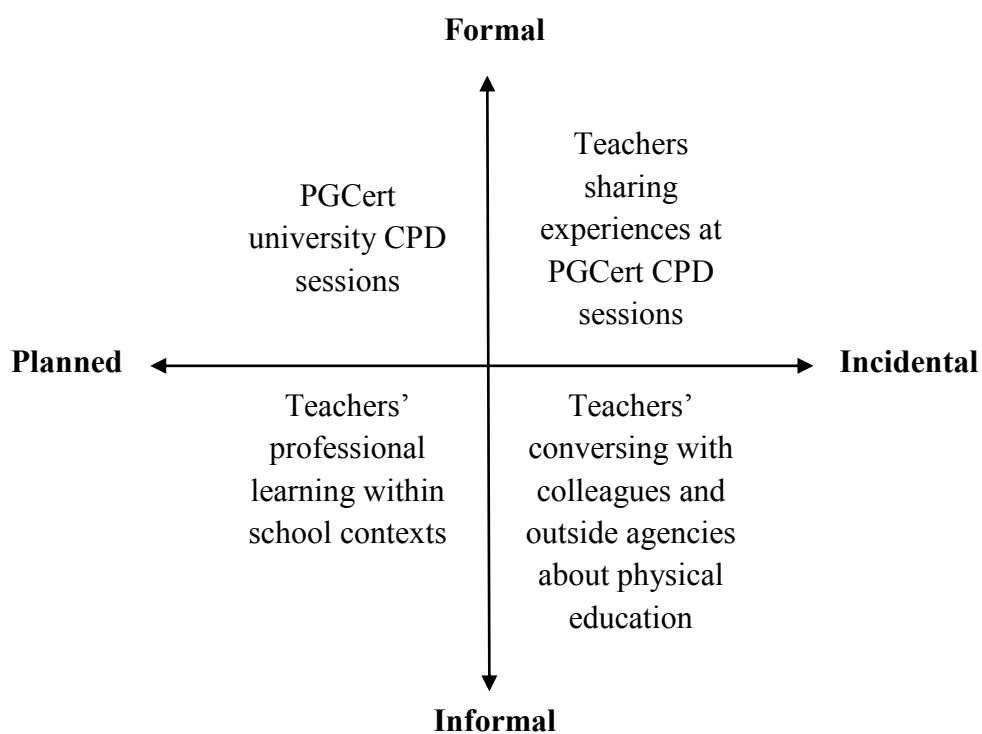
teachers to experiment within their school contexts with their improved subject knowledge and led them to ‘self-initiate’ curricular and pedagogical change. Applying the triple lens framework developed by Fraser *et al.* (2007) to evaluate the PGCert, I will attempt to capture the continuous process of professional learning and reculturation experienced by the participant teachers. As defined in the literature review, the triple lens framework combines Reid’s quadrants of teacher learning, Bell and Gilbert’s aspects of professional learning and Kennedy’s framework for analysing CPD. Each of these lenses is employed to analyse the “sphere of action” in which professional learning takes place, the “domain of influence of the professional learning” and the “capacity for professional autonomy and transformative practice through professional learning” (Fraser *et al.*, 2007, p. 162). The triple lens framework enables the structure of the professional development opportunity, the PGCert, to be explored along with the impact it had on each teacher and their school contexts.

### **Sphere of Action in which Professional Learning Takes Place**

Reid’s quadrants of teacher learning indicate where and how professional learning takes place: formal or informal and planned or incidental, see figure 5.1 (Fraser *et al.*, 2007).

Formal opportunities are those explicitly established by an agent other than the teacher (e.g. taught courses), whereas informal opportunities are sought and established by the teacher (e.g. networking). On the other axis, planned opportunities may be formal or informal, but are characteristically pre-arranged (e.g. collaborative planning), whereas incidental opportunities are spontaneous and unpredictable (e.g. teacher exchanges over coffee).

(Fraser *et al.*, 2007, p. 160)



**Figure 5.1 The PGCert analysed using Reid's quadrants of teacher learning**

When the PGCert is analysed using Reid's quadrants of teacher learning it is clear that as the course was accredited and organised by the University of Edinburgh it can be classified as formal and planned. However, the PGCert also supported formal and incidental professional development exemplified by the teachers sharing their experiences with each other during the university CPD sessions. Unlike the traditional one-off or short-term hints and tips for teachers approach to CPD that has largely been adopted within Scottish education since the McCrone agreement (Kennedy *et al.*, 2008), the PGCert was a government funded long-term professional development opportunity. The long-term nature of the PGCert combined with the way in which it brought teachers together from across the East of Scotland provided a unique opportunity for teachers to mix and converse. As Geoff recalled the organised CPD sessions provided an opportunity for participants to meet up and network with each other on a more casual basis:

And by the time you have sort of driven there, you know, you've had a whole day of work...you are shattered. I have actually said to a few folk that we

hung about together, that possibly if it hadn't been for them, you know, all the meetings and that, I don't know if I would have maybe managed to attend them all. So it was a social kind of thing as well. (Geoff, Interview 3)

I would suggest that it was through this mix of formal, planned and formal, incidental professional development that the participant teachers were able to build relationships with other teachers and the course tutors. As will be discussed later in this chapter, the forming of these relationships contributed to the emergence of an embryonic PGCert community of practice.

Informal, planned and incidental professional learning was also promoted by the PGCert. The course was designed in such a way that it was split into three modules with a break in between each providing the teachers with an opportunity to reflect on and experiment with what they had learned. Additionally while they were completing each module the university sessions were spread out so that again there was an inbuilt opportunity to put into practice what they were learning. The earlier quotation from Imogen illustrates this, where she describes "learning by doing", applying her new found physical education knowledge within her school context. The PGCert encouraged the participant teachers to continue their professional learning within their school contexts putting what they had learned on the course into practice and making connections with personnel involved with the delivery of physical education. I would argue that as the teachers applied their new physical education knowledge within their practice they engaged in planned and informal professional learning. Concurrently conversing with colleagues and outside agency personnel such as Active Schools coordinators involved the participant teachers in informal and incidental professional learning.

Delivering professional development in a planned and formal way the PGCert challenged the participant teachers intellectually, engaging them in discussion of policy and academic literature in relation to physical education. Concomitantly the participant teachers were supported to confront and critique their beliefs regarding physical education which Bechtel and O'Sullivan, (2006) suggest is integral to the effectiveness of professional development. Further contributing to the effectiveness of the PGCert for the participant teachers in my study the formal professional development they experienced was complemented with more informal professional



learning. In line with the findings of Deglau and O’Sullivan (2006) the PGCert encouraged the participant teachers to take ownership of their learning as they were free to choose how they incorporated what they had learned into their practice. The following vignette from a planning conversation with Jackson exemplifies how he exercised this agency within his school context:

### **Jackson Vignette, Planning Conversation 2**

I wrote on all of the evaluations that I felt to run *Sport Ed.* with four classes was biting off a bit more than I could chew especially the first time I was doing it...I know I’d read in Siedentop’s book that there is a lot of paperwork and you’ve got to be prepared for that. I guess I kind of glazed over that and thought oh I can manage and a bit of a gung ho approach...So in hindsight it probably should have just really been the primary sevens that I pioneered it with and then I feel I probably could have done it really well. I think I did well but I don’t know if I did it really well because I would have liked to invest in the folders and I felt that, that wasn’t really picked up by the teachers. I think I had so much going on in the background I didn’t really take that time to sit down with the teachers and try and get them on board. I did share with them what it was all about but they’ve got so much on their plates too that it was really kind of a case that I was competing against the rest of the curriculum...I really, really enjoyed it. I found it tiring and I think obviously running the four leagues and four classes that’s probably why I found it tiring and just staying on top of the fixtures and keeping everybody right and working with the duty teams and points and just managing it all. It’s enormous, absolutely enormous and I think I probably could have delegated. I know it [Siedentop] talks about having a team of pupils; I kind of wanted to keep the reins myself and give them a little responsibility throughout the season. In terms of the management side of things I think I could have had that little team working alongside me and kind of devolving responsibility in a sense.

This vignette demonstrates how Jackson undertook informal professional learning, driven by him and embedded within his teaching practice.

I would suggest that the professional development opportunity offered by the PGCert acted as a catalyst for the professional learning of the participant teachers leading to “professional growth” (Clarke and Hollingsworth, 2002, p. 947). Similar to the vignette from Jackson the planning conversations and interviews with all of the teachers revealed their professional growth after completing the PGCert; how they became immersed in a continuous process of learning, enactment and reflection (Clarke and Hollingsworth, 2002; Fraser *et al.*, 2007). The following extract from an

interview with Imogen illustrates how, like Jackson, she too was immersed in a process of learning and reflection as she attempted to instigate change in her practice:

Researcher: With the 3-14 although there's the course and you kind of work more at your own pace?

Imogen: I would say yes I think because I'm doing it on my own, at the school I can do what I like. I push myself as far as I want...I think the learning still goes on...I'm learning at my own pace. Nobody's checking up on me really which maybe is not good but then again I'm pushing myself, I know, I mean you're trusted to move forward yourself.

(Imogen, Interview 3)

As the quotation from Imogen demonstrates, the participant teachers were provided with time and space to 'self-organise' and chose if and how they enacted the physical education knowledge and understanding they had gained from the PGCert. The structure and format of the PGCert sustained both formal professional development and more informal professional learning. I would argue that taken together the CPD experienced by the participant teachers and the professional learning they initiated enabled the participant teachers to exercise autonomy to initiate change within their school contexts.

## **Domain of Influence of Professional Learning**

### *Personal*

As well as establishing the how and where of professional development and professional learning, consideration must also be given to how changes can be brought about in "intellectual and motivational aspects as well as functional development" (Fraser *et al.*, 2007, p 159). To ascertain the effectiveness and influence of the course on the participant teachers the PGCert can be analysed through a further two lenses from the triple lens framework, Bell and Gilbert's three aspects of professional learning and Kennedy's framework for analysing CPD. Fraser *et al.* (2007) suggest that Bell and Gilbert's aspects of professional learning emphasise how professional learning comprises three interrelated aspects: personal, social and occupational. Citing Bell and Gilbert (1996), Fraser *et al.* (2007) advocate that "the impetus for change originates within the personal aspect of professional

learning” (p. 158). The personal aspect of professional learning encompasses teacher beliefs, values and attitudes along with interest and motivation. Within the professional development literature it is noted how the extent to which these elements are addressed can determine the impact and effectiveness of professional learning (see Day, 1985; Guskey, 2002a; Hoban, 2002; Deglau and O’Sullivan, 2006; Hoekstra and Korthagen, 2011). I would suggest that contributing to the effectiveness of the PGCert was that the personal aspect of professional learning was addressed.

The purpose of the first module of the course was to support teachers to articulate their beliefs and attitudes in relation to physical education and how these impacted on their teaching practice, as Lara stated:

The first part [module] initially was a lot about us unpicking where we were and where we’d come from and our experience and how that was affecting or influencing the way we were teaching. (Lara, Interview 1)

Having established the prior experiences of the participant teachers, the remainder of the module was then focussed on supporting teachers to reassess their beliefs, values and attitudes in relation to physical education:

I think looking at the developmental aspect and this whole idea was just how I’d missed the boat in many areas on that and I hadn’t grasped a lot of things. So really, I suppose it’s the overall reflection and that opportunity, that time to really look deeper into something and make sense of it. And initially it picked massive holes in what I’d been doing. (Lara, Interview 1)

Attempting to impact on the beliefs, values and attitudes of teachers is a difficult task. This is intimated by Lara in the above excerpt where she describes how the PGCert “picked massive holes” in her previous practice. Reassessing beliefs and attitudes towards physical education could be an uncomfortable process for the participant teachers but they persevered, as the following extract from an interview with Max exemplifies:

They [the PGCert] said do this core and applied application lesson thing [in physical education] but I didn’t really believe that or I thought that was really tricky, so I didn’t do that. And then after a year or so I realised that the primary twos were much better at using apparatus than the primary fives

because the primary twos had been working on it all year 'cause they had it out twice a week, every week [through *Basic Moves*]...

[Initially] I didn't get this doing core. My interpretation of it [core skills PE] probably isn't [Colin's] and your interpretation of what core PE should be but it's my interpretation of not having disparate topics and keeping things rolling over the whole time and that's my interpretation of it and I didn't do that to start off with and then I thought no that's right and I do what the 3-14 said basically. (Max, Interview, 3)

In this extract Max describes the protracted process of revising his thinking about physical education and how he subsequently attempted to enact his revised beliefs in his teaching practice. This quotation also illustrates how professional learning in physical education became a continuous endeavour for the participant teachers.

The PGCert supported teachers to address their own beliefs and attitudes towards physical education before imparting new knowledge and understanding. Rovegno and Bandhauer (1997) stress that taking account of teachers' beliefs and building on them is crucial if professional development is to maintain teacher interest and motivation. The participant teachers in my study were motivated by the PGCert to apply what they had learned within their school contexts. The following excerpt from a planning conversation with Imogen demonstrates her commitment to the course and to her own professional learning:

I think every block [module] you get better. [I'm] more confident with the *Basic Moves* now. I finished my course [the PGCert] just in the summer but we had *Basic Moves* as a second block [module] at university so you have had a lot longer for it to sink in and practise and think about it. And then the other one [upper primary, early secondary module] we just finished before the summer so that is why I am probably weaker. I'll keep working on it. I'll keep moving it forward. (Imogen, Planning Conversation 2)

With practise Imogen's confidence in her abilities to teach physical education grew, a pattern that emerged across the interviews and planning conversations with all of the participant teachers. The following extract from an interview with Jackson reveals how motivated he was to initiate change and continue learning within his school context after completing the PGCert:

I've wanted to introduce everything all at the same time just through enthusiasm or fear of forgetting it through not practising. But also not wanting to introduce too much and overwhelming the children with change

because change obviously has to be over a period, it can't be immediate and you've got to try and introduce it gradually. So I think I came back burning with all these new ideas and realised that I wanted to do *Basic Moves* with the little ones, I wanted to do *TGfU* with the middle ones and then I wanted to do *Sport Ed*. So I did fire on with that but I think it's quite a lot to do all at once and so looking back on it maybe there should have been a focus on *Basic Moves* and then gradually introduced the other two and then going out and doing a bit more CPD on these other things and just building them up. But I can still do that with the time that I've got and so I'm very keen to do that and just develop my own subject knowledge so I can then get more and more confident with it and become a more effective practitioner which is what I want to be ultimately. (Jackson, Interview 3)

The enthusiasm expressed by Jackson to experiment with the developmental approach to physical education advocated by the PGCert within his school context was common amongst all the teachers.

I would suggest that there are a number of factors on a personal level that explain the participant teachers' engagement with the PGCert: they chose to take on the two year commitment of the course; it offered them a formal accreditation in physical education which some felt could impact on their career prospects, and it promoted debate and discussion encouraging the teachers to test out their new learning within their school contexts. Collectively this resulted in maintaining the participant teachers' motivation and interest in the PGCert and continuing their professional learning after completing the course. The positive, self-directed professional learning experiences of the participant teachers in my study, stemming from their involvement in the PGCert, demonstrates how important it is to address the personal aspect of professional learning. The PGCert addressed the participant teachers' interest in physical education and they were motivated to implement their new skills and knowledge within the context of physical education lessons, as the following quotation from Max exemplifies:

I do what they said [the PGCert] because it all made sense...so it's all because of the 3-14 and there's no way I'd be doing what I'm doing now if I hadn't been on that course. (Max, Interview 3)

I would argue that to impact on teachers' attitudes and beliefs requires CPD opportunities such as the PGCert to promote professional learning as an integral part of the teaching and learning process. Supplementing off-site CPD experience with

professional learning in situ, within their school contexts, enabled the participant teachers in my study to see how the approach to physical education teaching and learning advocated by the PGCert worked in practice (Guskey, 2002).

### *Social – Communities of Practice*

In addition to the personal aspect of professional learning Fraser *et al.* (2007) use Bell and Gilbert's aspects of professional learning to emphasise the social nature of professional learning. Fraser *et al.* (2007) suggest communities of practice (Lave and Wenger, 1991) as one possible approach to establish relationships between individuals and address the social aspect of learning. When viewing the professional learning experience provided by the PGCert from a situated perspective (Lave and Wenger, 1991) I would argue that the course created an embryonic community of practice (Thorburn, Carse, Jess and Atencio, 2011). The course brought people together to learn; providing an opportunity for teachers from different local authorities across the East of Scotland to interact and engage in collaborative professional dialogue about primary physical education. As previously intimated the opportunity to be involved with this type of discussion was a relatively new and positive experience for the participant teachers. Lara reflected on how much she valued this opportunity to engage in professional dialogue, particularly in comparison to the limited time for discussion she experienced through the recent implementation of *CfE* within her school:

The course gave me an environment where I could have that professional dialogue; I was given the opportunity to do that in a less time restricted way, I was given the opportunity to do that in a learning environment. The lecturers and the people on the course were putting themselves in the role as learners they weren't carrying this baggage they were trying to look at things in a fresh way. Whereas the other teachers [in her school], I don't know if they ever could have truly had that...because the time set up through the *Curriculum for Excellence* days were often already earmarked for specific things or the school had their own agenda or they were in working parties so they were fragmented. And they didn't have what I had; it wasn't as safe it was just very, very different. (Lara, Interview 3)

Through their discussions the participant teachers formed relationships with other teachers participating on the course and with the course tutors. I would argue that

through these relationships the participant teachers became mutually engaged in an embryonic PGCert community of practice.

Within communities of practice it is suggested that learning occurs through legitimate peripheral participation as individuals become immersed in “social practice in the lived-in world” (Lave and Wenger, 1991, p. 35). Through legitimate peripheral participation Lave and Wenger (1991) explore the relations between “newcomers” and “old-timers” within a community context and the artefacts, knowledge and practice produced (p. 29). The relationship between newcomers and old-timers is likened to that of master and apprentice but Lave and Wenger (1991) suggest that “mastery resides not in the master but in the organisation of the community of practice” (p. 94). Employing the newcomers and old-timers analogy used by Lave and Wenger (1991) it is possible to describe the PGCert course tutors as the old-timers or masters and the teachers enrolled on the course as newcomers or apprentices. The credibility of the old-timers within the community of practice stemmed from them being experienced practitioners in primary physical education. They had all worked for a substantial amount of time within schools and three of the course tutors were working in both schools and the university while delivering the course. Geoff succinctly stated the high esteem with which the course tutors were held by the participant teachers: “April and all that were fantastic.” While the course tutors directly taught elements of the course they also involved the participant teachers in activities and discussion which supported them to build relationships and negotiate new meanings about primary physical education. In contrast to Lave and Wenger’s (1991) description of learning in communities of practice there was observable teaching occurring between the old-timers and newcomers. This teaching involved the old-timers sharing physical education knowledge that was situated in their practice and that had been built up over time.

Lave and Wenger (1991) distinguish between a learning curriculum and a teaching curriculum operating within a community of practice. The learning curriculum “consists of situated opportunities for the improvisational development of new practice” while the teaching curriculum is “constructed for the instruction of newcomers” (Lave and Wenger, 1991, p. 97). In relation to the PGCert the

participant teachers experienced the teaching curriculum through direct instruction from the course tutors (old-timers). Concurrently the participant teachers (newcomers) actively participated in the learning curriculum through their assignments and by experimenting with their new physical education knowledge within their school contexts. I would suggest that consequently the participant teachers “developed a view of what the whole enterprise [primary physical education] is about and what there is to be learned” (Lave and Wenger, 1991, p. 93).

From the PGCert both a teaching curriculum and a learning curriculum emerged. The participant teachers experienced direct teaching of new knowledge by the course tutors who through their experience in physical education could be described as ‘experts’. At the same time the participant teachers had to negotiate their own meaning of the knowledge provided through the teaching curriculum. The learning curriculum emerged as the teachers applied their learning in their everyday practice and interacted with the course tutors and other teachers on the PGCert. As they negotiated the teaching curriculum and the learning curriculum the participant teachers developed their identity as physical education practitioners (Lave and Wenger, 1991).

The following extract from an interview with Lara highlights the emphasis placed on learning by the PGCert and the learning curriculum that emerged:

Lara: I think we were all learning together with it being the pilot cohort and I was very aware of that too. I think the lecturers shared their process with us too and that was always very clear. I did have feelings, this idea of having something and nobody knowing what it was I had and I didn't like that, I felt frustrated.

Researcher: When you first went back to school?

Lara: Or even during the course I would see things and it was just like I was bursting out of my skin and it was this whole idea of change and I think because again the lecturers it was very much a suck it and see and they weren't sure of where they were going to go or what the follow up was going to be. I was part of May's group when she came out to [the local authority] and she worked with the PE specialists and the active schools and I was there and [another teacher who was doing the



PGCert] so there was a couple of us from the course. And you could see I knew what May was trying to say but they couldn't get it because they hadn't been there and again it was like, 'Oh, I know why she's tried this but it didn't work'; so again I was still part of their learning and where they were trying to go with their vision.

(Lara, Interview 3)

Within this extract it is possible to identify mutual engagement (Wenger, 1998) between the old-timers and newcomers. Lara emphasises how the PGCert experience was about learning and that as a newcomer she was learning alongside the course tutors as old-timers. A shared repertoire (Wenger, 1998) emerged between the old-timers and newcomers; routines, stories, words and actions common to this embryonic PGCert community of practice which are examined in more detail in the next chapter. This shared repertoire is particularly evident in the above quotation when Lara talks about feeling that she had something her colleagues within her school didn't have. Additionally, the shared repertoire is again exemplified in the sense of affinity Lara expressed feeling with May the course tutor. I would argue that for Lara and the other participant teachers learning occurred through participation in the primary physical education learning curriculum generated through their involvement with the developing PGCert community of practice.

The learning curriculum that emerged from the PGCert centred around four key principles emphasising that physical education should provide learning experiences that: "are developmentally appropriate across the domains of learning; inclusive; connected within physical education and across the whole school curriculum; and lifewide, as learning in school needs to link with the child's life beyond the school gate" (Thorburn, Carse, Jess and Atencio, 2011, p. 4). The curricular and pedagogical change instigated by the teachers within their school contexts largely echoed these principles and will be addressed in greater detail in the following chapter.

The PGCert did not prescribe what the teachers were to learn therefore the course content was open to interpretation and implementation by individual teachers. Additionally the PGCert ran with cohorts starting and graduating at different times. Therefore, viewing the PGCert as an embryonic community of practice it is possible

to describe the participant teachers as operating on their own learning trajectory. As Max and Lara participated on the pilot cohort of the PGCert which commenced in November 2006, they had built up and retained close relationships with the course tutors. As these relationships flourished the initial peripherality Max and Lara enjoyed paved the way for them: “gaining access to sources for understanding through growing involvement” (Lave and Wenger, 1991, p. 37). Over time the course tutors (old-timers) recognised the innovative work Max and Lara (newcomers) were doing within their school contexts, which was accordingly incorporated into the PGCert primary physical education learning curriculum. Lara and Max contributed as full participants to this learning curriculum through their involvement in DPEG projects such as the National Physical Education Conference in 2009. Additionally Lara worked with April within their local authority to deliver physical education professional development. Lara greatly valued the support she gained from the course tutors as the following quote attests:

I'm so lucky that I have connections through [the local authority] with you and April for instance and then obviously through my course tutor with May. I didn't, but I knew that I could call on May probably at any time. So I had made my own wee network that I was comfortable with and people had invested in me and I had invested in them. (Lara, Interview 3)

Similarly to Lara, Max worked with Sara to deliver professional development within his school. Max and Sara also worked together to create links between the primary schools they worked in which were situated within the same secondary school cluster. Through their experience and full participation I would suggest that Max and Lara could presently be described as old-timers within the embryonic PGCert community of practice.

In contrast, Jackson and Imogen having only recently graduated from the course were newcomers within this community of practice and were in the early stages of applying the shared understandings of primary physical education they had developed. An excerpt from an interview with Jackson used earlier in this chapter revealed his enthusiasm to incorporate what he had learned from the PGCert into his practice and the measured approach to instigating change he acknowledged was needed if change was to be sustained. Both Imogen and Jackson were working on

the periphery of the PGCert community of practice eagerly yet patiently processing and applying the knowledge and skills they gained from the course:

I went to the University, some of it I would come away going I haven't a clue what that was or I didn't understand... You know how you go into that it's like you get all the information, you accommodate it and then you assimilate it and some of it I'm still assimilating, still working through. So I still pull out stuff from my folders and look through it if I'm doing a certain area of the curriculum and I'll look through it and try and get it and actually the more you do it practically the more this becomes relevant... I think I'm actually a person who learns by doing not by reading. (Imogen, Interview 3)

Having participated in the learning curriculum of the PGCert community of practice both Jackson and Imogen attempted to establish what the shared understanding they had developed around primary physical education meant in practice within their schools.

Similar to Jackson and Imogen, Geoff could also be described as working at the periphery of the embryonic PGCert community of practice. While he valued the experience the PGCert provided him, he was also critical of the lack of practical content in the course:

The course was about pedagogy. The course was about looking at, you know, the environment, the people within the environment, how to make things creative, adaptable yeah. As far as content wise, content was quite limited in terms of practical. (Geoff, Interview 3)

I felt, I have to be honest the course let me down in terms of practical. (Geoff, Interview 1)

In this respect, I would argue that Geoff was not engaged as fully in the learning curriculum of the embryonic community of practice as Max, Lara, Jackson and Imogen, and therefore operated more on the periphery. Additionally after completing the course I would suggest that he became part of another physical education community of practice within his local authority which greatly influenced his thinking and practice.

Although Geoff applied some of what he learned from the PGCert in his practice and used the same physical education language as the other participant teachers, there were elements of the course that Geoff had not utilised such as *Basic Moves*.

I have tried to mix both current practice, like what was going on at schools before, and some of the stuff, sort of half and half with what I learnt on the 3-14 course. I've tried to let the kids do a little bit more exploration. (Geoff, Interview 3)

Analysis of the interviews revealed that while Geoff had been influenced by the PGCert, since completing the course he had begun to spend time within another community of practice comprising other primary and secondary physical education teachers working within his local authority. Analysis of interview extracts with Geoff revealed that he seemed to be greatly influenced by this community of practice, more so than the embryonic PGCert community of practice.

Perhaps one of the main reasons this community of practice influenced Geoff was in the way it had emerged. The local authority Geoff worked for deployed some teachers who had completed the PGCert as physical education teachers in primary schools. These teachers became integrated into the existing team of physical education teachers and were assigned a mentor teacher:

The mentoring thing was good...it's the sharing process type thing. (Geoff, Interview 4)

We [PE teachers] got together which I felt quite privileged to be part of. It was, I keep calling them the proper PE teachers, there was the full-timers, and just myself 'cause the other [PGCert] teachers for whatever reasons never attended. And we put together Curriculum for Excellence plans and outcomes and all that and suggested activities for all the different kind of subject areas within PE and said this was going to be like medium term planning. (Geoff, Interview 2)

Geoff enjoyed the opportunity to interact with other physical education teachers and felt that it supported his development in his new role teaching physical education. Geoff has an interesting learning trajectory, his identity as a physical education teacher was developing through membership of more than one community of practice (Wenger, 1998).

The individual learning trajectory of each teacher led them to interpret and implement the emergent PGCert primary physical education learning curriculum in unique ways, which were situated within their individual contexts. The individual nature of the teachers' learning trajectories demonstrated their agency and reflects

Wenger's (1998) suggestion that communities of practice do not need to be homogenous. Wenger (1998) highlights that the community of practice is not about peace and harmony, in concurrence with this I would suggest that for the participant teachers in my study it was vital for them to develop their own interpretation of the PGCert. As will be expanded on in the following chapter, by negotiating and renegotiating (Lave and Wenger, 1991) their own meaning of the course content the teachers were then able to instigate pedagogical change and curricular change responsive to their school contexts. At times for all of the teachers some of their thinking was at odds with elements of the course. For example, both Geoff and Max were critical of the *Sport Education* curriculum and instructional model advocated by the PGCert as a possible approach to delivering sport within physical education:

I'm not opposed to *Sport Ed* and all the roles and all these sort of things... [but] do you want to sit on the side and put a funny cap on and be the referee and be the scorer and the timer and stuff or do you just want to play the game...I want them all to be a player and I think I want them all to be a referee. (Max, Interview 3)

As articulated by Max in this excerpt, while he disagreed with elements of *Sport Education* he also saw benefits in the model and incorporated elements of it within his practice, as will be exemplified in chapter six.

In terms of promoting professional learning, the lack of homogeneity within the PGCert community of practice, I would argue, resulted in increasing the confidence and competence of the participant teachers. They all adapted physical education ideas and resources acquired through the course, and from other sources, so that they matched the needs of the learners they were working with. Rather than simply replicating what they learned on the PGCert, I would argue that the participant teachers were critical consumers of the professional development they received, deciding if, how and when to apply what they learned from the course.

Evidence presented regarding the participant teachers' experiences of the PGCert suggests that when analysed from a situated learning perspective it is possible to identify elements of a community of practice emerging within the structure of the course. I describe the PGCert as an embryonic community of practice because only some of the features posited by Wenger (1998) were present and it is continuing to

grow and evolve. The course brought teachers together on a long-term basis therefore relationships were inevitably formed; this is indicative of mutual engagement. Additionally as the cycle of teachers enrolling on and graduating from the course progressed a shared repertoire emerged from the community of practice; words, stories and actions that became part of its practice. The participant teachers in this study contributed to this shared repertoire through the stories they shared of instigating physical education curricular and pedagogical change within their school contexts. Concurrently the shared language they developed enabled them to articulate more clearly the meaning and purpose of primary physical education. However, the presence of mutual engagement and an emergent shared repertoire only contribute partly to the formation of a community of practice. Missing from the PGCert community of practice was joint enterprise, without this it was difficult for the community to be sustained.

All of the participant teachers mentioned other teachers they met and formed relationships with while they were doing the PGCert. However, these relationships were not maintained upon completion of the course, as Imogen recounted:

One of the things I do need to do, I must try and organise it for next year is having somebody to bounce ideas from. I actually met one of the girls who was on the course with me, we were supposed to get together at the beginning of the year and of course we've not because it's just you get into your work and you just forget. (Imogen, Planning Conversation 3)

Without the structured time provided by the PGCert the participant teachers found it difficult within their busy school lives to maintain relationships established on the course. While attending the course the teachers were mutually engaged with others but upon graduating from the course they became isolated from these people. Through the SPPEP the DPEG attempted to address how to maintain the relationships developed by teachers on the PGCert and build networks between graduate teachers. This is exemplified in the National Physical Education Conference organised in 2009; the national primary school physical education CPD programme which provided PGCert graduates the opportunity to train as tutors to deliver physical education professional development within their local contexts, and most recently the piloting of a national physical education CPD summer school at the University of Edinburgh (Jess, 2011).

The efforts of the PGCert and the SPPEP demonstrate that while it is relatively easy to bring people together, it is more difficult to build a sense of mutual accountability between them. Wenger (1998) suggests that within a community of practice this is achieved through joint enterprise. However, if, as is the case with the PGCert, relationships within a community of practice are not maintained there is little scope for engagement in joint enterprise. Consequently the community of practice is unable to jointly negotiate its purpose and practice and members do not feel a sense of mutual responsibility and accountability for the maintenance of the community and its practice. Congruent with Lave and Wenger (1991), I have applied situated learning to view the PGCert and highlight it as an example of a community of practice. However, I am cautious in my application of situated learning as an analytical lens in recognition that communities of practice are easily described yet not as easily consciously created and maintained.

### *Occupational*

Fraser *et al.* (2007) suggest that there is an occupational element to professional learning that centres on developing an understanding of the “interplay between theory and practice” (p. 159). As previously outlined, exploring the connection between theory and practice underpinned the PGCert. Teachers engaged with physical education policy, child development literature as well as recent physical education academic research. Elliot *et al.* (in press) found that teachers from both PGCerts expressed dissatisfaction with physical education CPD they had previously received suggesting that it was: “sporadically offered, short in pedagogical and theoretical content, and unrelated to actual classroom experience” (Elliot *et al.*, in press, p. 19). Additionally teachers acknowledged that learning about child development theory as well as curricular and pedagogical practices would enhance their understanding of physical education and improve their teaching practice. These findings concur with much of the literature on physical education professional development (Armour and Duncombe, 2004; Ha *et al.*, 2004) and professional development in general (Kennedy *et al.*, 2008; Rose and Reynolds, 2008) suggesting that one-off, off-site CPD merely offers ‘tips for teachers’ and that what teachers need is the opportunity to connect with theory and explore in-depth the links with

practice. The PGCert attempted to address the need to link theory and practice in professional development by blending off-site learning with in-school experimentation, on-going reflection and exploration of how current education theory relates to pupil learning in the classroom (Thorburn, Carse, Jess and Atencio, 2011).

All of the participant teachers in this study appreciated the opportunity to study physical education from a more theoretical perspective. Max sums up the importance of engaging with theory in the following interview excerpt:

Max: The effect of the 3-14 is this first module where you do nothing but theory and background and it is the most important bit because if you are going to convince your head teacher that you need two hours, if you're going to convince a whole school that you are going to put it on the development plan and to have whole staff in-service and to do two hours, and to get more resources and to do three PE lessons a week and to devote a whole week of the third week of term to active schools week, you can't do that without backing it up.

Researcher: The 3-14's given you that theory and background to kind of push things through?

Max: Yeah, you need that to give, if you don't want PE to be bats and balls in a hall and ok it's just about moving, if you want it to be taken seriously and people to take it seriously, people to take you seriously then you need to play with balls and hoops and cones and things but you need to maybe know some big words to back it up and stuff as well.

(Max, Interview 2)

Crucially, as this quotation from Max exemplifies, he felt that the theoretical background covered in the PGCert provided him with a solid understanding of what he was doing in physical education and why he was doing it. Subsequently this theoretical background enabled him to instigate change within his school context.

I would suggest that engaging with theory increased the confidence of the participant teachers making them more able to articulate their changing beliefs and values around physical education and initiate curriculum change within their school contexts, as the following statement from Imogen indicates:



I think the first module I got a lot, I got something from it about thinking about the school and resources and the bigger picture and how it all fits together. (Imogen, Interview 1)

Seeing the bigger picture of physical education the participant teachers understood that instigating change required them to do more than apply their knowledge within their own class contexts. In line with the concept of teachers as change agents (Fullan, 1993; Kirk and Macdonald, 2001; Chen, 2005; Priestley, 2011), the teachers were aware that to instigate and sustain change required them to extend their role beyond the classroom to connect with key stakeholders at different levels within the education system.

All the participant teachers spoke of engaging in discussion with head teachers, colleagues, parents and other key stakeholders around physical education. Lara felt motivated and confident to make connections within her local authority:

I did go and knock on doors, I spoke to [the Head of Education in the local authority]...I thought they would have more understanding but I realised very quickly from the conversations that I had that they were quite removed from like even looking at SLANOPE<sup>15</sup> stuff. They didn't know about say work they'd looked at in transitions and all that kind of stuff. So I realised I'd been exposed to this literature and this stuff and it's put me in a place that there's nobody else with me and that was scary because number one I was like 'who the hell do you think you are' and then on the other hand going 'oh that's ok', so it was the whole conflict of having a little bit of knowledge, it was different and maybe a different perspective. (Lara, Interview 3)

By knocking on doors within the local authority Lara raised her own profile and that of physical education. She became known in physical education and physical activity circles within the local authority as a graduate of the PGCert and an enthusiastic promoter of physical education. In addition to her class teacher and physical education specialist responsibilities, Lara delivered professional development in physical education within the local authority and worked closely with other key stakeholders on a variety of physical education related projects. Similar to Lara, Max was also motivated to promote physical education beyond his own classroom practice. He shared his ideas with his head teacher and attempted to

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<sup>15</sup> Scottish Local Authority Network of Physical Education

build relationships with Active Schools and Sports Development officers to support the curriculum change he was instigating within his school.

In contrast to Max and Lara, Imogen, who had more recently graduated from the PGCert, lacked some of their confidence but still exhibited motivation and determination to instigate change within her own practice and an awareness of the complexity of her position within her school context:

It's really the head who has a lot of impact on what goes on in the school and how you as a little cog in the school need help from somebody with more weight than you. You [alone] can only achieve a little and I get frustrated sometimes but then I think I can only do what I can do, I'm not a bigger cog up there, I'm just a little one and I'm sort of twisting away. I think somebody said at the course 'fight the battle you know you can win, don't fight the battle you can't' and I always keep that in my mind. And I think like I said earlier that I wait 'til teachers open up to me or there's an indication that they're interested and then I'll go forward but I'll never go and try and force people. 'Cause I've seen them try to do that here where they took us to tennis along at the tennis centre and it was like a bunch of kids; "I don't want to do this, I'm not wearing my PE kit". They were closed to going but when they got into it they loved it ...but I don't want to go through [them] dragging their feet. (Imogen, Interview 1)

Imogen may not have been as forward as Lara and Max, but in this extract she exhibits self-awareness and an astute awareness of her school context. Imogen recognised that instigating wider change required the support of the head teacher which she had worked hard to achieve. She also acknowledged that forcing the teachers to think the way she did about physical education would be counterproductive. Using the battle analogy, Imogen demonstrated a realisation that she needed to be strategic in how she went about instigating change with colleagues within her wider school context.

Similar to Imogen, Jackson and Geoff were in the early phase of implementing their new course knowledge. In this respect their main concern was still with developing their own teaching practice in physical education, as Geoff stated:

To start with, my first experience [teaching PE] I had my plans all ready. I was blown away with the pace, you've got six classes, bang, bang, bang, bang...I was totally blown away and I remember sitting in Tesco car park thinking this is unsustainable. Whereas now a lot more relaxed, know what I

am going to be doing, give the people the plans, have a read over the plans, modify them from last year, score out bits, add in bits. (Geoff, Interview 2)

Despite this preoccupation with fine tuning their own teaching practice, Jackson and Geoff were still making attempts to connect with other key stakeholders and were keen to take on wider responsibilities. Geoff recalled how the management team and other colleagues approached him for advice on the delivery of physical education within his school: “my head teacher spoke to me the other day about how we can achieve the two hours of PE”. Correspondingly, Jackson attempted to make clear to colleagues and parents within his school the rationale underpinning the changes he was making to the physical education curriculum:

Gradually I guess through drip feeding in the school people have a better understanding of what’s going on. And again that could come down to termly newsletters which I’m beginning to put out to parents and just giving people a better understanding of what I’m aiming to do and why I’m doing this, kind of stepping away from that defined four activity model and adding in more activities throughout the year and just giving a wider variety of experiences for the children. (Jackson, Interview 2)

Jackson and Geoff drew on the theoretical knowledge provided by the course which enabled them to look at the bigger picture of physical education and make connections outside of their classroom practice.

Although all of the teachers felt that there could have been more time allocated by the PGCert to the practical aspect of physical education, it was not suggested that this be achieved at the expense of the theoretical element of the course. Rather the teachers acknowledged that they would have been happy for the course as a whole to be longer or to involve longer more intense sessions, as Jackson and Geoff remarked:

Even to have had the course six months longer so we could have spent more time working on the practical side I think I really would have benefitted from that. (Jackson, Interview 3)

I think there was a suggestion at one stage in our first year that we might possibly go to Edinburgh and have a week in Edinburgh...So we were sorta saying ‘right this is, we can work with that’...If that was to help with the practical element I would really sort of welcome that. (Geoff, Interview 3)

I would argue that these comments reflect the participant teachers’ commitment to the course and a clear recognition of its professional relevance to them (Fraser *et al.*,

2007). The teachers may have criticised the course in terms of: the need for more practical content; the amount of information provided by the course in a short period of time, and its structure. Yet they still greatly valued the opportunity it gave them to expand their understanding of physical education beyond merely the physical, and specific sports and activities. Imogen noted that:

Being aware of it being a developmental curriculum and basically looking at the children where are they, where do they go next, next steps is one major development...Also being aware, it's not just the physical aspect it's the four domains [psychomotor, cognitive, social and emotional] I think you do know when you teach PE but I think you do tend to forget that there's the other three domains that need to be employed within that situation. (Imogen, Interview 3)

The PGCert offered the participant teachers intellectual stimulation (Fraser *et al.*, 2007), as Jackson stated: “I really liked the notion of going in [to university] as an adult...and communicating academically with adults, so I was excited about it.” Additionally, the teachers were not fazed by the assignments that were a requirement of the course, as Geoff noted: “assignments I found them reasonably straightforward”. Imogen described them as an opportunity to “justify your learning”, while Max shared his assignments with his head teacher using them as a vehicle to articulate his new knowledge regarding physical education and initiate a change agenda. Considering other examples of physical education professional development and curriculum initiatives that have attempted to implement and sustain change (Curtner-Smith, 1999; Patton and Griffin, 2008; Ha *et al.*, 2010), I would suggest that one of the strengths of the PGCert was the strong link between theory and practice.

### **Capacity for Professional Autonomy and Transformative Practice**

If the purpose of professional learning is attitudinal development—that is, changes in intellectual and motivational aspects as well as functional development—then we must consider how this might be facilitated.

(Fraser *et al.*, 2007, p. 159)

To understand the transformative potential of professional development it is possible to view it along a “transmissive, transitional and transformative continuum” (Fraser *et al.*, 2007). This continuum, developed by Kennedy (2005) is the final component of the triple lens framework proposed by Fraser *et al.* (2007) and focuses on

evaluating the potential of professional development and professional learning to lead to change in teachers' practice.

Models of CPD located towards the transmissive end of the continuum largely take the form of short, off-site courses, involving the transmission of knowledge and skills to teachers by a perceived expert. Imogen described the limited value of this kind of professional development: “[some] courses you can go along and go ‘what are you talking about, I don’t understand a word of this and I don’t see how it fits in’.” This form of professional development focuses on technical skills and knowledge that are required to be simply learned and then replicated. Although the PGCert involved an element of transmission, this was not delivered in a prescriptive fashion; as previously intimated teachers were encouraged to think for themselves, developing their own meaning of what they were learning by applying it within their individual school contexts:

I think what we got at the university was quality teaching and ok I didn’t fully understand some of it all the time ‘cause you’ve got your world, you’ve got your life going on at the same time. And it’s like you’re running and you just sort of think, ‘right, ok, two hours what was that, I didn’t really understand it’, but you would go away and think about it and do a bit more reading and that helped. (Imogen, Interview 3)

Imogen highlights how the PGCert provided lots of information in a transmissive style while at the same time providing time and space to digest this information, read more around it and apply new knowledge and skills in practice.

Reflecting the direct, transmissive nature of curriculum change occurring in Scotland, Imogen compared the PGCert with the introduction of the new national curriculum, *Curriculum for Excellence (CfE)*:

I found *Curriculum for Excellence* it’s going too fast; we [school staff] said last year this is going too fast. It’s like I’m a little hamster on a treadmill and it’s all going too fast and when it gets like that I become a child, I always think we become very child like, we panic and then we don’t listen and we don’t hear and we don’t understand, so we just ignore it. So we’ve asked for a year of just let’s just continue what we’re doing and not go at the pace we’re being asked to do where there’s a new thing all the time because you just go into panic mode. So we’ve taken a year where we are just continuing to do maths and language and see how that works. So I think sometimes people push things at you far too quickly where you are not getting a chance

to take it on, understand it fully which we would never do to children so why is it being done to us. (Imogen, Interview 3)

For Imogen the introduction of *CfE* placed her on a “treadmill”, where the pace of change prevented her from stopping to reflect on and consolidate the curriculum changes that were happening. The new curriculum framework may have been presented as being open to interpretation but the tight timeframe for implementation, initially set for one academic year (Priestly and Humes, 2010), put pressure on teachers to introduce the new curriculum without fully understanding it, as Imogen commented: “I think with the *Curriculum for Excellence* there’s a lack of courses that help us to understand it.” In direct contrast Imogen felt the PGCert provided “quality” professional development. This professional development underpinned the pedagogical and curricular change she instigated within her own practice which she could set at a pace that she was more comfortable with: “now I’m getting the thinking period but at the same time I’m doing it so by doing it I’m seeing how it all fits together.” I would argue that concurrent with literature on the central role of the individual teacher in the process of educational change (Hoban, 2002; Kirk and MacDonald, 2001; Priestley, 2011), Imogen and the other participant teachers felt in control of the curriculum change they were implementing because they were centrally involved in the initiation and development of the change process.

Considering the experiences of the participant teachers and the underpinning aims of the PGCert it can be seen that although the PGCert involved external delivery of content this was not at the expense of addressing teachers’ values and beliefs. As the previous example from Imogen illustrates, the PGCert supported professional autonomy which situates this professional development opportunity towards the transformational end of the continuum. Additionally promoting a transformative agenda the PGCert immersed the participant teachers into a continuous and reflective process of professional learning. Imogen and the other participant teachers in my study did not want to be simply told what to do and handed a lesson plan. Rather they valued the opportunity the PGCert gave them to figure things out for themselves and take ownership of their professional learning. For example Max specifically remarked that he enjoyed the PGCert because it didn’t provide prescriptive lesson plans. I would argue that the PGCert managed to combine transmissive professional

development with transformational aspirations by emphasising the link between theory and practice. In this respect I would describe the PGCert as falling within the transitional category of the continuum.

Transitional professional development is identified by Kennedy (2005) as coaching/mentoring and communities of practice. These models of professional development are transitional in the sense that that they can be both transmissive and transformational in their agenda:

While communities of practice can potentially serve to perpetuate dominant discourses in an uncritical manner, under certain conditions they can also act as powerful sites of transformation, where the sum total of individual knowledge and experience is enhanced significantly through collective endeavour.

(Kennedy, 2005, p. 245)

Kennedy (2005) highlights how transitional models of professional development can simply transmit information to teachers to be replicated or can immerse teachers into a process of transformation. Throughout the interviews and planning conversations the participant teachers' experiences illustrate characteristics of the professional development provided by the PGCert that could be described as transformative: "internalisation of concepts, reflection, construction of new knowledge and its application in different situations, and an awareness of the professional and political context" (Fraser *et al.*, 2007, p. 159). The following excerpts from Lara and Jackson elucidate the transformative potential of the PGCert:

I know what I'm talking about more. When other people come in like I'm working with the active schools [co-ordinator], the rugby development officer from the club was in, I'm able to say now this is where you fit in and this is where I want to fit in with you or give me x, y and z and I'll give you that. The jigsaw pieces are fitting much more...I've got a more holistic view of where my learners [are] and the opportunities my learners have. When I'm planning I've got much more of a global perspective of [the] community, of well where they can take athletics or where this primary four athletics festival could eventually lead to. There's pathways and I know these now so it's no longer just a snap shot of being a generalist, I am feeling much more like I have a specialism. (Lara, Interview 3)

I did feel reasonably confident in the past taking PE; I really wanted to go down this road, obviously I wanted to further my career through PE. And so I think the way that I have learned to teach PE through the developmental PE course, it has definitely helped my confidence, it's helped my overall

knowledge of the subject, my understanding of developmentally appropriate teaching. I think there are still occasionally the odd lessons when things go wrong and the unexpected happens or you think I could have planned that better or I could have laid that out better. And if I get a chance to do the double hit on the classes, for example both [primary] sevens in an afternoon, if the first lesson doesn't go so well then you get a chance to make your changes the second time...And so I think it's definitely made me more reflective I think as teachers we're all very critical of ourselves, myself definitely included in that and there's a desire to want to do everything at once and I think it's got to be phased in to be effective, it's got to be well thought out. I think I've got this kind of underlying fear that the *Curriculum for Excellence* or even the inspectors are kind of chasing at my heels and me wanting to have everything in place... (Jackson, Planning Conversation 3)

The PGCert increased the confidence and competence of the participant teachers which consequently enabled them to exercise considerable professional autonomy both within their own physical education practice and in promoting physical education at various levels within the education system.

For the participant teachers in this study their involvement in the PGCert was quite literally a transformative experience as they completely changed their teaching careers. As outlined in chapter four they now all have responsibility for teaching physical education within their own and other school contexts. Having the opportunity to apply the knowledge and skills they developed on the PGCert in their new roles as physical education teachers has greatly increased their confidence and competence:

I think the course has definitely built my confidence up especially the infant end with the *Basic Moves*. (Imogen, Interview 2)

3-14 gives you the confidence because I'm not a PE teacher, I've been a class teacher for ten years, don't know what I'm doing and 3-14 gives you right well you should teach invasion games, you shouldn't teach football you should teach all the invasion, 'oh right, ok, then that makes sense' and you know and they give you the meat as well as the theory. (Max, Interview, 2)

I used a lot of the sort of ideas from our course but basically this year I think I've grown in confidence quite a bit and certainly with my own abilities and teaching approaches. I'm extending certain blocks for certain classes, I'm curtailing blocks, I'm trying to make things more relevant. (Geoff, Interview 2)

The transformative agenda promoted by the PGCert and how it impacted on the participant teachers will be explored in more detail in the following chapter. This



chapter will outline how the teachers have applied their learning from the PGCert within their practice.

## **Conclusion**

The purpose of this chapter was to build on the physical education biographies of the participant teachers (Morgan and Hansen, 2008) outlined in chapter four by focussing on their professional socialisation. At the beginning of this chapter I suggested that engagement with the PGCert realigned the professional socialisation of the participant teachers. Throughout this chapter I have attempted to build an argument to substantiate this claim. The PGCert was a significant event in the professional lives of the participant teachers in my study which impacted on their professional socialisation and greatly influenced their professional identities. In relation to their physical education socialisation the PGCert critiqued the traditional multi-activity block, sport orientated approach to physical education which had previously dominated the teachers' practice. In contrast the PGCert introduced the teachers to more holistic, developmental and child-centred approaches to thinking about and teaching physical education. Additionally, engaging with the PGCert led the participant teachers to change their professional identity from generalist primary teachers to primary teachers who teach physical education. In this chapter I wanted to ascertain why the PGCert was so influential on the professional lives of the teachers and the relationship between this professional development and teacher change. I looked in-depth at the structure and content of the PGCert to establish what was different about this CPD opportunity compared to the traditional CPD the participant teachers had experienced in the past.

Looking in more depth at the professional identity of the participant teachers highlighted a balance of professional, personal and situated factors (Sammons *et al.*, 2007) that contributed to them being able to commit to the PGCert. Considering the origins, content and structure of the PGCert it is clear that the format of this professional development emerged over time through trial and error by the DPEG. In line with much of the professional development literature it is also clear that the DPEG gave careful consideration to how best to meet the learning needs of teachers (Ha *et al.*, 2004; Duncombe, 2005; Keay and Lloyd, 2009). Utilising the triple lens

framework (Fraser *et al.*, 2007) to analyse the PGCert revealed the effectiveness of this type of professional development. The inclusion of formal and informal opportunities for learning contributed to the transformational potential of the PGCert because it enabled the course to attend to personal, social and occupational aspects of professional development and professional learning.

Addressing the personal aspect of professional development the PGCert supported the participant teachers to confront their beliefs, values and attitudes towards physical education. In doing so the social aspect of professional learning was emphasised; teachers were encouraged to share their thinking about, and experiences of, physical education through professional dialogue in the CPD sessions and within their school contexts. As the teachers engaged in professional dialogue relationships were formed and an embryonic PGCert community of practice, defined by a shared repertoire, emerged. One of the main aims of the PGCert, which addressed the occupational aspect of professional development, was to link theory and practice. The PGCert was structured in such a way that simultaneously content linking theory and practice was delivered in quite a traditional CPD format, through sessions delivered by the course tutors, while also providing time and space for teachers to engage in professional learning within their school contexts.

Encouraging the participant teachers to engage in professional learning within their school contexts provided them with greater ownership of their learning. Engaging in professional learning within their school contexts also contributed to increasing the teachers' confidence and ability to exercise their autonomy to initiate change. I would suggest that using the triple lens framework to analyse the professional development provided by the PGCert revealed the effectiveness of combining professional development and professional learning. This approach underpinned by professional dialogue supported teachers to learn as individuals and in collaboration with others, reconstructing their own knowledge about physical education which subsequently led to transformative change (Fraser *et al.*, 2007). The nature of this transformative change is outlined in the following chapter highlighting how the teachers developed a clear personal vision of physical education and employed this to underpin the changes they were making to their practice.

## **Chapter 6 - How the Teachers Instigated Change**

### **Introduction**

The previous chapter explored in detail how the underpinning rationale and structure of the PGCert impacted on the participant teachers acting as a catalyst to their change efforts. O'Sullivan and Deglau (2006) highlight the need to establish how professional development affects teacher knowledge, beliefs and practice. Indeed they suggest that “gathering systematic data on what teachers and students do in class relative to PD [professional development] goals and not just what they say they do is a necessary step” (O'Sullivan and Deglau, 2006, p. 447). From this perspective, it is the intention within this final analysis chapter to explore in-depth how the participant teachers actually applied the knowledge they constructed through the PGCert within their school contexts. In doing so, and as previously intimated in the literature review, this chapter will explore the concept of change agency (Fullan, 1993) through the participant teachers' change stories. In line with Goodson (2003) I recognise that the teachers' stories are social constructions influenced by the wider social, political and historical contexts they are situated in. As I listened to, observed and conversed with the teachers I was able to construct their change stories; my main aim being to help the teachers to come to know their own stories and share these stories of teacher initiated educational change with a wider audience.

Research focussing on teachers and educational change has explored a wide variety of topics, for example: teachers' perceptions of change initiatives (Ha *et al.*, 2004; Patton *et al.*, 2008); how teachers mediate change (Kirk and Macdonald, 2001; Priestley, 2007); teachers emotional response to change (Hargreaves, 2004; Hargreaves, 2005a; Hargreaves, 2005b); how teachers initiate change (Kirk, 1986 and 1988; Cothran, 2001; Durrant and Holden, 2006), and the characteristics of teachers as change agents (Miles *et al.*, 1988; Fullan, 1993; Chen, 2005; Ertmer and Ottenbreit-leftwich, 2010). While this research contributes to understanding educational change from a bottom-up perspective, still lacking from much of the literature is detailed empirical work that explores the complex nature of educational change in particular focussing on the interconnections between change, teaching and learning, and teacher professional learning (Hoban, 2002). Exploring the change

story of each teacher explains how they changed their practice and in turn how they began to influence curriculum change within their school contexts. As the change stories unfold it becomes apparent that there were a number of constraints and affordances that influenced the actions of the teachers within their school contexts.

Much of the discussion within this chapter stems from planning conversation and observation data. As a result of Geoff's reduced involvement in the study I was unable to undertake planning conversations and observations with him. Therefore the focus of this chapter is on the change stories of Imogen, Max, Lara and Jackson. I begin this chapter by presenting the physical education personal vision of each teacher and how this grew from a shared vision that emerged from their involvement in the PGCert. In contrast to other similar studies which focus generally on teacher response to professional development I wanted to understand how the participant teachers in my study conceptualised physical education and how this impacted on their practice. I sought to establish the extent to which the participant teachers had developed a shared vision of physical education through their engagement in the PGCert and how this contributed to their personal vision. Therefore, I directly asked the participant teachers to define key terms: physical education, physical activity and developmental physical education and share their personal vision with me. Having established the vision underpinning the physical education practice specific curricular and pedagogical examples are discussed to illustrate how the teachers developed mastery through inquiry. Finally I outline how the teachers attempted to extend the changes they were making beyond their own practice by seeking out opportunities for collaboration and making connections within and beyond their school contexts.

## **The Vision**

### **Informed Professional Judgment**

As outlined in detail in the previous chapter through the PGCert the participant teachers in my study developed informed professional judgement which Fullan (2003) suggests is essential to support the change process:

Reforms need to be pursued under conditions which maximise intensive teacher learning, involving external ideas as well as internal ideas, interaction and judgment. (p. 7)

Throughout this chapter I will build an argument to demonstrate how the teachers used their own initiative based on knowledge constructed through the PGCert to respond to external ideas, adapting these to suit their own contexts. The changes the teachers made were subsumed within their daily work which they viewed as a space for experimentation and continuous learning, as the following interview excerpt from Jackson illustrates:

Researcher: In the way you've done the 3-14 and applying what you know, do you experiment yourself and explore?

Jackson: Undoubtedly yeah, I think more so with the lower school and the middle school. Upper school I think I'm probably more defined and prescriptive and that's maybe to do with my personal fear of letting control go but having said that obviously I had my *Sport Ed.* term and the children were very much in charge so there was a sense of handing over the reins and saying right these are your teams you're in charge of these teams let's make them work. Obviously I'm on the periphery to kind of guide the whole thing but they're kind of shaping it themselves and coming up with their own warm-ups and coming up with their own drills and then organising their games themselves so definitely in that sense yeah. And then with the little ones if you're in the hall and everybody has a sponge ball and you're saying right I'd like you to travel in your own way with it, anything can really happen....you've got to be willing to accept that and discuss it and what the purpose of it is and then gradually maybe make it a little bit more generic and get people to kind of work within certain boundaries.

(Jackson, Interview 3)

Jackson's comments reflect Kirk's (1988) assertion that "innovation is work", the curricular and pedagogical changes made by the participant teachers in my study were not perceived as additional activities rather they became a natural and indeed integral part of their work (p. 455).

I would argue that the participant teachers created a climate of innovation and experimentation within the gym hall. Physical education lessons were learning opportunities for the children and the teachers, a place where new ideas and

approaches could be tried out and evaluated as Lara states: “I suppose just again the fact that it is constant learning and this overwhelming sense of responsibility to the children that you are trying to do as much as you can...” The process of educational change for these teachers was not one of linear cause and effect but rather one of constant refinement, learning through experience (Fullan, 2003). The structure and format of the professional development the teachers in this study engaged in provided a foundation for their informed professional judgment which in turn supported them to negotiate the complex process of educational change.

Rather than treating the teachers as ‘empty vessels’ to be filled with knowledge the starting point for the PGCert was to establish what the teachers already knew and what they were doing in physical education lessons. As outlined in chapter five, the course did not provide teachers with prescribed skills and knowledge in the form of lesson plans. Petrie (2009) highlights the shortcomings of lesson plans used as part of a one year physical education professional development programme in New Zealand. The primary teachers engaged in the professional development became reliant on using the lesson plans to deliver physical education and largely failed to adapt these resources to their local contexts or needs of their learners. In direct contrast to this finding the PGCert positioned the participant teachers as ‘active consumers’ of the course and the resources it provided (Hoban, 2002); the aim was to ‘reskill’ teachers. The course challenged teachers to critically reflect on the content (both practical and theoretical) of the course, modifying knowledge and skills acquired through the course to suit their school contexts and the needs of their learners. The teachers were encouraged to exercise their autonomy both on the course and within their school contexts. I would argue that the main resource the teachers attained from the PGCert was not a pre packaged lesson plan but rather a shared language and understanding of physical education which informed their professional judgement and came to underpin their practice.

### **Shared Repertoire**

Analysis of the first two rounds of interviews and planning conversations revealed commonalities between the participant teachers’ responses, particularly in respect of the language they used to talk about their practice and thinking in physical education.

As outlined in chapter four prior to engaging with the PGCert the participant teachers all shared a perspective of physical education closely aligned to the dominant multi-activity block, sport orientated version of physical education depicted within much of the literature (see Hastie, 2003; Kirk, 2004; Thorburn *et al.*, 2009). A clear consensus emerged from analysis of the first round of interviews amongst all the participant teachers regarding the purpose of physical education in the past. It was essentially seen as: just another part of the curriculum to be covered; not as important as maths or language; an opportunity for children to be active, and closely aligned with sport and fitness. As outlined in chapter four this perception of physical education stemmed from the socialisation of the teachers and the situated nature of their learning.

Through acculturation, professional socialisation and organisational socialisation the participant teachers experienced physical education that was synonymous with sport, fitness and being active. This perception was accepted as the norm, became embedded within their practice and was not questioned. However, early analysis of data from my study revealed an evolving notion and approach to physical education emerging amongst the participant teachers as a result of their engagement with the PGCert. To understand how the teachers presently conceived physical education, as outlined in the methodology chapter, I directly asked the teachers to share with me their understanding of key terms: physical education, physical activity and developmental physical education (the main concept the course ascribed to). I wanted to confirm how the teachers defined these terms and if these conceptions were reflected in their practice. Emerging from the definitions of physical education, physical activity and developmental physical education provided by each teacher was a shared language. To understand the significance of this shared language within the change story of each teacher it is important to explore the teachers' definitions of each term.

### *Physical Education*

There were nuances within the definitions of physical education provided by Max, Lara, Imogen and Jackson but essentially they all made reference to education, learning, understanding and movement:

The whole kind of education side of things, it's not just getting together in the hall and playing games... It's them [the children] learning, it's them coming to be physically literate and understanding, having this really kind of deep rooted, embedded understanding of what's going on regarding their own personal physical literacy. (Jackson, Interview 3)

All of these things where a teacher teaches and kids more importantly learn 'cause it's more about the learning than the teaching, that's physical education. (Max, Interview 3)

Well to me it's not the doing it's the understanding of the doing and why we do it and the concepts behind that. (Lara, Interview 3)

Physical education is educating the children to be able to move their bodies in throwing, catching etc. (Imogen, Interview 3)

I gained a sense from the data that the understanding of physical education expressed by the teachers moved beyond the fitness and sport analogies from the past. I would argue that these quotations reveal a working definition of physical education developed through the PGCert and honed in the real context of the physical education lesson.

Within the descriptions each teacher gave of physical education they also made reference to how they had employed their interpretation of the term in practice. Emphasising the education element of physical education Max expressed that the "same stuff [teaching and learning]" going on in the classroom could easily be employed within the gym hall: cooperative learning; listening and talking; questioning and social/emotional learning. The observations I made of Max in the gym hall revealed that he transferred many of the skills, knowledge and understanding he had acquired as a class teacher into the gym hall. For example, Max expressed on numerous occasions during the observations that he felt it was imperative for the children from a young age to learn about the concepts of cooperation and competition. He felt that as much as a lack of physical ability could hinder children's participation in physical education and physical activity so could their lack of being able to work with others, win and lose. This echoed the commitment within the school promoting the use of cooperative learning techniques within the classroom.



Similar to Max, Lara attained a deeper understanding of physical education through the PGCert which made a difference to how she approached it as a subject area. Before the PGCert Lara stated that she felt her physical education lessons had been “more physical activity”, about just being active whereas now in physical education lessons she was “exploring why we do things.” Lara recognised physical education was not just about being active and playing games but that there was also cognitive, social and emotional learning to be addressed within physical education lessons. While this transition was not easy Lara recognised the value in supporting the children to explore their movement in physical education:

And it is so hard as well because of things that we've spoken about in the past, things that in my head I find totally boring or I felt I couldn't possibly repeat this and you realise that they've [the children] actually benefitted from the repetition or they're not bored at all by something. So I think I'm learning just not to assume [based on her 'sporty background'] and to try and give things a go. (Lara, Planning Conversation 3)

There were occasions during the interviews and observations where Lara's reflections revealed a latent pressure to ensure that the children were physically active during physical education lessons:

I know within my PE team they would probably say they have much more of a focus on the physical like the drive towards the movement side within a lesson than perhaps I do. And I don't know, I suppose it's the more I'm getting into it I see it's so layered and multi-dimensional. (Lara, Planning Conversation 3)

Addressing the physical domain of learning during physical education lessons was a key concern for Lara and she had managed to “morph” this with the other domains of learning so that the children were engaged on all levels. However there were occasions when Lara recognised that she needed to focus more on a specific domain. One such example she provided was with a year group where the learning needs of the children required her to address the social dimension of learning separately:

When you get year groups like primary X then that does shake it up a bit and you have to go this year group are more in need of a social dimension so let's work together in a more supportive way, on working in small groups or lets work as a whole class and then try and wean them off. And so I would say three out of the four year groups it's much more of a meld whereas with them it's different I am having to break down the social dimension otherwise they're not going to learn. (Lara, Planning Conversation 1)

Through the PGCert Lara developed an understanding of physical education that moved away from her past connotation of it as simply being physically active. As Lara worked with the definition she realised the impact of the social cognitive and emotional domains as well as the physical on children's learning in physical education.

### *Physical Activity*

Greater divergence emerged from the definitions the teachers gave of physical activity and this seemed a less straightforward concept to define, as Lara states:

I still think there's a place for education within physical activity so I wouldn't separate the two completely. But physical activity I suppose I would look at it as something that we do in a functional way to keep healthy, to be engaged with others to make us happy so the health and wellbeing sort of aspect, not that PE isn't [about all that]. So that's why I'm saying it is difficult separating the two. (Lara, Interview 3)

A key issue encompassing both physical education and physical activity raised by the teachers was the crossover between the two terms. While after school clubs were largely classed as physical activity, because of the coaching and training they often involved, there was a consensus that these clubs also incorporated an element of education. Despite there being debate around the meaning of physical activity and how it linked with physical education, essentially all the participant teachers suggested that physical activity offered children the opportunity to choose to be active for a variety of different reasons ranging from health, to fitness or for fun, as the following extracts from Jackson, Imogen and Lara demonstrate:

Physical activity, it's really doing things for the enjoyment, it's again learning to be active, it's learning to think about your personal well-being. (Jackson, Interview 3)

Physical education is education and teaching, physical activity there is no teaching it's just the children being active. (Imogen, Interview 3)

They [the children] had free choice in that situation, they played games and they did physical activity. I wasn't interjecting, I wasn't necessarily making them think, it was just about having fun, being engaged, working together. (Lara describing engaging the children in physical activity within the context of a physical education lesson, Interview 3)

All of the teachers mentioned clubs or sport activities as vehicles for physical activity; reference was also made to break-times at school offering children the opportunity to freely engage in physical activity. A number of stakeholders were identified as having responsibility for promoting physical activity with reference being made to the wider school, parents, Active Schools and sports clubs. There was also a perception amongst all the participant teachers that they had a key role to play in linking physical education and physical activity, as Max reflected: “so if the PE lesson is Outdoor Journeys and we walk to somewhere and they [the children] then realise that actually it’s not too far to walk and they start walking [in their own time]...then that’s physical activity.” The role each teacher played in promoting physical activity as a lifelong endeavour and how they made connections between physical education and physical activity within their school settings will be discussed in greater detail later in this chapter.

### *Developmental Physical Education*

Following on from distinguishing between physical education and physical activity the participant teachers were then asked to comment on the term developmental physical education. This term was used within the PGCert to describe the approach to teaching and learning in primary physical education adopted by the course and encompassed a variety of teaching and curriculum models (see Appendix F). Alongside the practical element of the PGCert there was an emphasis placed on engaging with child development literature such as: Gallahue and Donnelly (2003), Smith and Thelen (2003) and Davids, Button and Bennett (2008). This enabled a connection to be made between developmental phases and the social, emotional, physical and cognitive characteristics displayed by children during these phases. The PGCert stressed that child development was age related but not age dependent (Jess and Collins, 2003). This outlook was reiterated by the participant teachers:

It’s where are they, with their knowledge within this game or athletics or whatever? And then I’ll take them on from there so it’s looking at the children and taking them from where they are. (Imogen, Interview 3)

Developmental physical education for me is about something that’s right for their stage of development. (Max, Interview 3)

The more you get into it the more you realise it does move away from the idea of chronological age and so much more to do with social, emotional. (Lara, Interview 3)

And having done the reading, now you understand the theory behind it and you understand what's developmentally appropriate at different stages in the primary school. (Jackson, Interview 3)

All of the teachers expressed the need to take account of where the children were in their learning before moving them forward and presenting activities that matched their learning needs.

While each teacher expressed their own individual perception of developmental physical education, analysing the interviews revealed a number of points of convergence. Inclusiveness emerged as a key component of the developmental physical education approach, with emphasis placed on matching activities and resources to the needs of learners, as Max stated: "it's about giving everybody fully the chance [to participate]." Imogen also alluded to this inclusiveness, rather than simply demarcating the children's thinking about movement as right or wrong she described attempting to value all of the contributions children made and supporting them to explore their thinking. Developmental physical education was about adopting a more holistic approach to teaching and learning to meet learners needs not just on a physical level but also socially, emotionally and cognitively, Lara commented: "to me it's holistic, anything developmental is about looking at the child or the children that you're working with and trying to meet their needs educationally and physically and socially and emotionally." During analysis of the observations and planning conversations it became apparent that the participant teachers were applying in practice the meaning they had assigned to each of the concepts: physical education, physical activity and developmental physical education. In effect, as will become increasingly apparent as this chapter progresses, the "espoused theories" of the participant teachers matched their "theories in use" (Agyris and Shon, 1976 as cited by Day, 1985, p. 138).

I would argue that the consensus that emerges from the definitions of the key concepts provided by each teacher: physical education, physical activity and developmental physical education, intimates a shared vision (Fullan, 1993).

Additionally it provides evidence of a shared repertoire emerging amongst the participant teachers (Lave and Wenger, 1991). The shared language generated through the PGCert became a resource for the participant teachers within their school contexts informing their practice and providing a foundation from which they were able to negotiate the meaning of the curricular and pedagogical change they were initiating (Wenger, 1998). Fullan (1993) warns against the pitfall of falling in line with ‘group think’ as a shared vision is established, stressing that it is necessary to simultaneously develop personal vision: “shared vision is important in the long run, but for it to be effective you have to have something to share” (Fullan, 1993, p. 13). I would argue that the shared language possessed by the participant teachers was not a case of ‘group think’, as this quotation from Max illustrates:

I do what they said because it all made sense and the more I teach [the more I understand]...my interpretation probably isn't Sara's and Colin's and your interpretation...but it's my interpretation. (Max, Interview 3)

Indeed as the participant teachers constructed a shared vision through the PGCert they were also encouraged to form their own personal vision of physical education that reflected their local context, which will be elaborated on in the next section of this chapter.

Goodson (2001) highlights that a criticism often levied against teacher initiated change is that it lacks coherence. I would argue that this was not the case for the participant teachers in my study mainly due to the shared understanding they had developed through the PGCert of the interrelated concepts of physical education, physical activity and developmental physical education. To use an analogy, all the teachers were singing from the same song sheet. Armed with a common understanding of physical education as a concept the teachers were then able to make changes to the physical education curriculum and their pedagogy taking account of their individual contexts. I would suggest that what the participant teachers learned on the course about physical education, physical activity and developmental physical education ‘made sense’ to them and was therefore naturally incorporated into their practice. When professional development links with the beliefs of teachers and they see it working in practice they are more likely to adopt this new knowledge (Waugh and Punch, 1987; Guskey, 2002; Ertmer and Ottenbreit-Leftwich, 2010). The

PGCert did not directly prescribe what the participant teachers were to think and do regarding physical education, therefore providing scope for them to make their own interpretations of the knowledge, skills and learning they obtained from the course. I would suggest that the shared vision and repertoire the participant teachers constructed through the PGCert was integral to their change stories. Along with moral purpose it provided a foundation for the personal vision each teacher developed about physical education.

### **Moral Purpose – children**

Moral purpose is what drives teachers; the underpinning motivation for wanting to teach is to make a difference. This moral purpose keeps the teacher closely linked to the needs of the children and has the potential to lead teachers to seek to bring about improvements in teaching and learning (Fullan, 1993). Day (1999) highlights the recent trend in educational reform worldwide that relies on narrow accountability measures to evaluate the effectiveness of teachers:

The interpretation of answerability and accountability through a host of policy initiatives has caused attention to become focussed upon a rather narrow range of desired 'basic' student achievement outputs which are able to be tested and compared. The logic is that teachers' work can be assessed in relation to their success in enabling students to achieve the desired results...But concentration upon them has distracted attention from the care and commitment which needs to be in place if learners are to be motivated, challenged and supported.

(Day, 1999, p. 14)

The primary concern driving the participant teachers in my study was to motivate, challenge and support the children they were working with. As physical education is largely free of narrow accountability measures the participant teachers were better able to exercise their agency to plan and deliver a physical education curriculum that met the needs of their learners and took account of local context. The participant teachers' moral purpose was expressed through their care and commitment to physical education and to the children they were working with.

The interrelated concepts of moral purpose and change agency demonstrate the emotional investment made by teachers to their work. The participant teachers in my

study exhibited passion through their commitment to learning, relationships with their pupils and the enthusiasm with which they approached teaching (Hargreaves, 2005a). This passion surfaced particularly during the planning conversations in the flow of their ideas. I use the following vignette from Imogen to exemplify this emotional investment:

### **Imogen Vignette, Planning Conversation 2**

Again with them [the class], it is sometimes a hit or a miss whether it works or not. I tried a game, used outside as much as I could, because there is 32 of them [children], I used the playground. The first time we went out they [the children] did nothing but fight, bicker. There was just no team play. They weren't playing by rules some of them. So there was a lot of learning involved in doing that; just being part of a team and working together. And sometimes we have been out and sometimes we have been in. But the last session I did with them, in the gym hall, split the gym hall up and they were in teams of about four in little zones. And all they were doing was passing the ball, static passing, trying to get it round as quick as you could in an order. Then they were doing passing and moving, doing it as quick as you could and sitting down. It was co-operation and team work and working together to get the ball round and all the rest of it. They actually really enjoyed just doing that and I think the learning they got on team work was good.

I was trying to get them to start on just keeping possession of the ball in invasion games. We have talked about that, how you want to keep possession so that was the aspect of invasion games we were working on mainly through the kinds of games we have done. We have not really gone onto too much defence yet. That is where it all broke down, when I did put them out into a defensive type of game. That is where I realised they have struggled as a class to accept being caught [by an opponent] and things like that...So we have taken back a step and just kept possession of the ball. I might, obviously I have got them for another two weeks, I might bring in some kind of defensive, like piggy in the middle type games. Where they still have possession going on but they are also trying to build in defence.

The first sentence from this vignette illustrates that Imogen knew and understood this class. Working with a large class, she knew that the small gym hall space she had was difficult for them to work in so as much as possible Imogen conducted lessons outside to provide the children with space. The detail with which Imogen described the activities the children were involved in and her thinking behind it reveals her enthusiasm and passion for the subject. Imogen was candid in her account reflecting on things that went well and not so well during the sequence of lessons which exemplifies her commitment to learning, the children's and her own. The central

role that children play in teachers' perceptions of, and responsiveness to, educational change is highlighted by a number of authors Cothran (2001), Chen (2005), Lasky (2005) and Hargreaves (2005a). In particular Hargreaves (2005a) stresses that when teachers are planning the curriculum they give careful consideration to what will engage both themselves and the children; this was found to be very much the case amongst the participant teachers in this study and is discussed in the next section of this chapter.

### **Personal Vision**

While it became clear throughout the interviews that the PGCert provided the teachers with a shared vocabulary regarding physical education it was also apparent that the teachers had developed their own way of thinking about physical education specific to their school context. Using Fullan's (1993) terminology I would describe this as personal vision. As previously discussed in chapter five, the first module of the PGCert required the participant teachers to reflect on their prior experiences of physical education as learners, their own teaching practice in physical education and the position of physical education and physical activity within their individual school contexts. Additionally the teachers were provided with the opportunity to critically engage with government policy relating to physical education and physical education research literature. Reflecting Miles *et al.* (1988) discussion of change agency, through this module the participant teachers considered their individual roles in orchestrating change as well as identifying what their schools required to change the physical education curriculum.

Akin to moral purpose, personal vision comes from within and offers the individual an opportunity to articulate their vision of the future: "It arises by pushing ourselves to articulate what is important to us as educators" (Fullan, 1993, p. 13). Personal vision involves the individual teacher confronting their own thoughts to make explicit the reasoning behind what they do. Fullan (1993) argues that personal vision in teaching has not been explicit enough and when expressed is often couched in a negative outlook as teachers tend to express what they don't want. The exact opposite is true in relation to the personal vision expressed by the participant teachers within my study. During the interviews and planning conversations each teacher



clearly articulated their thoughts on physical education, why they thought it was important and how it linked into wider social agendas. Rather than focussing on negatives, the personal vision revealed by the teachers was positive and proactive. Having a clear personal vision of physical education was important to the change stories of Max, Imogen, Lara and Jackson because it provided a foundation upon which the changes they were making to their pedagogy and the curriculum could be based. Unlike many centrally driven reforms the change instigated by the participant teachers in my study was not change for the sake of change (Fullan, 2007). With personal vision the teachers had a clear focus of where they wanted the changes to go and why they were changing.

Early analysis of the data revealed that the teachers appeared to have a clear vision for physical education. I was curious to find out if, when specifically asked, the participant teachers could share this personal vision with me. Therefore in the final planning conversation I asked each teacher to use words to paint a picture for me of the physical education curriculum they had devised within their school contexts. I recorded what the teachers said and asked them to make a mind map or write words as they described their vision to me. Extracts from the visions they shared with me are included in Appendix G. While there are similarities between the teacher's personal visions what makes them divergent is that each teacher specifically related their vision to their own individual context. The personal vision of each teacher Imogen, Max, Lara and Jackson will now be explored to ascertain how they gave meaning to what they were teaching in physical education lessons.

*Imogen: "Developing the children from where they are"*

Essentially Imogen was trying to make a difference (Fullan, 1993) in physical education by giving more consideration to the children and trying to meet their learning needs. In line with the findings of Chen (2005) discussing change agency amongst early childhood teachers in Singapore, Imogen respected the uniqueness of the child and recognised her responsibility for promoting the children's holistic development in physical education. A definite and clear theme emerging from her personal vision of physical education and from her definitions of physical education and developmental physical education was "developing the children from where they

are”. Imogen stressed that she now adopts a more child centred approach to teaching physical education in comparison to the top-down direct approach she had used in the past. Assessment played an integral role in enabling Imogen to meet the needs of the children she was working with. It enabled her to see where the children were in their learning and she then used the information acquired from her assessments to inform her planning and teaching in physical education. Reference was made to the strong visual element of her assessment and how she utilised video to assist her with this. Imogen was keen that the children were given the opportunity in physical education lessons to explore movement not just from a physical perspective but also in relation to social, emotional and cognitive learning. In this respect Imogen subscribed to the developmental physical education curriculum espoused by the PGCert.

*Basic Moves* underpinned this curriculum providing infant children with the opportunity to learn about and explore fundamental movement skills. Following on from *Basic Moves*, within the middle and upper years Imogen developed a more applied curriculum. She spoke of covering athletics, gymnastics and developmental games focussing on the three main categories of invasion, central net and striking and fielding. While Imogen utilised the ideas relating to developmental physical education advocated by the PGCert she preferred to adapt these ideas rather than simply using them ‘straight off the shelf’. For example I observed Imogen adapting the *TGfU* approach to deliver physical education in the middle and upper primary years. Additionally I observed her modifying *Basic Moves* in a gymnastics lesson with upper primary children, using stations to support the children to explore and practice basic rolling skills. In contrast to larger scale studies of educational change I was able to spend an extended period of time with Imogen and the other participant teachers which provided me with an insight into their innovativeness and creativity.

While Imogen was generally very positive about her personal vision of physical education she expressed her concern that the physical education curriculum she planned and delivered was not impacting on the class teachers. Teaching physical education within her school Imogen provided other teachers with reduced class contact time. As outlined in chapter four this meant that her colleagues did not see

her teaching and subsequently the physical education she was teaching became somewhat disparate. Imogen had attempted to rectify this issue:

What I'm trying to do just now with the primary two teachers [so] it's not just all a one way flow, I want to be working in partnership. So they had mentioned that they were trying to do some gymnastics, in particular the forward roll so what I'm doing is forward roll work with the children and the teachers are doing [it too]. I'm listening to what they want me to do rather than it always being me telling [them] I'm doing this and you follow me. (Imogen, Planning Conversation 3)

Rather than ignoring the separation from the teachers and simply following her own agenda in physical education I would argue that Imogen recognised that she was in a strategic position (Fullan, 1993) to resolve and improve the situation (Miles *et al.*, 1988). Imogen articulated a clear personal vision for physical education and, as the observation evidence discussed later in this chapter demonstrates, was working to make it happen.

#### **Max: "Continual learning"**

In comparison to the other participant teachers Max had spent the longest time in the role of physical education teacher. This afforded him a longer period of time to refine his personal vision for physical education and evaluate the impact of the changes he was making on the children (Ertmer and Ottenbreit-Leftwich, 2010). With this experience came confidence which enabled Max to cope with and adapt to the evolving and messy nature of the change process (Fullan, 1993). At the same time as the physical education curriculum devised by Max and his own personal vision were evolving so was the context he was working in. Max recalled during the interviews the various timetable changes made within his school and how these affected his delivery of physical education. When Max spoke about his personal vision for physical education one of the first things he brought up was an issue that had emerged during the course of the school year. He was concerned that "what I least wanted to happen has happened", where physical education had become a "disparate subject". Max felt that because he was used mainly to cover reduced class contact time it meant that the onus for teaching physical education was placed predominantly on him. This operated in complete contrast to the personal vision Max had for physical education at the beginning of the study where he had spoken of

spending time liaising with teachers and sharing the responsibility for teaching physical education with them.

Rather than feeling deterred or disheartened by the evolving context within his school I would argue that Max displayed an optimism and capacity to cope with and attempt to manage the change process (Fullan, 1993). One of the main aims of Max's personal vision for physical education was to keep things "fresh" and keep "doing new things". Therefore his response to the separation of physical education was:

Next year, it's about getting it back so that the class teachers are teaching more and I work better with the class teachers...you do something and take your eye off something and then all of a sudden you're in this situation that you didn't want to happen. So that's OK, it just needs to be worked on.  
(Max, Planning Conversation 3)

Max was disappointed with the backward steps he perceived physical education had taken within his school context but he remained assertive (Miles *et al.*, 1988) and committed to his personal vision. He pushed on, continuing to articulate what was important and striving to enact change (Fullan, 1993).

Comparable to the other participant teachers the personal vision Max articulated for physical education centred on the children. To support progression Max was committed to extending *Basic Moves* beyond the infant years. He did this by introducing what he described as 'core skills' lessons within the middle and upper primary school, which will be outlined in more detail later in the chapter. Effectively Max set up more complex learning contexts for the older children which challenged them not only on a physical level but also cognitively, socially and emotionally. Reflecting the change agency skills outlined by Miles *et al.* (1988) Max was "resource bringing", introducing new ideas into the school, putting them into practice and sharing them with colleagues (p. 158). There was a focus on the holistic nature of learning within the physical education curriculum that Max devised. Building the curriculum in this way helped Max to reach his end goal, helping the upper primary children to "fly" with the skills they had gained throughout their primary years and apply them to take greater ownership of their learning. Indeed Max shared his

intention that in the following academic year he hoped to involve the children even more in the planning of the physical education curriculum.

As well as teaching physical education Max felt that his role included running clubs and organising sporting, physical education and physical activity events within the school. He passionately believed in promoting lifelong learning in physical education and for him a big part of this was to make links between physical education and physical activity which he felt he was in a prime position to do. Overall the personal vision that Max promoted through the physical education curriculum he delivered was “continual learning” for both him and the children.

#### *Lara: Inclusive and relevant*

Lara found that she was in the position of striving to implement a developmental approach in physical education while also attempting to meet the children’s more traditional expectations of the subject. Describing her developmental vision of physical education Lara outlined how she wanted to “include everybody” and make the curriculum “relevant” to the children. Attempting to make physical education inclusive Lara discussed the importance of “looking at what the children have got first” and moving their learning on from there. She focussed on the education aspect of physical education, particularly in relation to giving greater consideration to social, emotional and cognitive learning. Describing the holistic approach she had adopted, Lara explained how she now gave greater consideration to social and emotional learning in physical education: “so that they [the children] can work together and ultimately take that to a competition level be it individual or team and deal with the emotions that come with it.” This approach to teaching and learning in physical education demonstrates the depth of Lara’s content knowledge which Ertmer and Ottenbreit-Leftwich (2010) highlight as a vital factor that supports teachers to instigate change.

In her endeavour to make the physical education curriculum she was planning and delivering relevant as well as inclusive Lara attempted to make links with the wider community. She felt that making links with sports clubs and activities occurring within the local community offered the opportunity for physical education to tap into

the children's interests and increase motivation. While this involved Lara meeting with community sport leaders and on occasion working with them to deliver physical education it also drew on "knowledge and experience" the children had accumulated from their community sport experiences. Lara made an effort to incorporate this prior knowledge and experience by involving the children in the planning and occasionally the delivery of lessons.

Meeting the children's expectations of physical education required Lara to strike a balance between the developmental approach she was attempting to implement and the children's 'traditional' perspective on physical education. Lara explained how a few years previously she had attempted to gauge the opinions of the upper primary school children regarding physical education within the school. Emerging from these discussions with the children was that: "a real drive for them [was] to have a traditional sense of PE i.e. things like gymnastics, games and sport specific [activities]." Lara felt that to keep the children motivated she had to take into account their traditional view of physical education linking it with the developmental approach she wanted to bring to the fore. Later in this chapter examples will be provided of exactly how Lara managed to strike this balance. The concern Lara showed towards the children's reaction to the physical education curriculum she was delivering reflects Cothran's (2001) finding that "teachers who are able to promote change reflect on their programs and its impact on their students" (p. 77).

Expressing her personal vision of physical education Lara reflected on how her beliefs and understanding of physical education had changed since participating on the PGCert. In line with much of the literature on professional development and teacher change (Guskey, 2002; Chen, 2005; Deglau and O'Sullivan, 2006; Ertmer and Ottenbreit-Leftwich, 2010), the change in Lara's beliefs paved the way for her to instigate change to the physical education she was delivering within her school context.

### *Jackson: Focussed, dynamic and interesting*

"I think in terms of the course, that's really given me a knowledge of PE." Sharing his personal vision for physical education Jackson emphasised how the PGCert increased his subject content knowledge which contributed to his confidence to

initiate change in his practice (Miles *et al.*, 1988; Ertmer and Ottenbreit-Leftwich, 2010). Corresponding with the personal visions of Imogen, Max and Lara, Jackson was also intent on delivering a more developmentally appropriate physical education curriculum to match the learning needs of the children. He provided examples of how he managed to extend learning beyond the purely physical within physical education. Reference was made to cross-curricular links established through physical education with maths, language, and personal and social education. Jackson also discussed in detail how the children were engaging with physical education on a deeper level. “They’re [the children] getting a larger vocabulary...and a better cognitive understanding of PE.” When the children were asked to discuss their experience of physical education in the school and share targets they had set for themselves Jackson stressed how the children were able to:

Articulate their thoughts more clearly and instead of: ‘What are you trying to get better at?’ ‘I’m trying to get better at throwing.’ they’re saying: ‘I’m trying to get better at throwing at a target.’ ‘I’m focussing my eyes on my partner.’ (Jackson, Planning Conversation 3)

This response to physical education “excited” Jackson as he felt the children were engaging with their learning and reflecting more on their experiences. The ability of the children to more clearly articulate their learning also exemplified the progression Jackson had sought to achieve through the physical education curriculum he was implementing.

Examining the emotional aspect of educational change for teachers Hargreaves (2005) suggests that teachers will often adopt a variety of pedagogical approaches to keep things interesting for students. This was one of the main concerns for Jackson regarding his personal vision of physical education. He outlined how as well as the children enjoying physical education he wanted it to be “focussed”, “dynamic and “interesting”. Jackson felt strongly that the physical education lessons should not be about the children sitting down and listening to him. The approach he favoured was more constructivist (Rovegno and Dolly, 2006), positioning himself as a facilitator encouraging the children to contribute to lessons and learn from each other. He described “feeding off their [the children’s] energy and their ideas, it’s not just me spoon-feeding answers.” Within his personal vision Jackson gave consideration to

his role as the teacher discussing how he wanted to be a “motivator” and wanted his enthusiasm for the subject to be translated through his lessons. At the same time he was concerned that he provided “clarity” so that “the kids know what they are doing.”

Within the infant years, and in common with the other participant teachers, Jackson valued *Basic Moves* as a curriculum framework that nurtured basic movement competency. Through *Basic Moves* the children were able to practise skills: “time and time again in different contexts and little mini game situations.” Moving into the middle and upper primary years Jackson spoke about a more generic approach mixing skill learning with the opportunity to apply these skills in context. The main concern Jackson shared regarding physical education in the middle and upper primary school was retaining the creativity that was a feature of infant physical education. He sought to address this by encouraging the children to:

Actually come up with their own games using specific equipment but not giving them specific criteria and then seeing what they do with that. And I think that’s really important especially with the introduction of the *Curriculum for Excellence* to give children an opportunity to practise these things and to see [them] develop their creative side. Just ‘cause they’re in primary six and seven it doesn’t mean they’re any less creative. (Jackson, Planning Conversation 3)

Jackson’s vision for physical education centred on facilitating a curriculum that captured the children’s interest and supported them to progress with their learning.

### **Developing Mastery through Inquiry**

Observing Max, Lara, Imogen and Jackson teaching and listening to them describe the physical education curriculum they had developed and the pedagogy they used to deliver it I was aware of their motivation and commitment to improve the experience of physical education for the children they were working with. Their personal vision of physical education was interwoven into their practice and they demonstrated creativity as they set about applying the ideas and knowledge gained from the PGCert. In line with Fullan’s (1993) description of mastery and inquiry as essential capacities for successful change the participant teachers were committed to extending their physical education knowledge and understanding. This was achieved



by seeking out further professional development opportunities and embedding professional learning into their teaching practice by reflecting on the physical education curriculum they were delivering to learn from experience.

The teachers actively experimented with new ideas in physical education lessons and became immersed in a change process driven by continuous learning. The main factor that supported the teachers to enact their personal vision of physical education and engage in continuous learning was time. Unlike many large scale educational change initiatives which often work to a tight timescale the autonomy enjoyed by the participant teachers meant they could manage the pace of change (see Imogen's description of the implementation of *Curriculum for Excellence* in chapter five). The feelings of ownership and control experienced by the participant teachers in relation to the change process supported them to develop an understanding of the iterative process of, and an openness to change. There are many examples from the planning conversations and observations that exemplify this multifaceted nature of educational change and the participant teachers' response to it. However, it is not possible within the scope of this thesis to enter into detailed discussion of all of the data. In order to demonstrate how each participant teacher was able to enact their personal vision over time through a process of continuous learning (Fullan, 1993) specific examples from the change story of each teacher will be explored in detail.

### **Max: 'Core Skills'**

As previously outlined, one of the most innovative approaches to teaching and learning in physical education I observed were the 'core skills' lessons devised by Max. This change to the middle and upper primary physical education curriculum was honed over three years. Similar to the other participant teachers, for Max the change process began with the introduction of *Basic Moves* into the infant physical education curriculum and changing his pedagogy to adopt a more child-centred social constructivist approach (Rovegno and Dolly, 2006 ). Gradually after his first year in the role of physical education teacher he began to question the multi-activity block format used within the middle and upper primary school to teach physical education and consequently set about making more far reaching changes to the physical education curriculum.

The PE curriculum that was here beforehand which I thought was really good but it had lots and lots of different things and I kind of tried to force it into six blocks so there was an invasion game and a net game and some athletics and some dance, there was six different areas. And over the last year I realised that this didn't really seem to fit with me and this jarred, I'd got all this continuity in the wee years [through *Basic Moves*] where they were building up and things were rolling and constantly developing and building. And it came to primary four and I would stop that and I would just have these disparate blocks again so [I introduced] this rolling effect in the upper years to try to keep things [developing] so that I dance at the beginning of a net games lesson. I think that's the right idea, and that we can have running and net games as part of a lesson together. (Max, Interview 3)

Max was concerned that the traditional multi-activity block structure of the curriculum lacked continuity and progression as activities stood alone and were only visited once every academic year. "There's no continuity of learning, they [the children] don't pick up a ball when they're doing eight weeks of gymnastics or they don't work on apparatus when they're doing... so I like the balance of sort of core activities and it's just continual learning."

To offset the multi-activity block approach to teaching physical education Max designed what he called 'core skills' lessons. The premise behind these lessons was to have a "continual build up of core skills like *Basic Moves* but throughout primary four, five, six and seven." Essentially Max modified the underpinning features of *Basic Moves* incorporating guided discovery, working in stations, and combining fundamental movement skill development with applications into the middle and upper primary years physical education curriculum:

These core skills lessons which basically take the ethos and philosophy of *Basic Moves*...we've got these two triangles: technical, adaptable and creative, and balance and object control and travelling going on the whole time but with the bigger kids. (Max, Interview 3)

The 'core skills' component of the physical education curriculum complemented and ran congruently with the application component where the children had the opportunity to employ their skills in more specific activities such as basketball, rugby etc. During core skills lessons Max facilitated opportunities for the children to explore movement, experiencing the links between specific activities. For example, one core skills lessons I observed involved a central net element, an invasion games element and a balance and co-ordination element using apparatus. This was the last

in a series of core skills lessons that had been linked with application lessons centring on basketball. While Max had assumed responsibility for teaching the core skills lessons, the class teacher taught the discrete basketball lessons.

Making links with basketball, within the core skills lesson Max set up a station that involved the children in a modified small sided basketball game. To counteract the situation where gymnastics had become a traditional, stand alone and disparate element of the primary physical education curriculum Max introduced what he described as a balance and co-ordination element to the core skills lessons. This provided the children with the opportunity to use gymnastics apparatus outside of a gymnastics context which supported them to make links between physical education activities like gymnastics and basketball which may previously have been perceived as incongruent. In previous lessons Max had questioned the children about connections they could identify between the basketball and balance and coordination stations. The children were able to identify that the balance and coordination element of lessons helped them to work on keeping their balance when moving around and stopping during a game of basketball. In this lesson the balance and coordination station was split into two sections, in one section the children were encouraged to work as part of a group to create a balance sequence to music whilst in the other section they were encouraged to work individually on apparatus to combine balance and roll. The third station Max set up for this lesson was a central net station. His reasoning behind this was that it fed-forward to the focus of the physical education curriculum in the following term which was central net games and linked with a badminton club Max was intending to run in the mornings before school. At the central net station Max put out badminton rackets and shuttles and gave the children a free choice in how they played here, cooperatively or competitively.

As Max developed the 'core skills' component of the physical education curriculum he engaged in a process of continuous learning and inquiry. During and after physical education lessons Max reflected on the physical education lessons he was delivering and the children's response to them. He then fed these evaluations back into the change process to inform his future planning.

I tried lots of things and it was horrendous and lots of things didn't work and I haven't got it right now but I think the kids are more [engaged]. Also the kids are not used to this type of lesson they are used to coming in and having whole class lessons doing 'fitba' or 'basketba' or 'dance' and I think to get their mindset around the fact that they've got to throw a ball in a team over there and then come and be creative on their own over here and then work cooperatively with somebody over here and then go and be competitive and to use all of this in the space of an hour or whatever, I think they found this quite difficult as well but I think it's the right way. (Max, Interview 3)

During the year of the study Max reached a point where he felt confident and comfortable experimenting with new ideas in physical education lessons. Reflection and evaluation had become firmly embedded within his practice guiding the changes he was making. The 'core skills' innovation Max implemented stemmed from his personal vision of physical education; it was a product of his continuous learning and creativity, born from his reflections, evaluations, experimentation and questioning.

### **Lara: Combining 'traditional' physical education with a developmental approach**

Similar to Max the physical education curriculum Lara devised evolved over time. Lara had experimented with a variety of different curricular and pedagogical approaches in physical education, in particular drawing on *Basic Moves*, *Sport Education* and *TGfU*. Lara was keen to involve the children as much as possible in their learning to do so she took on more of a facilitator role:

First of all in many ways it is a partnership and I think that is what I am trying to get across by this idea of trying to listen to the children, trying to go with them, but at the same time being confident, where you're: 'I know where this is going to but I can give you this or we can use this vehicle that you are suggesting as a way to get that'. (Lara, Interview 2)

As this quotation illustrates, involving the children more in their learning was not straightforward. Within the 'partnership' which developed over time and with experience, Lara had to work out her role and how best to support the children. A particular example from a planning conversation that exemplifies this is a sequence of hockey lessons Lara recalled teaching with a primary six year group.

During this sequence of lessons Lara found that she had to balance the children's requests to play a full-sided game with her developmental vision of physical

education. This was not the first time Lara had found herself in this position with the children. In the second interview Lara recollected the previous year when she had a similar request from a child:

Last year one of my children was saying why do we always have to play small sided games and I was able to say, well these are the reasons why and to go through it with that child and for them to walk away going: ‘No, you’re right’, so I think it’s more about now I’ve got more of the answers, I don’t have them all but I can justify where I am. (Lara, Interview 2)

Subsequently Lara drew on this experience and her growing confidence to experiment with a different approach to answering the children’s requests for a more traditional physical education lesson.

Building on the generic invasion games approach she had taken with the primary six children in the previous academic year, Lara sought to explore hockey as a specific invasion game in more depth. She stated that she adopted an approach to teaching and learning that drew on situated learning (Lave and Wenger, 1991) and *TGfU*, providing the children with the opportunity to learn the skills and tactics of hockey by playing the game. Through this approach Lara reflected on how the children’s understanding of the game grew in a deeper way:

There’s more sharing going on, there’s more cross invasion game learning going on. I’ve gone into the game in more depth than I’ve *ever* done with a class before, even though they’re primary six, from the point of view we’re really breaking down the elements of attack and defence. (Lara, Planning Conversation 2)

I had the opportunity to observe one of these hockey lessons where the children were exploring the related concepts of space, attack and defence. The lesson opened with lots of questioning and discussion as Lara supported the children to reflect on their previous learning and link it to the purpose of the lesson. In previous lessons the children had been involved in playing small-sided games but to specifically address the concept of space Lara engaged the children in drills to isolate and practise this skill. The drill I observed involved the children working in groups of three to pass the ball between each other while moving from one end of the pitch to the other. Through this drill the children had to pass and look for space to move to. As the lesson progressed Lara asked the children to modify the drill to make it more like a

game situation, so static and then moving defenders were introduced. At the end of the lesson the children played small-sided games again providing them with an opportunity to put the skills practised in the drill into an applied context.

As the hockey sequence of lessons progressed the children questioned why they were playing small-sided games of hockey rather than larger-sided games. Lara found an innovative way of responding to the children's request by setting up large-sided games and incorporating them into the physical education lessons as a learning experience:

So I had videoed the small-sided games...so in their small- sided games they were developing passing and moving to a space, they were developing the skills within that context. Then I videoed the large-sided game of ten-a-side with subs, and they set the criteria, they had a whiteboard, it was a tick frequency chart and they had their criteria, they had their four-a-side and then ten-a-side and they had to tick every time they saw a good use of space, whatever their criteria was....So that was just purely a classroom session and then at the end, they spoke about which game suited them at the age and stage they're at....Well, it was obvious, and it was astounding visually. I took photographs of all of their whiteboards, which I've saved on to the server, as an assessment tool of, you know, of their learning. And, just visually, you could see the big crosses beside the ten-a-side...[In the ten-a-side the children were like] swarms of bees following this ball around the pitch! And it was so apparent visually...the real power of video...They were just like "Oh my God". It was like somebody taking a mallet and hitting them over the head. (Lara, Planning Conversation 2)

This example provided by Lara illustrates how rather than simply enforcing her developmental approach to physical education on the children she attempted to incorporate their traditional outlook of physical education turning it into a powerful learning opportunity.

### **Imogen: Reflection and evaluation**

As Imogen had recently graduated from the PGCert and was only teaching physical education one day a week within her school she was still in the early stages of putting into practice what she had learned. As intimated in chapter five the first area Imogen sought to get to grips with was *Basic Moves*, therefore her early attempts at making changes to the physical education curriculum focused on the infant years. Her early exploration of *Basic Moves* was also influenced by the fact that she had

responsibility for a primary two class the year previous to this study. When I spoke to Imogen about *Basic Moves* and observed her teaching these lessons it was apparent that her confidence with this approach was growing and she wanted to find out the impact of *Basic Moves* on the children's learning of fundamental movement skills. The following example of a discussion we engaged in exemplifies the process of continuous learning Imogen had become immersed in as she attempted to put *Basic Moves* into practice.

Imogen shared with me that she noticed a clear difference in progression between two primary three classes she was teaching. One of the classes she had taught as a class teacher the year before and so they had experienced a full year of *Basic Moves* with her. Imogen had only worked with the other class for a term in the previous academic year, she reflected that they were not as mature and lacked the same depth of knowledge. Imogen asked me to observe consecutive *Basic Moves* lessons with each class to see if I could identify the differences she had perceived between them. At the end of the first lesson I noted in my field notes:

*This class did not listen well all the time to instructions and on a number of occasions instructions had to be given a number of times...While the children were all engaged and on task they were focussed on what they were doing as individuals rather than trying to cooperate with their partner.*

In contrast at the end of the second lesson I noted:

*With this class the children generally organised themselves better...The children were more on task and more able to take responsibility for themselves than the last class. Children listened well to instructions and followed them.*

(Imogen Observation 1 field notes, 16/10/2010)

I noticed a clear difference between the two classes. From this observation I presumed that the second class were the class that Imogen had previously taught as they seemed more mature in their attitude and movement.

During subsequent interviews Imogen continued to reflect on these two classes:

Imogen: I think what they [her previous class] can do is first of all their organisational skills of equipment are much better, they know exactly what I'm asking them to do. Also they can verbalise

what they're learning and they remember and retain what they should be doing for a long jump or a high jump. They'll tell you what their body should be doing based on the questioning that they've been given and they can assess each other. I feel learning with them is much better. They're much more able to stand there and look at a partner and work with a partner in that context of watching, helping, saying 'do this better' and then the child tries to do it better so you have all this peer learning going on. That class definitely work better than the other primary three class which haven't had that amount of time.

Researcher: So you're noticing that with the class that have had you for longer, you're seeing progression?

Imogen: Yeah just so used to working like that so it becomes a lot of the routines and the sort of attitude towards peer work and the cooperative work and things like that are much more embedded as a result. And as I say they do retain because it's been constant repetition over the year like they've had this touching on everything over and over again, they can verbalise it and feed it back to you.

Researcher: Yeah 'cause you are repeating it over you know as they go through and you've been with them.

Imogen: Yeah and I think for example things like the hockey dribbling which I've just touched on, they did that with me last year. I've taken them on much more quickly to a little game... Whilst the other primary three I just felt I'm not even going to attempt that, we did do it eventually last week but the speed of them being able to move from one to the other was more restricted 'cause they hadn't had the dribbling input and the ability to know how to control it.

(Imogen, Interview 2)

As Imogen became more comfortable with teaching using *Basic Moves* as a framework she began to evaluate what impact, if any, this approach had on the children's learning. Over time Imogen noticed a difference between the primary three classes, one had received a greater input from her regarding *Basic Moves*. Imogen utilised the planning conversations and observations with me to think out loud about this reflection and gain a second, outside opinion on her reflections.



## **Jackson: Experimentation, a process of trial and error**

Having recently graduated from the PGCert like Imogen Jackson was also in the early stages of applying the knowledge and ideas he had gained. In comparison to Imogen, Jackson taught physical education full-time within his school which gave him more time to experiment and more scope to build the physical education curriculum. In the first planning conversation Jackson described how he had introduced a new approach to teaching and learning in physical education that he had learned about from the PGCert, *Sport Education*. He decided to use this approach to deliver physical education with the upper primary school children (primary six and seven). Jackson spoke of being “excited” about trying *Sport Education* and that he: “invested a lot of time and a lot of energy in it but I think that it’s really paid dividends.” To support the implementation of *Sport Education* Jackson used Siedentop, Hastie and van der Mars (2004) book which provides resources that can be used to establish a season (see Appendix F for an outline of *Sport Education*).

When Jackson introduced *Sport Education* to the children he gave them a choice about the activity they used as the stimulus for the season. They opted for football. To further actively involve the children in the season and give them greater responsibility for their own learning Jackson: enlisted their help to pick teams; gave them duty roles as well as playing roles and gave them the opportunity to plan and lead their own practice sessions. The following vignette outlines Jackson’s experience of applying *Sport Education*.

### **Jackson Vignette, Planning Conversation 1**

Starting out I went into the classes and showed them the Power Point that kind of breaks down what it is all about talking about competency, literacy and enthusiasm and the kids really got fired up about it, they got really excited about the jobs [roles]...So even before the pre season training we had the picking of the teams and I got kids involved in that and really I wanted children involved from the start right through to the end...We sat down and we discussed who would go into which teams, discussed why and we came up with the mixed ability teams and then really launched it with the classes and they were dead excited. We moved into the pre-season training, there were a few niggles in the different groups. I tried to keep them together though rather than just giving up and saying this isn’t working. Trying to get them to resolve their differences because as adults if you are put into a staff team and it’s not working together you don’t just leave the school you’ve got to make it

work, and for kids surely that's something we've got to try and teach them, resilience. So worked away at that and as a result really kind of having come to the nearer end of the season it's been a big success and people respect one another more, they're less inclined to fly off the handle at one another and just the different responsibilities. Duty team I think still I'm kind of laying the stuff out from the cupboard just 'cause I know if I go in they'll start tearing everything away [laughs] but you've got to kind of be willing to go to that chaotic point and let them do it. So I've kind of been doing little bits of spoon feeding gradually introducing them to things. But today, for example, I had them out this afternoon it was one group who were the duty team and really they didn't cope very well they just didn't, first of all they didn't pick up the stuff because they just didn't see it outside the hall. I'd said to them they missed it and they came out the pitches were kind of a mess all different sizes and it just didn't really go well and so it has an impact on the rest of the class and so I'm going to speak to them about that next time. Not get on at that group but just say it's the responsibility of the duty team to work really hard and think in terms of pride laying out the space and keeping it right for the rest of the kids and just making it flow smoothly.

*Sport Education* appealed to Jackson's constructivist outlook on physical education as it provided an opportunity for the children to take responsibility and ownership of their learning. The *Sport Education* experience was one of constant learning for Jackson and the children. As Jackson reflected at the end of this extract things don't always go according to plan but mistakes can be valuable learning experiences. Additionally the children learned during the *Sport Education* season how to work together even when there were times when they found it difficult to work in teams. Jackson invested time in the *Sport Education* season and treated it as a learning experience for both him and the children.

As previously described in chapter five Jackson used his own reflections and feedback from the children to evaluate the *Sport Education* season. His first attempt at delivering a season of *Sport Education* was one of trial and error, yet one that he was also keen to repeat. He expressed that he wanted to try using a different activity as a stimulus for a season in the future and that the children had requested to use the model again. Reflecting on the impact of the *Sport Education* season on the children's learning Jackson noted: "hopefully the skills that they gleaned from the *Sport Ed.* they can bring into the regular lessons and I do seem to see that happening too which is great." The evaluations Jackson made of the *Sport Education* season

affirmed the positive aspects of the experience and what the children had learned from it while also highlighting aspects of the season that could be improved.

As was established in the previous chapter, and is further exemplified through the previous examples, continuous learning came to underpin the teachers' teaching practice. The main way in which this was manifested was through experimentation and questioning. All of the participant teachers were keen to try out the new knowledge and skills they had gained from the PGCert within their school contexts. This finding accords with previous work by Lasky (2005) and Stoll (2009) on the individual capacity of teachers to manage change. Lasky (2005) outlines how the individual capacity of teachers encompasses a number of factors including willingness to learn and viewing learning as a continuous process. Stoll (2009) extends this further to discuss capacity in wider terms and in relation to school improvement:

Capacity is a power—a 'habit of mind' focused on engaging in and sustaining the learning of people at all levels of the educational system for the collective purpose of enhancing student learning in its broadest sense. It's a quality that allows people, individually and collectively, routinely to learn from the world around them and to apply this learning to new situations so that they can continue on a path toward their goals in an ever-changing context.

(Stoll, 2009, p. 125)

I would suggest that reflection, questioning and experimentation became 'habits of mind' that permeated the teaching practice of the participant teachers in my study and consequently their capacity to enact change was enhanced. Consistent with the findings of Kirk (1988) this study found that experimenting with ideas in their own physical education lessons enabled the participant teachers to establish "a clearer vision of what might work and what might not" (p. 452). It also contributed to the teachers' understanding of the uniqueness of the children they were working with and the contexts they were working in. There are few studies within the field of primary physical education that can provide as detailed examples of what primary teachers are doing in their practice, what they are thinking and how they are enacting change. This small scale study contributes to literature on primary physical education by exemplifying how the primary physical education curriculum can be developed beyond the traditional sport focussed multi-activity model.

## **Collaboration and Connections**

The participant teachers in this study used their initiative to make changes to their own practice and I would argue that initially they benefitted from the ‘solitude’ their autonomy provided them to initiate these changes. In line with Fullan (1993) the teachers needed time and space to develop personal meaning and experiment with ideas. However as Fullan (1993) also contends there is a ceiling to how much can be learned in solitude: “the ability to collaborate – on both a small and large scale – is becoming one of the core requisites of postmodern society” (Fullan, 1993, p. 17). As previously discussed in chapter five the PGCert provided an opportunity for teachers to come together and learn from each other and stressed the need for them to attempt to collaborate with others within their school contexts. The participant teachers from my study understood that for the changes they were making to be sustainable they had to attempt to collaborate with key stakeholders at a number of levels: community, local authority and school. However this proved challenging and while there were instances within the change stories of each teacher where they were able to collaborate with others and share their vision of physical education there was also a clear theme of isolation. The attempts made by the participant teachers to collaborate with others stemmed from their desire for the physical education curriculum to be connected with the curriculum as a whole and to ‘real’ life.

### **Connections**

#### *Cross-curricular Links*

Corresponding with the emphasis placed on interdisciplinary and lifelong learning by the new curriculum guidelines in Scotland, *CfE*, Max, Lara, Imogen and Jackson recognised the potential for knowledge and skills developed in physical education to be applied across and beyond the school curriculum. They all aspired to make cross-curricular links through physical education, as the following planning conversation extracts from Imogen and Lara illustrate:

I’m doing Victorians as a project possibly around that time so I was going to use the canal which is next to the school as an Outdoor Journey opportunity as part of that project. So we’re doing activity as part of a project, so it’s all cross-curricular linking. (Imogen, Planning Conversation 1)

Last year I tied it [gymnastics] in with what they [primary four] were doing in topic so they were telling, the story of the Celts invading, so again trying to make links where I can. And that's obviously easier when I'm working with that year group. (Lara, Planning Conversation 1)

There may have been an aspiration to make cross-curricular links through physical education but in practice this proved difficult for Lara, Max, Imogen and Jackson to achieve:

I've not been going to classes and doing sit down writing lessons or working on their own folders. I really wanted them to be doing that in their own time because I feel pressure on myself to be keeping them active that is really my remit. And so what I found is I've not really had the back up from the teachers because they've not had time and maybe they've not known what to do despite me leaving the folders in the classrooms. (Jackson discussing the class element of the *Sport Education* season he trialled, Planning Conversation 1)

Researcher: And you talked about possibly doing an Outdoor Journey to link in with the topic [The Victorians].

Imogen: Can't do it, no time. I wanted to do it along the canal and all the rest of it but running out of time, haven't got time.

(Imogen, Planning Conversation 3)

As these reflections from Jackson and Imogen attest, establishing cross-curricular links required an investment of time and collaboration with class teachers which in practice was easier said than done.

The only teacher who had managed to make significant progress making cross-curricular links was Max. There were numerous examples within the planning conversations with Max that illustrated how he had attempted to provide a more connected physical education experience for the children in his school. With the support of the head teacher and his colleagues Max had been able to extend his role beyond the gym hall and into the classroom. One specific example he shared centred on a series of basketball lessons he had planned and delivered for a primary seven year group in collaboration with the class teachers. The basketball sequence of lessons drew loosely on the *Sport Education* model of curriculum and instruction where the children worked in teams and Max attempted to make links beyond the gym hall. Additional to their physical education time Max worked with the children in their classroom, setting various tasks: searching the internet to find out about the

NBA in America and about basketball teams in Scotland; reading newspaper reports on basketball games and then writing reports about the games they were playing, and writing letters to their local basketball team. Max was extremely enthusiastic about making cross-curricular links through physical education and saw great value in it: “I just had lots of boys desperately wanting to write sports reports for their basketball team and things and pick up a pencil and write stuff.” As a result of wider support within his school and time to focus on establishing cross-curricular links Max had managed to extend the reach of physical education beyond the gym hall. However, towards the end of the study changes in Max’s timetable (discussed earlier in this chapter) jeopardised the collaboration and cross-curricular links he had built up, Max reported that he felt physical education had again become a “disparate subject”.

### *Physical Education beyond the Curriculum Linking with Physical Activity*

As well as making links across the curriculum through physical education the participant teachers also wanted to extend the scope of physical education beyond the school curriculum. Resonating with *CfE* the PGCert promoted a lifelong approach to learning in physical education. The PGCert encouraged teachers to think about physical activity as an evolving lifelong endeavour pursued for different reasons at various times in our lives spanning four possible dimensions: functional, recreational, health related and performance related (Penney and Jess, 2004). One of the key aims of physical education highlighted by the PGCert was to encourage and enable children to learn about being active, enjoy being active and stay active (Penney and Jess, 2004). All the participant teachers in my study took a lifelong view of physical education and physical activity and saw a cross over between these concepts. Correspondingly they all recognised the role they personally played in promoting physical activity through physical education within their school contexts.

Jackson described how a lifelong perspective on physical activity underpinned the physical education curriculum he delivered:

It’s not just about coming to PE to run around, to burn off some energy before we go back to class. Thinking about lifestyles, thinking about the future, thinking about developing particular sports or techniques which might

feature in your future, the kids seem to have a grasp of this. (Jackson, Planning Conversation 3)

Jackson enacted this lifelong perspective, exploring the links between physical education and physical activity in a variety of ways. For example I observed an athletics lesson with a primary seven class where, largely driven by the enthusiasm of the children, Jackson incorporated a performance and competition element into the lesson. Jackson gave careful consideration of how to make the competition inclusive while also appealing to those children within the class with a more performance orientated conception of physical education. He spent time with the children over a number of weeks learning about high jump technique. In the final week of the sequence of lessons Jackson introduced an element of competition. Initially he encouraged the children to compete against themselves as they took turns jumping to try and beat their own jump. Jackson observed the children jumping and gave them one to one advice after each jump. This personal competition then progressed into a class competition at the end of the lesson:

*At the end of the lesson Jackson gathered all the children in the hall and said that they would have a high jump competition. He said to the children if they wanted to jump they could and if they didn't want to jump they could sit at the side to observe. The whole class got into the competition, there was a real feeling of class camaraderie. They were cheering all the competitors on and were excited by the jumping. There was lots of cheering and high fiving. The children competing got one jump each. If they missed the jump by a lot they were out. If they missed the jump by a little they got a second attempt. The elastic bar kept getting put up, by the end of the competition there were three boys remaining and they jumped 1.2m. Only one boy managed 1.3m, he flew over the bar. He used a scissor kick technique, he was really good. The children were cheering all the last three boys on. The children really loved the high jump competition even those not taking part were involved. (Jackson, Observation 8 field notes, 01/06/11)*

As this extract from my field notes demonstrates Jackson had managed to incorporate competition into the physical education lesson in a positive way. I was really struck by the enthusiasm the whole class showed for the competition element. Every person in the gym hall was involved in the competition and genuine excitement was generated to see how far everyone could jump.

As well as making links to physical activity through physical education all the participant teachers also worked closely with Active Schools and other outside agencies such as sports development officers and community clubs to promote physical activity. Both Max and Jackson discussed working with Active Schools coordinators to incorporate physical activity ‘taster’ sessions into the physical education curriculum:

Quite a lot of tasters going on at the beginning of the year just to get people interested in clubs, doing it alongside PE, me working with the staff and ensuring that it's not [just] coaching sessions that there is teaching, that there is skills and that it is physically educational...On the whole they're fantastic the people who come in at the moment and it really, it is teaching, it is physical education because they are breaking down the skills, they're making it meaningful, they're taking the kids on. For example X is in from a local cricket club to work one period a week with primary five then I'm going to do my striking and fielding in the summer time and it'll lead onto that.  
(Jackson, Interview 2)

In this interview extract Jackson views his role as bringing an element of teaching to the physical activity taster sessions that were incorporated into the physical education curriculum. He valued the input from outside agencies and the cricket example illustrates how he strived to make links between what they offered and the physical education curriculum he devised.

Max was involved, in conjunction with the Active Schools coordinator, in organising a week of events in his school at the beginning of the first term to promote physical activity opportunities available to children within the local community. I went into the school on one day during the taster week to observe the taster sessions. On this particular day in the afternoon the parents had been invited into the school. The purpose of bringing parents into the school was to provide them with information about the Active Schools activities available and local sports clubs operating within the local community. To advertise physical activity to both pupils and parents, groups of children shared what they had learned from the clubs and after school activities they attended. After the demonstrations there was then an opportunity for children to take their parents around the “marketplace”. This offered parents the opportunity to meet with representatives from local community clubs and sign their children up to Active Schools clubs. Within the marketplace there was also a stall



selling smoothies, elderflower juice and healthy snacks made by the children. The taster week exemplifies how Max actively sought to connect physical education and physical activity by extending his role beyond the gym hall:

So my job has to be having the impact on a really lofty thing like lifelong physical activity, lifelong learning and physical education so that has to be my job... I think when we're class teachers you feel like you're a class teacher, social worker, police, you know, all, and now I feel I'm a PE teacher, I am sort of sports organiser, I'm an Active Schools coordinator as well and I'm a community liaison.. (Max, Interview 3)

This quotation illustrates how Max perceived that his role as a physical education teacher extended to promoting physical activity through physical education.

Lara and Imogen also attempted to build a working relationship with Active Schools and other outside agencies. Imogen reflected on the raised profile of sport and physical activity within her school:

I think there's a higher sport profile because I've been involved in it and the children, they see me as being a teacher as well as being the sport person in the school and a lot of them come up and they speak to me about things [they do] out of school. And I think active schools as well have a big part to play and I now help with that organisation. (Imogen, Interview 3)

In contrast Lara's reflection on connecting with Active Schools and sports development officers exemplified the difficulties connecting at different levels. Lara managed to build up a solid working relationship with the Active Schools coordinator. They would liaise regularly regarding physical activity and physical education within the school and where possible would collaborate on projects such as the Sport Week. However Lara found it more difficult collaborating with sports development officers from community clubs partly due to staff turnover and because they were mainly involved in the school delivering 'taster' sessions.

Imogen was actively involved in promoting physical activity within her school context and had taken on additional responsibilities. Supporting the Active Schools coordinator Imogen was involved in organising and coaching after school clubs. Additionally she took on the remit of bringing outside agencies into the school to complement the physical education curriculum and taking the children outside of school to various competitive and non-competitive events.

With Active Schools I know all the clubs that run. Some of them I can tie into, some of them I can't but again it's letting them [the children] see that this is what the game is and there's that opportunity for you to go to Active Schools and then from Active Schools they'll, you know, there's always the opportunity for a club [within the wider community]. (Imogen, Planning Conversation 1)

While Imogen enthusiastically took on the additional responsibility of being the link between physical education and physical activity within her school context this also placed pressure on her time. Juggling the dual role of teaching a class and teaching physical education she found it difficult to find time for the added responsibility of organising physical education in her school a task which had previously been part of the remit of the Depute head.

The aim for the participant teachers in my study was not only to teach physical education but also to raise the profile of it as a subject area, making links within and beyond the school curriculum. The personal vision and descriptions of physical education and physical activity provided earlier in this chapter attest to the holistic approach the participant teachers took to teaching and learning in physical education. They strongly believed in the potential of physical education to meet the learning needs of the children they were working with beyond the purely physical, as this extract from the final planning conversation with Jackson illustrates:

I think PE lends itself really nicely to working in groups, working in pairs, challenging yourself, working individually and it gives the kids these opportunities to really develop their social skills and inter-personal skills which are essential for life skills. And there are other skills in PE: co-operation obviously and other things, problem solving, that they're facing in PE and they're grasping this and they're seeing that this really is a big subject and there's a lot going on in terms of their development. (Jackson, Planning Conversation 3)

Learning in physical education was perceived as a lifelong endeavour by the participant teachers exemplified in their commitment to promoting and incorporating the concept of lifelong physical activity within the physical education curriculum:

I think you can talk about fitness and health and things but I think now and hopefully this has transmitted to everybody else that PE is about lifelong learning and lifelong involvement and I don't think anybody ever told me that before...Now I kind of remind people of it whenever I can get on a soapbox and tell them about it. (Max, Interview 1)

I would suggest that this quotation from Max sums up the lifelong theme underpinning the physical education curriculum devised and delivered by the participant teachers in this study.

### **Collaboration**

Initially the participant teachers worked alone to make changes to their own practice. During this time they were able to work out their personal vision and experiment with different approaches in physical education (Fullan, 1993). Once the participant teachers had some idea of things that worked and didn't work they extended the changes they were making in their practice to modify the physical education curriculum. Through this continuous process of experimentation and evaluation the teachers could see that changes they were making to the physical education curriculum were having some impact on the children's learning, as the examples provided earlier in this chapter illustrate. This increased their confidence and competence contributing to the participant teachers feeling more comfortable articulating and sharing their personal vision of physical education (Thorburn, Carse, Jess and Atencio, 2011). To further extend the scope of the changes made to the physical education curriculum the participant teachers recognised that they needed to collaborate with others both within and outside their school contexts.

Despite their general work pressures I would argue that as Max, Lara, Jackson and Imogen sought out opportunities for collaboration they became curriculum leaders as well as teachers of physical education. They were not necessarily given a leadership role, rather their leadership was expressed in the way they used their initiative to take action and make change happen (Macbeath, 2005). Concurrently, as a result of their additional physical education qualification and their role in raising the profile of physical education within their school contexts the participant teachers were perceived by colleagues as 'experts', thus confirming their status as curriculum leaders.

Within their schools while all the participant teachers attempted to liaise and work with class teachers and senior management they still found that they were isolated, as Max succinctly stated:

If you're a PE teacher you don't have a stage partner and the Head doesn't discuss the merits of your plans with you, and the Quality Improvement Officer (QIO) won't come anywhere near the gym hall because they're going to go and look at maths and language and things like that so sometimes I could do with a bit of steering. (Max, Interview 2)

As the participant teachers extended their remit to promote physical activity they made contact with individuals and organisations outside of their schools that provided potential for support and collaboration. Working with other physical education professionals was viewed by the participant teachers as a means of presenting a more connected approach to physical education and physical activity while also providing an important learning experience with the potential to add to their knowledge and skill base. However, the time commitment involved in maintaining these connections along with changes in personnel made working relationships with Active Schools and outside agencies difficult to sustain. Another potential source of support and collaboration were other physical education specialist teachers, working within the local authority where each teacher was based. However, the change story of each teacher reveals complex dynamics with regards to other physical education teachers as a source of support and collaboration.

### **Challenges to Collaboration**

*Max: "People are the best resource"*

Max valued the opportunity to work with others as he instigated change:

I think people are the best resource. 'Cause people who know what they are doing are invaluable and if you can, if you had time to work with them and learn from them that's better than any book or resource or You Tube or anything. (Max, Interview 2)

I would suggest Max's enthusiasm for physical education and his openness to collaboration contributed to him being able to build working relationships with key stakeholders both within and outside of his school context (e.g. colleagues, physical education teachers, sports coaches, Active Schools personnel, parents and members of the DPEG). However, as the interview and planning conversation data confirms, establishing and maintaining these relationships was a long and arduous task. In

particular, the people Max thought he could learn the most from, other physical education specialist teachers, proved to be a difficult group to work with:

I mean stupid of me but it took me two years to realise that the PE teachers meet on in-service days and I literally I just wasn't on the email list so I didn't get invited so I didn't know this was going on...  
I'm not much part of a community of PE teachers who, who do things and share ideas and stuff. And the ones I [speak to] I think they think 3-14 teachers are charlatans because they're not proper PE teachers because they didn't do four years at Moray House. And then *Basic Moves* is to be laughed at: "but you don't do *Basic Moves*, no you can't do that" the people say these things to you and, so do you see what I mean. (Max, Interview 3)

Analysing Max's attempts to collaborate with the physical education specialist teachers in relation to communities of practice illustrates the potential difficulties in attempting to straddle different communities of practice. The shared repertoire that emerged from the embryonic PGCert community of practice appeared to be at odds with the beliefs and approach to physical education adopted by the specialist teachers. I contend that Max went from a central position as an old-timer within the embryonic PGCert community of practice to a newcomer working on the periphery with the physical education specialists.

As well as looking outside his school context for support and people to work with Max also attempted to make the most of the collegial ethos present within his school. Max described his school as:

Progressive to work in...it doesn't pay lip service to things. It kind of goes whole heartedly and everyone jumps on good things they don't do things unless they think they're worth it. (Max, Planning Conversation 3)

Max's description of his school alluded to the presence of collegiality particularly when he outlined how teachers shared good practice:

If something's really, really good, someone said cooperative learning's the way you want to go, it's brilliant and they advocate it then you go with it. And there's a few sort of people going for chartered teacher standard and things and if they get up and sort of eschew brilliance then people go this is marvellous and people change the way they plan and change the way they do things because they've got good demonstrations of ways to work, me included I think I should be like that, I should do that as well. (Max, Planning Conversation 3)

Supported within this collegial environment Max wanted to share what he had learned about physical education with his head teacher and his colleagues. As mentioned in chapter five sharing the assignments he wrote as part of the course with his head teacher enabled Max to articulate his personal vision for physical education backed up by relevant literature and policy information. He managed to capture the interest of his head teacher who in response placed physical education on the school development plan, engaged the whole school in physical education in-service sessions and provided him with, in Max's words a "blank canvas" to make changes to the physical education curriculum. The task of raising the profile of physical education within his school was entrusted to Max by the head teacher and he relished the challenge. The autonomy this trust afforded him combined with the knowledge gained from the PGCert enabled Max to "think outside the square" to put his innovative ideas into practice (Argyris and Schon, 1994 as cited by Hoban, 2002). Additionally Max sought to extend his influence beyond the gym hall and into the wider school and community.

In collaboration with the DPEG Max took an active role in planning, organising and delivering the physical education in-service sessions requested by his head teacher at his school. These acted as a platform from which Max could share with his colleagues the knowledge he had gained from the PGCert. Most importantly the in-service sessions established some common ground regarding physical education between Max and his colleagues which enabled them to begin to collaborate in the planning and delivery of the physical education curriculum:

I managed to have some time to meet with each of the class teachers [to discuss] what they would like to do next year and whether they'd like to take this core skills bit and when they're teaching the core skills I would do the basketball or maybe they would like to do the dance and when they are doing that I could do the core skills. (Max, Interview 2)

Observing an in-service session towards the end of the period of the study provided further evidence of the collegiate ethos within Max's school and how Max was collaborating with his colleagues to plan and evaluate physical education and physical activity within the school using the new *CfE* experiences and outcomes.

Yet despite evidence of Max attempting to collaborate with others he still felt isolated within his school.

I don't have a support network here and talking about PE and if you do it's kind of you as a leader and with other class teachers. I will do more of this next year, I will talk about PE but they've got hundreds of other things going on in their mind and they don't want to witter on with me for very long. They want to do it: "right we've got ten minutes Max, right we'll plan this or oh yeah that sounds good." Whereas we were there talking about dance for two and a half hours on Friday [at the university], it was brilliant I loved it and it's great...everyone comes with the same sort of mindset and you meet with the DPEG group...they like me, I can go and speak to them and they respect what I say. (Max, Planning Conversation 3)

As this quotation from Max suggests despite his feelings of isolation this did not deter him from continuing to seek out opportunities to speak about physical education and he was slowly beginning to build a support network.

*Lara: Working with the physical education specialist*

Comparable to Max, because physical education had not received the same close scrutiny as the core subject areas of maths and language within her school, and coupled with the autonomy afforded her by her head teacher Lara was also able to freely experiment with curriculum change. Planning conversation data revealed that Lara consulted with staff about her long-term and medium-term plans for physical education. While her colleagues showed some interest in what she was doing they were generally content for Lara to assume full responsibility for the planning and delivery of physical education:

At the moment they [the teachers] are very much looking to me and using my daily plans...Nobody's breathing over my shoulder sort of saying you will [do], so I have that freedom. (Lara, Planning Conversation 1)

As previously noted the freedom Lara enjoyed enabled her to experiment with different curricular and pedagogical approaches such as *Sport Education* and *TGfU*. I would also suggest that the marginal status of physical education as a subject area within Scottish education (Thorburn, 2007) enabled Lara and indeed all of the participant teachers in my study to work under the radar of accountability measures which often accompany educational change. While Lara enjoyed the freedom to

experiment she too wanted to collaborate with colleagues and outside agencies to deliver physical education:

I think if I were to sit down and draw up my developmental needs it would be to get out there and watch more PE teachers actually teaching definitely because the more I'm getting into it the more I'm thinking: am I getting more set in my ways and more isolated than perhaps I might have been once. (Lara, Interview 2)

The senior management team and her colleagues may have backed the changes Lara was making to the physical education curriculum but the interest they showed in physical education was limited. Like Max, Lara found herself increasingly marginalised within her school setting.

Lara worked in a collegial environment where teachers worked together across year groups to plan the curriculum. However, I gained a sense from her change story that the school culture did not promote sharing of thinking and practice to the same extent as Max's school. Rather than force collaboration on her colleagues Lara went for a "drip, drip" approach to disseminate what she was doing. This involved sharing the plans and ideas she had for physical education with her colleagues, providing them with resources to support the lessons she planned and encouraging them to observe and get involved with the physical education lessons she delivered. Lara was cognisant that by isolating herself in the gym hall her practice could stagnate and to engage the whole school in change she had to find a way of sharing her practice:

I mean you are very aware as well like we all have our little kingdoms and I am aware of my ego in it as well. And you know the fact that I do want to continue to be open and it's almost the more you get into it the more ownership you may have and I can see pitfalls there too. I don't want to become this, you know this is my Bennachie [laughing] this is the way we do things... I am trying to continually change. (Lara, Interview 3)

With limited opportunity for collaboration with her colleagues Lara was proactive about seeking support outside of her school context. Lara valued and wanted to be part of some kind of network where she could talk about physical education and get advice. In particular she felt there was much she could learn from fostering working relationships with other physical education teachers, Active Schools and sports development officers.



Taking on the role of physical education teacher within her school provided Lara with the opportunity to work more closely with other physical education specialist teachers within her local authority. Echoing Max's experience of engaging with physical education teachers while there was some suggestion that the specialist group may have been slightly wary of Lara's credentials over time she seemed to have become integrated into the group:

I had to develop who and what I was in my completely autonomous way. I think with things when you had the PE teachers' sort of saying: "oh one of the criticisms [of the PGCert] I'd heard with gymnastics and things." And they're right you know safe practices in PE, gymnastics it's about knowing where and how, common sense. Maybe, I didn't get a module that they got [*laughter in voice*] when they were doing their four year degree, I don't know and I possibly never will. But I still, I've got a good network with the PE team looking at the people round the table. (Lara, Interview 3)

Throughout the year of the study Lara talked frequently about the other physical education teachers and what she was learning from spending time with them:

Now the majority of my learning is coming from others so the PE group, going to the health and wellbeing networking meetings. It is about communities of practice or you know engaging in dialogue with the High School and just getting to know the environment that you work in more and more. (Lara, Interview 3)

Becoming part of the physical education specialist group increased Lara's confidence and enabled her to extend her profile beyond her school. Lara was mixing with stakeholders at various levels within the education system: school, university, local authority and community.

At the local authority level Lara was involved with the local authority sport and education advisory group. Additionally, in collaboration with the DPEG she was delivering physical education professional development within her local authority on elements of the PGCert: *Basic Moves* and *Sport Education*. Her involvement in delivering physical education professional development provided Lara with a further opportunity to extend the knowledge and skills constructed through the PGCert beyond the gym hall. Delivering *Basic Moves* professional development Lara collaborated with other physical education specialists working with teachers from across the local authority. In contrast her first attempt at delivering *Sport Education*

professional development, which happened during the year of the study, was focussed on the staff in her school. Most of her colleagues signed up for the CPD along with a number of the physical education specialist teachers. Rather than hitting teachers with a one off workshop which professional learning literature suggests has limited impact (Armour and Yelling, 2004; Armour and Duncombe, 2004) four sessions were delivered over an extended period of time. The idea behind this format was to provide teachers with the opportunity to attempt to put into practice knowledge and ideas gained from the CPD. The feedback Lara received about the professional development was largely positive and it appeared to have had a positive impact on her colleagues:

After we did the *Sport Education* thing with volleyball the primary sixes came to me and said: “oh is it, would it be ok with you if we did a *Sport Ed.* thing for just four weeks ‘cause we want to give it a go.” And I was able to go “yeah” ‘cause we did central net games with them last year in a generic way and everything was there and so I could give background. (Lara, Interview 3)

This quotation suggests that through professional development Lara was beginning to establish a common ground between herself and her colleagues regarding physical education which offered the potential for further collaboration.

#### *Jackson and Imogen: Making tentative steps towards collaboration*

In direct comparison to Max and Lara, Jackson and Imogen had limited opportunities for collaboration. As they had only recently graduated from the PGCert they were both still in the phase of trying to negotiate their own personal meaning of physical education and, to quote Imogen “assimilate” the knowledge and skills constructed through the PGCert. Echoing the change stories of Max and Lara, during this assimilation phase Jackson and Imogen benefitted from working alone. While they were both attempting to articulate their personal vision of physical education with others and, as previously outlined, were attempting to make connections with Active schools they still lacked confidence to share their knowledge and skills with colleagues:

I have thought maybe I should sit down again I think I could do it [deliver professional development] with some people but others I think they would

just sit there and resent me doing it, I just don't feel comfortable when you're sitting there with people who don't want to listen to you. (Imogen, Interview 3)

I think people are still unfamiliar with *Basic Moves* and well I'm still getting to grips with it myself I know I'm happy enough doing some travelling, doing a kind of development thing and then an application through stations but I think I'd like to take it further and then get a bit more confidence with it. (Jackson, Interview 2)

As the quotation from Jackson illustrates before he could consider sharing *Basic Moves* in a professional development format with his colleagues he felt that he needed to build up his own confidence in this area first. Relating back to the previous section on mastery and inquiry, crucial to the participant teachers' ability to enact change was their feelings of confidence and competence in relation to physical education. It was only by putting into practice the knowledge and skills they had developed that their perceived feelings of competence to share their knowledge and collaborate with others increased.

Imogen felt that there were limited opportunities for collaborating with colleagues within her school; she described feeling like she was "in a void of her own". Some teachers observed her teaching physical education and asked about what she was doing but largely Imogen was left to her own devices to plan and deliver physical education. This was not a situation that Imogen felt comfortable with; in particular she was concerned with the lack of communication between her and the other physical education specialist working within the school. Imogen recounted how she had attempted to make contact with the specialist teacher:

I think the specialist, well I'll be honest with you, the other specialist I think it's that the relationships not there and I think that's partly my fault, I can't lay the blame at one person's door. But I have asked for support from the head to create that relationship it's not like I don't speak to X, I do but I think from a working relationship and developing the PE I think I'm finding that tricky. 'Cause I have said a few things in the past and I've just not got the reaction from her, she's not very positive towards change and that's what frightens me and that's why I feel [the head] needs to be there to support a change and get X's ideas on board as well. (Imogen, Interview 3)

Imogen wanted to work with the physical education specialist but from how she spoke about her relationship with the specialist during interviews and planning conversations I perceived there was tension within their relationship:

She would be the person I would like to speak to but I think with some of the reactions when I was doing my course I've said to her what I was learning about, I kind of got the feeling that she was putting down *Basic Moves*. Not interested in hearing what I was doing so I stopped speaking to her about it 'cause it's like a child if somebody's not listening you get a rejection and then you think oh well I'll just not say anything then carry on and do my own thing. (Imogen, Planning Conversation 3)

In an attempt to counter this tension Imogen approached the senior management team for support in setting up opportunities for her and the specialist to meet:

I would like management to be in that [liaison] discussion as well because I feel they want me to go down this route so they need to be there to support me to go down this route in as much as they are there to sort of help the discussion and move the discussion forward and sort of show that that's the way this school wants to go. (Imogen, Planning Conversation 1)

The head teacher was very supportive of the physical education Imogen was planning and delivering and was keen that her approach was adopted within the school. However, this placed Imogen in an awkward position as what she was doing seemed to differ greatly from the traditional approach adopted by the specialist. Imogen and I discussed her relationship with the specialist a number of times over the year of the study and despite Imogen's desire to communicate by the end of the year of the study little progress had been made.

I would suggest that the following statement from Jackson captures the situation all the participant teachers were in regarding sharing their knowledge about physical education and attempting to collaborate with others in their school contexts:

Yeah I think anybody will listen to me but generally my feeling is and I think probably their feeling is too although it's maybe unspoken is that they've got their stuff to be getting on with, I've got my remit to be getting on with, they don't want my remit and I don't want their remit so we just kind of work in that respect. (Jackson, Interview 2)

Time is a key commodity in education and the pressures placed on teachers and schools as a result of accountability measures have resulted in emphasising the

individual nature of teaching (Day, 1999). Teachers can work together and listen to each other but they lack the time and inclination to engage in deeper collaboration like team teaching or peer observation. Consequently for the participant teachers in my study who were “thinking outside the square” (Argyris and Schon, 1994 as cited by Hoban, 2002) and recognised the value in collaboration the present structures of schooling (Tyack and Cuban, 1995; Macdonald, 2003) conspired against them; the following quotation from Max illustrates this:

I would love to [observe people in other schools] but it’s never going to happen. We had a day [in-service] at X High School and people were talking and they were talking about sort of sharing and monitoring and stuff and I said this is a totally ridiculous conversation because it is never going to happen, there’s no point in even talking about it. In a primary school [doing] a PE teacher’s job, it’s not [possible] so we shouldn’t talk about it. (Max, Planning Conversation 3)

All of the teachers discussed wanting some kind of network where they could share their experiences, get advice and meet people in similar situations to themselves with a view to collaborating with them. In particular during the interviews and planning conversations they all expressed a desire to observe other physical education specialist teachers and PGCert graduates delivering physical education. The value of peer observation is also recognised at a policy level within Scottish education, as the recently published Donaldson Review into teacher education noted: “Peer observation has grown significantly in recent years but is still under developed as an important element in professional learning” (Scottish Government, 2010, p. 66). Despite teachers and policy makers recognising the positive impact collaboration can have on teachers’ practice, as the experiences of the participant teachers in my study exemplify, engaging in collaborative activities such as peer observation within the ‘real’ context of the school is ‘easier said than done’.

## **Conclusion**

Through their engagement with the PGCert the participant teachers developed a shared understanding of physical education which, within their school contexts, came to underpin their personal vision and practice. The physical education curriculum developed by the teachers exemplified their creativity and how they changed their

conception of physical education to incorporate a more holistic, inclusive and connected approach to teaching and learning. Contrasting the teachers' conception of physical education with their personal vision and what they did in practice revealed a clear connection between their "espoused theories and their theories in use" (Argyris and Schon, 1976 as cited by Day, 1985, p. 138), which I would argue contributed to the agency and resilience they demonstrated in their change efforts.

The participant teachers were passionate and committed to physical education and were determined to provide quality learning experiences for the children they worked with that took account of recent research. Correspondingly innovation was part of the daily work of the participant teachers, data from the planning conversations and observations demonstrated that they were immersed in a process of experimentation, reflection and evaluation. The participant teachers' commitment to physical education was also illustrated in the advocacy roles they assumed within their schools as they attempted to make connections through physical education within and beyond the school curriculum.

The teachers' efforts to raise the profile of physical education within their schools and change the curriculum were aided by affordances at the school level such as, interest from their head teachers and at a policy level, for example the mandate for two hours of physical education. However, there were also factors that constrained the change efforts of the participant teachers particularly exemplified through their attempts at collaboration. I would argue that while the merits of collaboration have been extolled within academic and policy literature my fine-grained study of change at the 'chalk-face' reveals that facilitating and sustaining collaboration within and beyond the school is a complex task. The issue of collaboration will be explored in more detail as I pull together the findings of the study in the following, concluding chapter.

## **Chapter 7 - Conclusion**

### **Introduction**

The main aim of this research study was to investigate the process of educational change from the perspective of the individual teacher. As outlined in chapter one, while there is extensive literature outlining the impact of large scale educational reform on teachers and teachers' response to change, there is limited in-depth research into teachers initiating change. This is a gap within the literature to which my study has contributed. This study provides a fine-grained account of how teachers responded to professional development and how they subsequently embedded professional learning within their school contexts as they enacted curricular and pedagogical change. The main question guiding this study was:

How do primary teachers with a further qualification in primary physical education construe and take forward educational change in primary physical education?

This entailed asking three further sub-questions:

- In what ways have these individual teachers' experiences of professional learning in physical education shaped their pedagogy and the primary physical education curriculum in their schools?
- How have these teachers instigated and implemented curricular and pedagogical change in physical education?
- What factors facilitate and impede the continuation of the process of educational change?

To address these questions I referred to educational change and professional learning literature, adopting an interpretivist, qualitative approach to the research.

Reflecting this interpretivist approach and my extensive reading around the interrelated concepts of educational change and teacher professional learning, I drew on multiple theoretical lenses to present the teachers' change stories. To answer the research questions the three analysis chapters were structured around the following areas:

- the teachers' backgrounds, what they thought about and how they taught physical education prior to engaging with the PGCert;
- the participant teachers' experiences of the PGCert and how it impacted on them;
- the teachers' present practice in physical education and how they instigated change.

Situated learning theory (Lave and Wenger, 1991) was used throughout this study to situate the learning and change experiences of the participant teachers, within their lived-in social worlds. To augment this theoretical framework a different theoretical lens was applied in each chapter to analyse each of the main themes in more depth. In chapter four Lawson's (1983a & b; 1986) model of teacher socialisation was applied to examine the background experiences of each teacher in relation to physical education and how these experiences contributed to their professional identity. Within this chapter I reflected on the background of each teacher to demonstrate how their previous experiences impacted on their engagement with the PGCert and their change efforts. Subsequently, in chapter five I established how the PGCert affected the participant teachers. The triple lens framework, devised by Fraser *et al.* (2007), was used to interrogate the structure and content of the PGCert. Using the triple lens framework enabled me to determine the particularities of this professional development that motivated the teachers to apply their learning within their school contexts. Finally, in chapter six I drew on the work of Fullan (1993; 1999; 2003; 2007), specifically the concept of change agency, to describe the physical education curriculum the participant teachers devised and the pedagogy they employed after completing the PGCert. Congruently, the role of the individual teacher in the change process was explored, and factors were identified which supported and impeded their change efforts. I now outline the main findings of my study centring on themes that emerged as I answered the research questions along with areas for potential future research.



## **Findings**

**Main Research Question:** How do primary teachers with a further qualification in primary physical education construe and take forward educational change in primary physical education?

This study has contributed to developing an understanding on a micro level of teachers' work and lives, and the complex process of educational change (Goodson, 2003). In line with Fullan (1993), Hoban (2002) and Goodson (2003), this study viewed change as a process and there is evidence to suggest that the participant teachers to some extent construed change in this way. The teachers perceived changing the curriculum and their pedagogy as a long-term, on-going, commitment. Throughout the planning conversations they reflected on and planned the physical education curriculum building on what had gone before. Correspondingly, the relatively low status of physical education as a subject area removed it from the glare of accountability measures and afforded the teachers the opportunity to focus on the learning needs of the children they were working with. As the teachers instigated change in their own practice they began to influence the children's learning, and attempted to extend their change efforts to colleagues both within their schools and the wider physical education/activity community. The participant teachers from my study were not simply on the receiving end of change, they were actively involved in managing the development of the physical education curriculum within their school contexts, which gave them ownership over the change process. I now outline themes in relation to each of the sub questions guiding this study, to explore in more detail the participant teachers' experiences of the complex process of educational change.

**Research Question 1:** In what ways have these individual teachers' experiences of professional learning in physical education shaped their pedagogy and the primary physical education curriculum in their schools?

Two themes emerged in response to research question one. Firstly, establishing a link between formal, off-site professional development and more informal, within school professional learning and secondly the capacity of the PGCert to attend to three

interrelated domains of influence of professional learning: personal, social and occupational. Each of these will be discussed below.

### **Theme 1: The link between professional development and professional learning**

In response to reflections on research into professional development made by O'Sullivan and Deglau (2006) I attempted to "tease out what and how aspects of the professional development work facilitate teachers' learning" (p. 448). There was a transformative element (Fraser *et al.*, 2007) to the professional development the participant teachers in my study engaged in. As Jackson described it, the PGCert merely 'whetted the appetite' of the teachers and led them to extend their professional learning into their school contexts. Contrasting with much of the literature on teacher professional development I examined how teachers applied the knowledge and understanding gained from CPD over an extended period of time within their school contexts. In doing so my study highlighted the link between teacher professional development and professional learning. The PGCert as formal, accredited, long-term CPD acted as a catalyst which immersed the participant teachers into a continuous process of professional learning within their school contexts.

The formal CPD sessions introduced the teachers to different approaches to teaching and learning in physical education providing them with broad physical education content and pedagogical knowledge which subsequently came to inform their practice. Rather than providing prescriptive lesson plans to be followed the PGCert emphasised that the approaches to physical education advocated by the course, such as *Basic Moves*, *TGfU*, and *Sport Education* had to be adapted by the participant teachers to suit the contexts they were working in. The following reflection from Imogen illustrates how she relished the opportunity to take ownership of her learning:

I quite like the freedom; I've always been like that, I don't like to have to follow things slavishly. I think that's where you're creativity as a teacher comes in and if you are just following a plan all the time you're not really, you're not really a teacher you're just following a set of instructions and well

anybody could technically do that. It's the fact that the teacher brings in their expertise and their ability to put that over in a way that helps the children and looks at what the children can and can't do and then moves them on.  
(Imogen, Interview 2)

As the teachers applied what they had learned from the PGCert their confidence and competence grew and learning became embedded within their practice. Without a prescriptive resource attached to the PGCert the participant teachers were able to assert greater ownership over their learning, developing a physical education curriculum which was responsive to the context they were working in. My study did not specifically focus on the impact of the teachers' professional learning on the children's learning. Yet through my observations and reflections made by the teachers during the planning conversations it became apparent that the teachers were attempting to gauge the effect of their change efforts on the children they were working with. Concurrent with much of the academic and policy literature I would suggest that the findings of my study indicate that a significant future line of enquiry is exploring how teacher learning is translated into children's learning.

## **Theme 2: The domains of influence of the PGCert: personal, social and occupational**

Teasing out what aspects of the PGCert facilitated teacher learning I would suggest that most notably it was the ability of the course to impact on teachers at a personal, social and occupational level (Fraser *et al.*, 2007). On a personal level the PGCert supported teachers to readdress their beliefs, values and attitudes towards physical education. Tracing the physical education socialisation of the participant teachers revealed how a conception of physical education based largely on competitive games and sports (Kirk, 1992) became embedded in the teachers' beliefs and practice. Rovegno and Bandhauer (1997) suggest that breaking down these long-held beliefs is a difficult and complex task as:

teachers' prior knowledge and experiences both as students and teachers can function like screens, filters or cultural templates that limit understanding and initial acceptance of new information. (p. 137)

As noted in chapter five, the PGCert challenged the participant teachers' previous conceptions of physical education. Critically engaging with academic and policy

literature, the teachers were supported to confront their previous beliefs, values and attitudes. Consequently, I would argue that the participant teachers were more open to the new ideas and approaches to physical education advocated by the PGCert.

Central to supporting the teachers to confront their beliefs was providing opportunities for the teachers to learn with and from each other. I would argue that the embryonic community of practice that emerged from the PGCert addressed the social aspect of professional learning by providing an opportunity for the teachers to “move beyond politeness to substantive talk about their own teaching practices and ideas and a willingness to engage in critical discussion about these ideas with peers” (Bechtel and O’Sullivan, 2006, p. 378). As Lara recalled the PGCert gave her a “safe environment to engage in professional dialogue”. In addition to providing the participant teachers with an opportunity to deconstruct their own ideas about physical education the embryonic community of practice provided an environment within which the participant teachers could discuss and critique the new ideas about physical education presented by the PGCert in relation to their own practice.

At an occupational level the professional development provided by the PGCert linked theory and practice. I maintain that using practicing physical education teachers as course tutors gave the course credibility; this is reflected in the high esteem within which the course tutors were held by the participant teachers. The participant teachers were aware that the course tutors were applying in their practice the ideas and approaches to physical education they advocated through the course. Furthermore and distinctive amongst other approaches to physical education professional development the PGCert provided space for the teachers to apply what they were learning on the course in their practice. This was achieved by providing breaks of time between the modules and CPD sessions that comprised the course, and setting the teachers tasks and assignments to apply in their teaching practice. As previously discussed by not providing a prescriptive resource to support the course the teachers were able to build capacity (Stoll, 2009) as they experimented with and made sense of the new practical and theoretical knowledge they had gained within the unique contexts they were working in.

The ability of the PGCert to influence the professional learning of teachers on a personal, social and occupational level contributed significantly to teacher change. Contrasting with traditional approaches to professional development which have favoured a deficit model the PGCert perceived teachers as “active learners shaping their professional growth through reflective participation in professional development” (Clarke and Hollingsworth, 2002). The teachers were inspired to enact change in physical education within their school contexts. The findings of my study suggest that professional development can lead to teacher change. However, I would emphasise that careful consideration needs to be given to the design and content of professional development, particularly in relation to the professional identity of teachers and their professional life phase (Day *et al.*, 2007). Tracing the socialisation of the participant teachers in my study, and relating this to their professional life phase revealed that they were at a point in their careers where they were susceptible and open to change. In line with Day *et al.* (2007), and in response to my finding, I would suggest that more research is required into the impact of professional development on teachers at different life phases in their careers and how CPD can be designed to better reflect the learning needs of teachers.

**Research Question 2:** How have these teachers instigated and implemented curricular and pedagogical change in physical education?

Two themes emerged in response to the second research question. Teachers engaged in change agency and as well as being influenced by socialisation the teachers were able to begin to impact on the socialisation process within their schools.

### **Theme 1: Teachers engaged in change agency**

Through their involvement in the embryonic PGCert community of practice the participant teachers negotiated a shared repertoire and a shared vision of physical education. As they experimented with the new ideas and approaches to physical education the PGCert had introduced them to the teachers reflected on the shared understanding and developed a personal vision of physical education. This personal vision was based on their revised conceptions of physical education. While the personal vision each teacher developed was unique and grounded in the context of

their school, patterns emerged in their thinking. I would suggest that there were three key elements common to the personal vision of all the participant teachers:

- Developmental physical education – matching lesson content to the learning needs of the children, attempting to make the physical education curriculum more inclusive
- Holistic – accounting for cognitive, social and emotional learning in physical education as well as psychomotor.
- Connected – making links between physical education and other subjects within the curriculum, and beyond the curriculum by promoting physical activity

The personal vision developed by each participant teacher was not merely an espoused theory; it was a theory in use (Argyris and Schon, 1976 as cited by Day, 1985).

Clarke and Hollingsworth (2002) posit that “change occurs through the mediating processes of ‘reflection’ and ‘enactment’” (p. 950). As the participant teachers enacted their personal vision they became immersed in a process of mastery and inquiry where innovation became part of their work (Kirk, 1988). The teachers experimented with different approaches to physical education and reflected on their change efforts identifying successes and areas for improvement. Reflecting on the physical education curriculum they were implementing the participant teachers also considered ways in which they could extend their own learning. Subsequently they pursued further CPD opportunities and attempted to connect with sports development officers and active schools coordinators. Developing their personal vision into a programme of physical education within their schools, the teachers benefitted from working individually. Yet, congruently they recognised that building the capacity of their change efforts required them to collaborate with colleagues and other personnel with a vested interest in physical education. While the participant teachers were keen to collaborate with others this proved to be a challenging undertaking.

Although Fullan outlines the capacities of change agency: personal vision, mastery, inquiry and collaboration little evidence is provided of how these are developed by teachers in practice. I was able to explore change agency in-depth from a context specific perspective focussing on the relationships between individuals and their environments and how these influenced the change process. I wanted to know how the participant teachers instigated and implemented change. Drawing on the concept of change agency I was able to apply this to the change story of each teacher. Subsequently this illuminated how the teachers instigated and attempted to sustain change, as they developed a personal vision of physical education, enacted and reflected on the physical education curriculum they had developed and sought out opportunities for collaboration. The fine-grained account of educational change provided by my study reveals the messy and complex nature of learning and change. Concurring with the complex view of change asserted by Hoban (2002) I suggest that as a complex process change is influenced by a number of different factors for example: contextual, individual, societal and political. Crucial to explaining this complex process is examining the interrelationships between these factors that “may enhance each other to support change or undermine each other to block change” (Hoban, 2002, p. 38).

## **Theme 2: Teachers impacting on organisational socialisation**

Tracing the physical education socialisation of the participant teachers enabled me to gain insight into their professional identities and understand how they built up a conception of physical education over time. It was clear that the participant teachers: “define their roles through prior experience, in relation to the context in which they teach and through interaction with relevant others” (Keay, 2006a, p. 373). As discussed earlier in this chapter, and noted by Rovegno and Bandhauer (1997), impacting on teachers’ prior knowledge and experiences is challenging. Yet the participant teachers in my study did change their beliefs values and attitudes towards physical education. Accounting for how this change occurred I suggested that the PGCert acted as a catalyst altering the teachers’ thinking about physical education. Researching the socialisation of newly qualified physical education teachers Keay (2006a) suggests that professional development can support teachers to redefine their

roles. My research takes this analysis further by suggesting that professional development can impact on professional socialisation and lead to teacher change.

Reflecting on the experiences of the teachers in my study I contend that the transformative nature of the PGCert differed significantly from the deficit model of CPD the teachers had previously experienced. As established earlier in this chapter the format and content of the PGCert challenged the teachers' beliefs regarding physical education and led them to change their practice. In relation to the socialisation of the teachers I would argue that their experiences of physical education through the PGCert diverted their professional socialisation onto a different trajectory. The PGCert deconstructed the prior knowledge and experiences of physical education built up by the teachers providing an alternative conception of the subject. Rather than simply focussing on games and sport the teachers' revised conception of physical education took account of the holistic nature of learning and centred more on the learning needs of children.

As the participant teachers employed their revised conception of physical education within their school contexts they were able to impact on the way physical education was taught and the value placed on it as a subject area. I would argue that the teachers were actively influencing organisational socialisation and were engaging in reculturation as they attempted to reshape the organisational values of the school regarding physical education along with the structure and culture of this subject area.

**Research Question 3:** What factors facilitate and impede the continuation of the process of educational change?

The emergent themes in relation to research question three indicated that the teachers experienced facilitating and impeding factors as they attempted to instigate and continue the change process.

### **Theme 1: Facilitating factors: teacher autonomy**

Clearly evident within the preceding discussion was the key role that the PGCert played in facilitating teacher change. One of the main ways in which the PGCert facilitated change was the emphasis placed on teachers exercising their professional



autonomy to enact change. Priestley *et al.* (2010) assert that: “many successful reforms have succeeded because they engendered professional trust and a genuine shift in power to those at the chalk face” (p. 5). Concurrently the findings from my study suggest that one of the main facilitating factors of the teachers’ change efforts was the professional autonomy they were able to exert within their school contexts. As the participant teachers enacted change within their school contexts there were a number of factors that further supported their feelings of autonomy. All of the teachers received general support from their head teacher to participate on the course and for the work they were doing in physical education. As Lara stated, no one was “breathing over the shoulder” of the participant teachers scrutinising what they were doing which provided the teachers with time and space to change. The findings of my study concur with Fullan’s (1999) observation that while leaders play a central role in educational change “at the same time teachers spontaneously self-organise” (p. 39). Without being directed by anyone else, within their school contexts the participant teachers just started experimenting with the physical education curriculum and their pedagogy. The trust afforded the participant teachers by their head teachers encouraged them to continue this process of experimentation and extend their role beyond teaching physical education to take a lead role in developing this subject area within their schools.

The participant teachers were able to exercise their agency to enact curricular and pedagogical change at a pace that suited them which afforded them ownership over the change process. Teachers taking ownership of change is recognised within much of the literature as key to the success of educational change (Kirk and MacDonald, 2001; Fullan, 2003). The fine-grained stories of change recounted in this study contrast with the large scale examples of change discussed in the literature review. Micklethwait and Wooldridge (1996) as cited by Fullan (1999) suggest that two problems plague policymaking, firstly that the state imposes initiatives with little sensitivity for the local context and secondly that politicians crave a “magical solution” (p. 54). Consequently policies are introduced with little attention paid to timelines and strategies for successful implementation and continuation of change. In the quest for quick fix solutions when one initiative fails another is simply introduced to replace it leading to policy overload and clutter (Fullan, 1999). The

change instigated by the teachers in my study was sensitive to the local context. Rather than imposing change on the children they were working with the teachers experimented with ideas and sought feedback from the children as they reflected on and evaluated the successes of their change efforts and aspects that required improvement. Concomitantly the participant teachers did not impose change on their colleagues rather they thought strategically about how to share their physical education knowledge and skills. There was recognition amongst the participant teachers that the changes they were making were not a magic solution to ‘fix’ the ills of primary physical education, rather they recognised that change was a continuous process to which they were committed to advancing.

## **Theme 2: Constraining factors: isolation**

Despite there being a number of factors that supported the change efforts of the participant teachers there were also constraining factors which impacted negatively on their attempts to instigate change. I gained a sense from the data that the teachers were at times restrained by the ‘grammar of schooling’ (Hargreaves and Goodson, 2006; Tyack and Cuban, 1995) in the form of: timetabling; conventional academic subjects such as maths and language taking precedence within the curriculum; a focus on accountability measures, and the ‘flat’ management structure. Additionally the teachers had to overcome the generally conservative sport and games perceptions of physical education held by the children (Cothran, 2001) and their colleagues. While these factors proved challenging for the teachers, they were attempting to “think outside the square” to counteract these issues (Argyris and Schon, 1974 as cited by Hoban, 2002). I would argue that the main factor constraining the change efforts of the participant teachers was a feeling of isolation stemming from the issues the teachers encountered as they attempted to collaborate with colleagues and other physical education practitioners.

The embryonic PGCert community of practice provided an opportunity for the participant teachers to learn from their peers as well as the course tutors and emphasised the social nature of learning. However, as the participant teachers graduated from the PGCert they lost the opportunity to engage in professional dialogue and began to feel isolated within their school contexts. Lara remarked that

she felt she “had something and nobody knowing what it was she had”, and that this “frustrated” her. Congruently Imogen stated that:

I think a lot of us probably miss that, when you go into university and go “oh I tried that and it went rubbish” or whatever and having that sounding board time. ‘Cause we always would come in and talk about what we had tried and what we were doing. So I think something like [meeting up] some people would want that just as a way of going back and even just reaffirming that you are on the right track. (Imogen, Planning Conversation 3)

Despite feelings of isolation the participant teachers were aware that to widen the scope of the changes they were making beyond their own practice they needed to interact with colleagues about physical education. As outlined in chapter six this collaboration was pursued in a variety of ways and with a range of people. However, the teachers’ attempts at collaboration largely faltered. If the change efforts of the teachers are to be sustained beyond their own practice they need to find the time and energy to collaborate with others (Fullan, 2007). I would suggest that there is a need for future research to probe further the capacity of collaboration and how it can be instigated and sustained to support the change process.

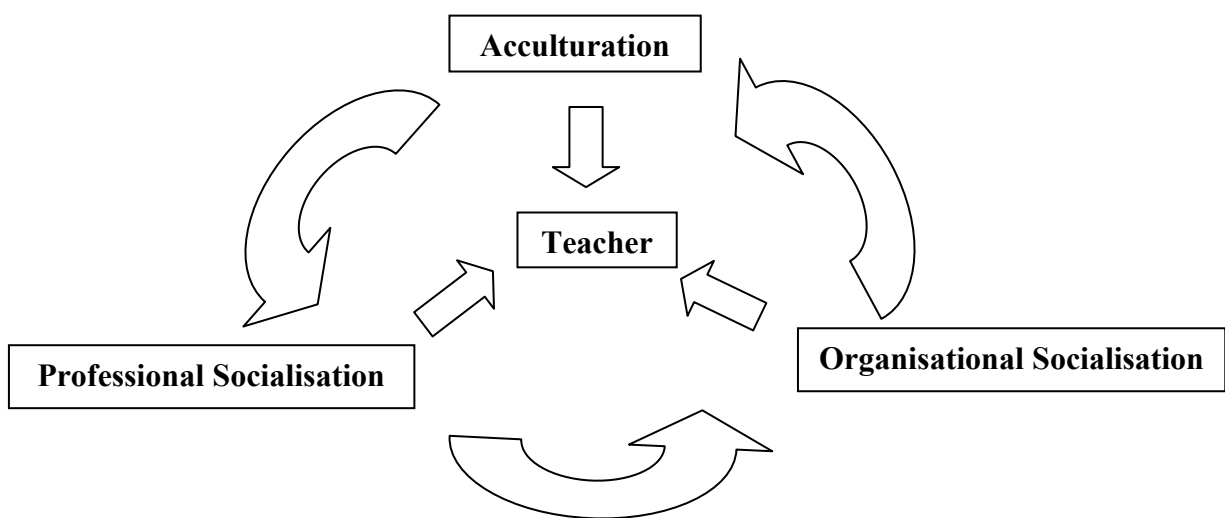
Recapping the research questions and identifying emergent themes provide some suggestions, based on my findings, that I hope may contribute towards greater account being taken of the positioning of teachers in the process of educational change, and the supporting role that professional development and professional learning play in this process.

## **Reflections, Implications and Limitations**

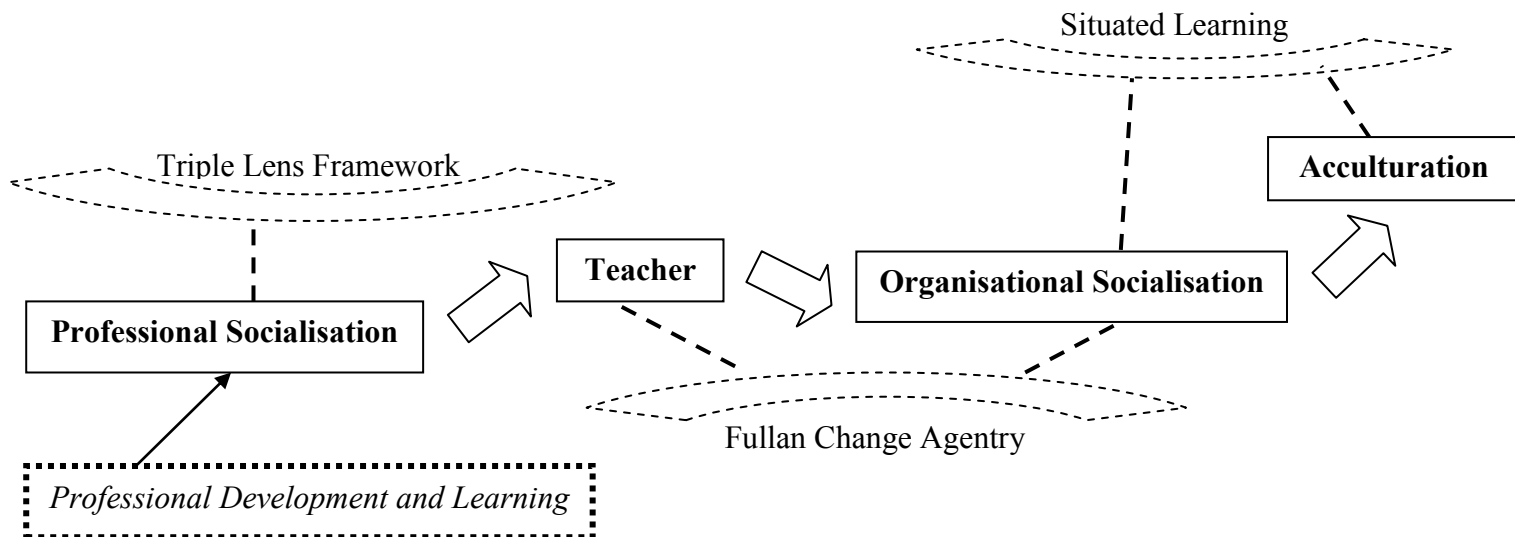
### **Drawing the Theoretical Lenses Together**

Reflecting on the findings of my study, I now intend outlining the connections between the theoretical lenses used to analyse the teachers’ stories. Based on the findings from my study, I viewed Lawson’s (1983a & b) model of teacher socialisation as a cyclical process (see figure 7.1). In this cyclical process, each phase of socialisation (Acculturation, Professional and Organisational) influences the other, and they all impact on the teacher. As the thesis developed it became apparent to me that teacher socialisation, as a theoretical lens, was central to explaining the

response of the participant teachers to professional development and their subsequent experiences of instigating curricular and pedagogical change in physical education. While Lawson's (1983a & b) model of teacher socialisation was specifically applied to physical education I would suggest that there is potential to use it to view the socialisation of teachers in general. I am cautious about making generalisations from a small scale study; however, I do feel this is a line of analysis worth pursuing further. I propose that by modifying Lawson's (1983a & b) model of teacher socialisation and combining it with the other theoretical lenses used within my study it is possible to illuminate how teachers can come to affect the process of socialisation rather than simply being influenced by it (see diagram 7.2).



**Figure 7.1 The Cyclical Nature of Lawson's (1983a & b) Model of Teacher Socialisation**



**Figure 7.2 Lawson's (1983a & b) Model of Teacher Socialisation  
Modified and Combined with Theoretical Lenses**

By unpacking figure 7.2, I intend to demonstrate the connections between the theoretical lenses utilised within my study. When combined these lenses illustrate the dynamic nature of teacher socialisation and how individual teachers can come to influence the process of socialisation. I begin by examining the acculturation phase and how the personal experiences of teachers influence their socialisation.

Acculturation reveals the influences and incidents within society that, over time, have shaped understanding of education and schooling. Acculturation exerts a strong influence over individuals as it is the foundational phase of the process of socialisation, developing over an extended period of time, through childhood into adulthood. When the acculturation phase and the organisational phase are analysed together through a situated learning theoretical lens (Lave and Wenger, 1991) it is possible to see how specific ways of being and thinking gain prevalence within society.

The physical education socialisation of the participant teachers in my study exemplifies this argument. Knowledge and understanding of physical education and physical activity was not built up in isolation by the participant teachers, rather it was developed through participation in social practice with others (Lave and Wenger, 1991). Regularities and patterns of practices dominant within the wider social

system, in relation to physical education such as, a sport orientated, multi-activity block curriculum, were experienced through acculturation. In a cyclical manner these regularities and practices were then reproduced at each subsequent phase of socialisation - in the ITE experiences of the teachers during professional socialisation and then again within the school contexts the teachers were working in during organisational socialisation – to become accepted as ‘the norm’ within the wider social system. Central to the strong influence exerted by the acculturation phase of socialisation is that over an extended period of time concepts and ideas are accepted as ‘the norm’. The prevalence of ‘the norm’ within the social system means that it permeates each phase of the process of teacher socialisation making it difficult for alternative ways of thinking to be accepted.

However, with the interjection of professional development and professional learning at the professional socialisation phase, an opportunity is created to introduce alternative ways of thinking into the social system. Depending on the nature, structure, format and content of professional development there is potential for it to encourage teachers to question the status quo, and alter their professional identities. As exemplified in my study, if teachers are encouraged to critically engage with education policy and literature, and develop their thinking in relation to the contexts they are working in, they can actively begin to challenge the norm. The participant teachers’ perceptions of physical education and physical activity developed through acculturation were compounded by their ITE experiences and early teaching. The teachers taught physical education in the same way it had been taught to them. However, through engaging with professional development, the PGCert, the professional socialisation of the participant teachers became offset from the norm. The participant teachers came to question and challenge the regularities and patterns of practices in physical education they had learned through acculturation and which they had perpetuated within their teaching practice.

Analysing the impact of professional development on the professional socialisation of the participant teachers I utilised the triple lens framework (Fraser *et al*, 2007) as a theoretical lens. The triple lens framework contributed to my understanding of the significance of the structure and content of professional development, and its

transformational potential for teachers. The long-term nature of the professional development opportunity provided by the PGCert combined with the non-prescriptive and critical nature of the course encouraged the participant teachers to confront their attitudes, values and beliefs regarding physical education, and to subsequently change their practice. I would argue that the interjection of the PGCert rerouted the professional socialisation of the participant teachers and as a result the professional identity of the participant teachers changed from primary teachers to, as Max suggested, primary teachers who teach physical education.

With this changing identity came a new confidence and competence in the way the participant teachers approached teaching and learning in physical education. They took increasing responsibility for curricular and pedagogical development in physical education within their school contexts, and subsequently began to impact on organisational socialisation. This is in direct contrast to the influence of the organisational phase of teacher socialisation as outlined by Lawson (1983a & b), where the school context and protocols impacted on, and often restricted teachers. Using Fullan's work on change agency as a theoretical lens, to view the experiences of the participant teachers as they instigated educational change, helped me to understand how they were able to shape organisational socialisation rather than be influenced by it.

As the teachers instigated curricular and pedagogical change in their own physical education practice, concurrently they began to impact on the provision of physical education within their school contexts. The change agency theoretical lens explains how, by developing a clear personal vision for physical education, engaging in mastery through inquiry and actively seeking out opportunities for collaboration, the participant teachers were able to influence the structure and culture of physical education within their school contexts. The changes in physical education initiated by the participant teachers also influenced the learning experiences of the children, providing them with an alternative, more in-depth experience of physical education. Teaching and learning in physical education was deconstructed, and expanded on the traditional multi-activity block curriculum model, to actively engage children in their learning. In the physical education lessons I observed it was evident that the children

were afforded greater choice and ownership of their learning through a holistic, more social constructivist approach to teaching and learning in physical education, which moved beyond sports and games. These examples from my study demonstrate how the teachers were able to influence organisational socialisation within their school contexts. Linking organisational socialisation back into acculturation and looking beyond the school context into the wider social system it is possible to see that changing the culture and structure of physical education within school contexts provides the foundations to change the perceptions of physical education within wider society.

### **Limitations**

I acknowledge that there are a number of limitations in the research. Firstly, my interpretivist analysis of the participant teachers' change stories has presented a detailed picture of what teachers do in practice. Yet, I cannot conclude this thesis by offering a recipe for successful change. Rather, I stress the complex nature of the change process that is impacted by a myriad of factors operating at different levels within the education system. While I felt that there was a great deal of research that had reviewed educational change at a macro level, my study sought to fill a gap within the literature by examining change at a micro level. Secondly, focussing on individual teachers I was able to present a fine-grained picture of how they grappled with change. However, this could also perhaps be perceived as a limitation of my study. Due to my concern with investigating in-depth the experiences of individual teachers I was unable, within the scope of this study, to investigate corresponding factors influencing change at the macro level. A further limitation of my study was that by focussing on the teachers' stories I was unable to fully investigate the impact of their change efforts on children's learning. Thus, one possible route for future research could be to explore in more depth the relationship between the school, the teacher and the children in the change process. Considering the limitations of data collection while it was beneficial to the study to collect data over an academic year it would have been valuable to continue data collection for an extended time to investigate the sustainability of the changes the teachers had instigated. This is certainly a line of analysis I may consider in the future, maintaining the relationships



established with the participant teachers so as to continue to chronicle their experiences. Finally, as previously outlined I acknowledge my position within the research, particularly as an ex-practitioner researcher as a potential limitation. However I did take significant steps to reduce my personal impact on the research process through a range of measures, including engaging in regular reflective conversations about my research with supervisors and colleagues.

### **Concluding Comments**

This thesis has shown that it is possible for teachers to be initiators of change. In response to professional development in physical education, the participant teachers engaged in a process of professional learning within their schools as they instigated curricular and pedagogical change. Hoban (2002) asserts that links need to be established between researchers and practitioners; I would argue that this was a positive outcome of my study. Engaging with teachers provided an insight into their experiences regarding physical education, educational change and professional development and correspondingly a greater understanding of their thinking and behaviour within their school settings. Within the literature review I painted a picture of a largely compliant teaching profession stripped of their autonomy as a result of successive, intrusive centrally driven reforms. Reforms which failed to take account of the central role of teachers in the change process and left them feeling frustrated and marginalised. It was for this reason, combined with my own experiences as a primary teacher, that I believed it was vital to consult teachers about their thinking and experiences of professional development and educational change. Conducting multiple interviews, observations and planning conversations with the participant teachers enabled me to build relationships with them and generated rich data. Through the data I was able to present the change story of each teacher and demonstrate how they self-initiated change (Hargreaves, 2004) within their school contexts. Reflecting on the research experience and the findings of my study, I suggest that if teachers are to take on the mantle of change agents CPD and ITE needs to offer more opportunities for teachers to examine the complex process of change and their role within this process.

Carrying out this research with primary school teachers has allowed me to gain an insight into three main areas: primary physical education; educational change, and professional development and learning. I have been able to provide a fine-grained picture of these areas from the 'chalk face' which I would argue has been missing from previous research. Additionally, from the outset of the study I wanted this research to be of value to the participant teachers. Working with the teachers on this study has inspired me and afforded the teachers space to reflect and share their ideas about physical education as this quotation from Imogen illustrates:

Having you as a sounding board...as a result of talking to you it's helping me to work out things. By talking to you about questions you are giving me it's actually I'm thinking right I'm on the right track there or I know where I'm going now as a result of talking to you. And having you coming in and watching the children and seeing what I'm doing...it's just having the back up... I think it's helped me focus a lot more as well. I think you can with what I'm trying to achieve in the school with having a class and this and all the other things that I do it's made me think a lot more about my development. I've enjoyed it, yeah I have, it's been good. (Imogen, Planning Conversation 3)

My personal experience of change and the experiences of the participant teachers in my study indicate that change is a journey. A journey that can be simultaneously exciting, frustrating and lonely; for change to be successful it is important for policy makers and deliverers of CPD to recognise and account for the uncertain and complex nature of this journey.

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## APPENDIX A - OBSERVATION FIELD NOTES EXTRACT

Ben Nevis Primary School	Imogen	Observation 4
<p><b>Time and Place of Lesson</b></p> <p>Thursday 24 March 2011 1300 – 1400</p> <p>Gym hall</p> <p><b>Age of Children, Class, Number in class</b></p> <p>Primary 4 age 7 and 8 20</p> <p><b>Resources</b></p> <p>Unihoc sticks</p> <p>small soft hockey style balls</p> <p>footballs</p> <p>soft balls to bounce</p> <p>bibs</p> <p>bands</p> <p>hoop</p>	<p><b>Focus of Observation</b></p> <p>Invasion Games Lesson working on ball to hand, ball to foot and ball to stick. Focus: learning about defending</p> <p><b>Aims of the lesson</b></p> <p>Children learn about defending through 2 v 1 small game play.</p> <p>Children experience different types of invasion game exploring the same principle of defence.</p> <p><b>What am I looking for...</b></p> <p>How the children interact with the lesson, the teacher and each other.</p> <p>Are the children able to work with the sticks and balls?</p> <p>Are the children able to defend in a small game situation?</p>	

### Lesson Format

- Warm Up Game Fishes

Children with bands as tails were fishes and children without tails were given blue bibs, sharks or a red bib, dolphin. The sharks had to catch the fishes by taking tails and placing them in a hoop. If a fish lost their tail they had to go to the fish tank. The dolphin could get tails from the hoop and give them to fish in the fish tank to let them back in the ocean. The sharks had to attack the fish to get their tails and the fish had to defend their tails from the shark.

- Attackers and Defenders Task

Children working in pairs as attackers and defenders, attackers moved across the hall trying to get to the other side while the defender tried to block the attacker.

- Stations

Hall split into 3 sections: Ball to Hand, Ball to Stick, Ball to Foot working on defending in a 2 v 1 game situation.

- Plenary

### **The Lesson**

In the first game of fishes there were two sharks and one dolphin and the children who were fishes were running round in circles, some tails were taken but the dolphin managed to save most of them. Imogen stopped the lesson and talked to the children asking the sharks if they felt their task had been easy and how it could be made easier for them. The children suggested more sharks.

The game was played again with four sharks and this changed the game more fish were caught and I could see more dodging happening and the children were making better use of the space. Imogen stopped the game and asked the children why this time there were more fish in the fish tank and they discussed that it was because there were more sharks. Imogen asked the children if they needed any more sharks and they said yes, one more. Imogen raised a safety point as one child had been hit during the game. She asked the children what they should be looking for when they were running in invasion games and the children answered spaces. Through this questioning Imogen was attempting to make a link between the catch game they were playing and invasion games which the children had been learning about in their physical education lessons. Tying in with the safety point, Imogen reminded the children to keep their heads up and look for space. At the end of the final game most of the fish had been caught and Imogen had a discussion with the children about why most people had been caught and the idea of defenders and attackers.

At the end of the game Imogen moved onto the next part of the lesson, she asked the children to put any bands on a hook on the wall and bring any bibs to her. She also asked the children to find a partner and sit down with their partner, the partners then numbered themselves 1 and 2. The children with their partners sat on opposite sides of the hall 1's on one side as attackers and 2 on the other side as defenders. Imogen then numbered each pair of children again 1 or 2 going up the hall. The children were numbered for a safety reason so that the children had some space and they were not all moving at the same time in the activity. Imogen explained the activity which the children had experienced in the previous week where the attackers had to try and get to the other side of the hall and the defender had to come out and try to stop them. Imogen asked the children where the defender needed to be to defend the wall. The children spoke about the defender needing to come out to block. Imogen said to the children to think about what they had been doing in the previous week to help them answer the questions and to do the task.

The activity started but all the children were going at once, observing the pairs closest to me it seemed that they were confused by the numbers, they were thinking of each person as 1 and 2 rather than the pairs as numbered 1 and 2. Imogen stopped the activity and said to the children that she would call 1 or 2 and it was only that number pair that should go and she explained again that as with last week this was

for safety reasons so the children did not bang into each other and they had more space to move. Imogen also said that in this activity the defender could now come to life and move to try and stop and block the attacker, last week the defender had been in a more static position. Before the children went to do the activity again a girl put up her hand and said that she thought that everyone was confused by the numbering as some people were still thinking that they were 1 and 2 separately with their partner. Imogen responded to the feedback from the girl and went along the hall numbering the pairs again and explained the task again to the children.

This was really interesting as the children and Imogen sorted this issue out together. They did the activity again and Imogen swapped over attackers and defenders. There were still some problems with the children knowing when to go, I spoke to a pair of boys closest to me who were still not sure but after a couple of shots it was worked out. Imogen stopped and asked the children about what they needed to do when they were defending. The children spoke about making their presence felt, big wide stance and stretch out arms, move about, stop the attacker in their path, move away from the wall. The two boys I was watching closest to me were really good at coming forward as the defender which resulted in pushing the attacker back.

The next part of the lesson carried on the attacker and defender theme but introduced objects into the activity. There were three stations set out: ball to stick, ball to foot and ball to hand. Imogen used the middle station to demonstrate the activity to the children. There were 4 or 6 attackers on one side of the hall working in pairs to get their ball to the other side. There were 2 or 3 defenders on the other side of the hall working individually with the attacking pairs to block them from reaching the other side and scoring the point. The defenders could not take the ball they could only move and block the attackers. Imogen demonstrated this at the foot to ball station as the attacking pair dribbled the ball at their feet and passed it to each other to reach the other side. Imogen stressed the need for the children to dribble and pass the ball with their partner moving to the other side. Imogen and the children talked about the demonstration highlighting that the defenders had to come out from the wall to defend. One child said if you come out and defend and the attacker gets past you still have the chance to go back and defend but if you stay at the wall there is nowhere else to go.

Observing I could see that as well as this being a physical task where the children had the opportunity to practice skills and the principles of attack and defend in a small game like situation it was also a very demanding cognitive task. The children had to think about dribbling, passing, moving, getting the ball to the other side and then working out what to do once their turn was over.

During the task it became apparent that some children had a higher skill level than others but all were able to participate in the task at their own level.

I observed a boy and girl working together at the ball to hand station, the girl never started with the ball the boy always started with the ball but the girl never said anything or complained. The boy then commandeered the ball and wouldn't pass to the girl. He was always dribbling the ball; his dribbling lacked control, his hand was quite floppy when dribbling the ball so he would hit it rather than push it to dribble. Imogen focussed on these two children and spoke to the boy about working with his

partner and sharing the ball. The other children in this group that I was observing were generally quite good at organising themselves and taking turns.

Imogen ensured that everyone had the opportunity to be an attacker and a defender at their station and then they moved on to a different station.



## APPENDIX B - STUDY INFORMATION



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### Study Outline

#### Aim

The aim of this study is to investigate the process of educational change in primary physical education concentrating on the role that teachers play within this complex process.

The study will focus on exploring how the process of curriculum change within physical education unfolds, identifying the main components of the curriculum and the pedagogical practices employed to deliver the curriculum.

#### Participants

The study will follow five primary teachers who have undertaken the Postgraduate Certificate in 3-14 Physical Education at the University of Edinburgh. It will track the experiences of these teachers and how their additional subject knowledge impacts upon the curriculum, their pedagogy and the wider school.

#### What does the study want to find out?

Key to understanding the complex curriculum change process will be ascertaining from the participant teachers:

- What their physical education curriculum and pedagogy was like before undertaking the PGCert?
- What changes they have made to their curriculum and pedagogy and how they achieved this?
- What impact they have had on the wider physical education curriculum within their schools?
- What happens next? How will these teachers sustain and maintain the curriculum change process?

### What will the study involve?

The study will be conducted throughout the academic year 2010/2011. Data will be generated in the following ways:

- Interviews with participant teachers

Interviews would most likely take place at the beginning and end of the school year with another two interviews taking place during the school year.

- Discussing short, medium and long term planning with participant teachers

Discussing plans would take place at the beginning or end of each term to link in with the planning process in place within the school.

- Observations to view physical education curriculum and pedagogy in action.

Observations would most likely involve the researcher coming into the school for one or two days each term to observe a physical education lesson; the scheduling of these would be flexible and negotiated in advance with the participant teachers. The purpose of the observations would be to explore the link between physical education curriculum planning and teaching practice.

### Ethical Information

**All information collected as part of the study will be kept private and confidential. When the results of the study are reported, the name of the school and the names of all participants will be changed. The data collected from your participation in the study will only be used for this PhD thesis, for academic papers and for conference presentations.**



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## Research Study in Primary Physical Education

Dear,

My name is Nicola Carse. I am a PhD student at the University of Edinburgh working with the Developmental Physical Education Group. Linking in with the Scottish Primary Physical Education Project I will be conducting some follow up research to explore in more depth some of the issues that emerged from the initial questionnaires that were completed by participants on the Postgraduate Certificate 3-14 Physical Education at the University of Edinburgh. I would like to investigate the experiences of teachers who have completed this programme to ascertain how their additional subject knowledge has impacted upon the primary physical education curriculum, their pedagogy and the wider school. I hope that my study will highlight the complex process of curriculum change in physical education and the key role that teachers play in developing and implementing curriculum change.

I would like to conduct interviews and observe physical education lessons and curriculum planning over the course of the academic year 2010/2011. This will involve:

- Interviews with participant teachers
- Discussing short, medium and long term planning with participant teachers
- Observations to view physical education curriculum and pedagogy in action.

**Interviews will be voice-recorded. All information collected, and any voice-recordings made, will be kept private and confidential. Recordings will never be presented in any public arena. When the results of the study are reported, the name of the school and the names of all participants will be changed.**

I would be very grateful if you would agree to participate in this research by signing the consent form. Participation is voluntary and you have the right to withdraw from the study at any time.

If you have any questions, please feel free to contact me at \*\*\*\*\* or [s0090864@sms.ed.ac.uk](mailto:s0090864@sms.ed.ac.uk), or my supervisor, Dr. Charles Anderson, at [c.d.b.anderson@ed.ac.uk](mailto:c.d.b.anderson@ed.ac.uk) or \*\*\*\*\*. You will be kept informed of the results of the study and receive a copy of any publications arising from the study.

Many thanks in advance!

Nicola Carse

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## Staff Consent Form

I have been given information about my participation in Nicola Carse's research, which is being conducted for her PhD degree at the University of Edinburgh, under the supervision of Dr. Charles Anderson and Dr Matthew Atencio.

I understand that, if I consent to participate, I will be asked to:

- Participate in recorded **interviews** relating to primary physical education (curriculum and pedagogy)
- **Be observed** while involved in primary physical education.

I understand that my participation in this research is voluntary, and that I am free to withdraw from it at any time. I have been assured that any information I provide and recordings I feature in will be kept private and confidential, and that the recordings will never be shared in any public arena. I have also been assured of anonymity.

If I have any questions, I know that I can contact Nicola Carse at \*\*\*\*\* or s0090864@sms.ed.ac.uk, or Dr. Charles Anderson at [c.d.b.anderson@ed.ac.uk](mailto:c.d.b.anderson@ed.ac.uk) or \*\*\*\*\*. I also know that I can contact Nicola Carse if I would like to access the results of the study or publications arising from the study.

By signing below, I am indicating that I consent to participate in the study. I understand that the data collected from my participation will be used for a PhD thesis, for academic papers and for conference presentations and I consent for it to be used in this manner.

Signed:

---

Name (please print):

---

Date

---

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# THE UNIVERSITY *of* EDINBURGH

## **Research Study in Primary Physical Education**

Dear parents,

My name is Nicola Carse. I am a PhD student at the University of Edinburgh. I would like to investigate how the physical education curriculum is changing and what different styles of teaching are used by teachers to support the curriculum. I hope that my study will help to improve learning and teaching experiences in physical education for teachers and children.

Over the course of the academic year 2010 to 2011 I will be working with teachers to investigate the provision of physical education within the school. Integral to this study will be observing physical education lessons over the course of the academic year. I would like to observe and make notes on physical education in the school; the focus of the observations will be on the teacher and how they plan, deliver and evaluate the physical education curriculum. During the observations the general reactions of the children as a collective, rather than individual reactions, towards the teacher and the physical education activities will be recorded.

**All information collected will be kept private and confidential. When the results of the study are reported, the name of the school and the names of all participants will be changed.**

I would be very grateful if you would allow your child to be observed as part of this research study. Participation is voluntary and you have the right to withdraw your child from the observations at any time. Please note that I will also explain my study to the children and ask the children if they are happy to be observed in physical education lessons. If you **do not** wish your child to be involved in the study please complete the attached reply slip.

If you have any questions, please feel free to contact me at \*\*\*\*\* or [s0090864@sms.ed.ac.uk](mailto:s0090864@sms.ed.ac.uk), or my supervisor, Dr. Charles Anderson at [c.d.b.anderson@ed.ac.uk](mailto:c.d.b.anderson@ed.ac.uk) or \*\*\*\*\*. You can also contact me if you would like to know the results or receive a copy of any publications arising from the study.

Many thanks in advance!

Nicola Carse



# THE UNIVERSITY *of* EDINBURGH

## Parental Consent Form

Please only complete this form if you **DO NOT** want your child to take part in the study.

Please make sure you return this form to the school by *date*. If I do not receive this form from you, I will assume that you are happy for your child to take part.

I wish to withdraw my child from the physical education observations

Pupil name: \_\_\_\_\_

Name of school: \_\_\_\_\_

Parent/guardians name: \_\_\_\_\_

Parent/guardians signature \_\_\_\_\_

Date \_\_\_\_\_

Please return this form to *name of teacher*.

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## APPENDIX C - BACKGROUND QUESTIONNAIRE

<b>Participant Information</b>					
<b>Personal Information</b>					
Name:	Age:	Gender:    M    F			
Years Teaching					
0 - 3	4 - 7	8 - 15	16 - 23	24 - 30	31+
Years Teaching PE					
<b>Initial Teacher Education</b>		Institution:			
B.Ed.	PGCE/PGDE		Other (Please Name)		
	First Degree				
Comment on initial teacher education physical education experience:					
<b>Physical Education CPD apart from the 3-14 Course</b>					
Course/Activity	Year	Comment			

<b>School Information</b>		
Current Position in School(s)		
Describe the PE facilities and resources in your school.		
Describe the community setting of your school (e.g., socio-economic level, location, community physical activity resources, parent involvement, etc)		

Please use the back of the sheet if you require more space to write in...



## APPENDIX D - INTERVIEW SCHEDULES

### Interview 1 Schedule

The purpose of this first interview is to establish background information about the teachers in relation to physical education.

#### BACKGROUND INFORMATION

Warm-up questions about interest in PE and personal experience of PE

- **As a teacher how did you become interested in PE?**
- How did you feel about PE when you were younger?
- What activities were you involved in when you were younger?
- How did you feel about PE when you were younger?
- What activities are you currently involved in?
- *Are you currently or have you in the past been involved with after school physical activity clubs?*

#### HISTORICALLY PHYSICAL EDUCATION CURRICULUM AND PEDAGOGY

Ask teachers to think about and describe their PE curriculum and teaching before they began the PGCert

Planning PE

- **How did you plan for PE?**
- **What resources and programmes were used?**
- How did you use the 5-14 curriculum guidelines used?
- **What activities were planned?**
- What did you think about the curriculum you were planning?
- **How confident were you in the PE curriculum you planned?**

Delivering PE

- How did you deliver the PE curriculum that you planned?
- **How did you view your role in the teaching and learning process?**
- **How did you view the learner's role in the teaching and learning process?**
- **Can you identify any of the teaching styles that you used to deliver the PE curriculum?**
- How did you assess pupil learning in PE? What types of assessment did you use – baseline, formative, summative?
- How did you differentiate in PE lessons?
- How did you share learning intentions with pupils?
- What were your feelings about teaching PE?
- **How confident were you about teaching PE?**
- **How successful would you say the PE curriculum was? Can you give examples of what was and was not successful?**

## HISTORICALLY PE WITHIN THE SCHOOL

Ask the teachers to think about and describe what the PE curriculum looked like within the school.

- **Was there a PE specialist working within the school?**
- How were they involved in the planning of the curriculum?
- Were outside agencies involved in the delivery of PE in the school (Sports Development, Active Schools)? What role did they play in the delivery of the PE curriculum?
- How frequent were PE lessons within the school?
- **What was the purpose of PE in the school?**
- Were after school physical activity clubs offered by the school/Active Schools?
- Did staff in the school talk about PE (informally/formally)?
- **How much importance would you say was placed on PE by teachers, senior management, pupils and parents?**

## LEADING INTO INTERVIEW 2

Ask questions about the PGCert to link this interview which focuses on the past to interview 2 which will focus on the present.

- **Could you tell me about your involvement with the PGCert.**
- What made you decide to do the programme?
- *What did you learn from the course?*

## **Interview 2 Schedule**

The purpose of this second interview is to find out about:

- a) Current practice in PE – curriculum, pedagogy, assessment
- b) How the PGCert influenced current PE practice
- c) Building up a picture of what is currently happening in the wider school as regards PE

### **PRESENT PE CURRICULUM**

#### **Planning (Curriculum)**

- How do you plan for PE now?
- How do you use Curriculum for Excellence for planning?
- Are there any other resources or programmes that you use for planning PE?
- Describe the curriculum, what activities do you plan?
- How confident are you in the curriculum that you plan now?

#### **Delivery (Pedagogy)**

- How do you now deliver the PE curriculum that you plan?
- Can you identify any teaching styles that you use to deliver the PE curriculum?
- How do you now view your role in the teaching and learning process?
- How do you view the learners' role in the teaching and learning process?
- How confident are you about teaching PE now?

#### **Assessment**

- How successful would you say the current PE curriculum is? Can you give examples of things that have worked well and things that haven't worked so well?
- How do you assess pupil learning in PE?
- How do you differentiate in PE lessons?

### **PE WITHIN THE SCHOOL**

- Thinking about before and after your involvement with the 3-14 programme how (if at all) has the provision of PE changed within the school?
- Have you had an impact on the way PE is planned, delivered and assessed within the wider school?
- How frequently are PE lessons taking place within the school now?
- Who is responsible for the delivery of PE lessons – is there a PE specialist working within the school?
- What involvement do outside agencies like Active Schools and Sports Development Officers currently have in the planning and delivery of PE and physical activity within the school?
- How much importance would you say is currently placed on PE by other teachers, senior management, pupils and parents?

### **Interview 3 Schedule**

The purpose of this third interview is to follow up on points of interest emerging from the previous interviews, clarify terminology used by the teachers associated with PE and explore the concept of change.

#### **DEFINE TERMS ASSOCIATE WITH PE AND THE PGCert**

- Physical Education
- Physical Activity
- Developmental Physical Education
- Edge of Chaos

#### **PE CURRICULUM & PEDAGOGY**

- The first interview focussed on past physical education practice and the second interview focussed on present practice. Could you summarise for me the main ways in which you have developed the PE curriculum and your pedagogy since completing the PGCert.
- In previous interviews you have spoken positively about the PGCert but were there some aspects of the course that you didn't like or felt were not relevant, can you elaborate on these for me?
- Reflecting on what you learned on the PGCert about physical education curriculum and pedagogy. Can you share with me the practicalities of applying the developmental physical education approach advocated by the course within the context you are working?
- Can you identify factors that have supported and/or impeded you as you have developed the PE curriculum and your pedagogy? Prompt: children, Headteacher, colleagues
- How beneficial would you say that the physical education curriculum you now deliver and the pedagogy you use to deliver it is to you and the wider school - pupils, colleagues, community?

#### **FEELINGS AND EMOTIONS**

- What are your expectations/aims of the physical education curriculum you are currently developing?
- Why PE?
- How do you feel about the course and about what you are doing in PE now?

#### **THOUGHTS ON GENERAL ISSUES IN EDUCATION**

- Apart from the PGCert can you identify any other courses, resources or literature that, in recent years, have impacted on you and your teaching practice? Prompt: CfE
- Moving aside from PE Scottish education has seen a great deal of change in recent years. What educational changes for yourself seem to be important? How have these changes been implemented? How did you react and respond to these changes?

## APPENDIX E – DATA ANALYSIS

### Max Interview 1 Example of Annotation

*Researcher: No, that answers the question yeah thanks. em So we've covered planning and as you said it was the PE specialist that planned a lot, so thinking about delivering, you said you did do some delivery as well and worked with her. (J: mmhmm) How did you deliver the PE curriculum that you planned then, what..how did you go about delivering it?*

Max: Like..like a sort of structure of a lesson? Or

*Researcher: Yeah.*

Max: *Yeah.* Well I'd say it was..it's erm compared to now a lot of very direct teaching. I mean classic lesson would be warm-up, skills and drills, game at the end. pause *ehm pause (Researcher: so..)* And I'll use the word warm-up where as now I would use the word intro activity and..and..and so back..back to front to what..to what I now..to what I now do, erm a complete role reversal. *ehm* Aaand..and very depen..and..and a sort of direct style of teaching, you know, this is the ball, this is how we pass it, you know, I may have even got people to stand on lines whilst they passed the ball, I don't know, horrendous *ay sucks in breath. erm* And stuff like that so *eh* but I think this is all very interesting because in light of these observations I've done, no, sharing classroom, we'll not call them observations, sharing good practice or whatever that I've done recently with the staff here and in the fact that a lot of the staff here still worked with Antonia years ago and that my PE time now even though I've been teaching games for understanding and things for the past couple of years here my time's used as non contact time. There's still that going on in that gym hall (*Researcher: right*) several times a week I still see people, I had..I had a debate with a teacher last week after this about games taking place within lines and not on lines and stuff pause (*Researcher: so*) and *eh*, and.. and..and..and about skills and drills and actually putting kids into small sided..small games and things and not sitting them on benches and things. And I think as much as you want everything in the school to be fantastic and..and all that we've just talked about [referring to earlier planning conversation], it's not.

*Researcher: So..so thinking about..so you said it was lots of direct teaching, warm-up, skills and drills, game at the end so looking a bit more in depth at that.. How did you view your role in the teaching and learning process then?*

Max: The Teacher (*emphasis on teacher*) I t..I teach you and you learn. So I think it's *eh pause*

*Researcher: And then following on from that then.. How did you view the learner role in the teaching and learning process?*

Max: *Yeah*, and..and more than that teacher and the referee, I think that's important. In games, you know, you're the referee and *em* and the..and the learner is..the learner is the doer, I think there's probably an awful lot less thinking. I'm being very stark about then and now. (*Researcher: No, that..that's fine..that's...*)

**Comment [n1]:** Direct teaching style in the past.

**Comment [n2]:** Lesson structure in the past would be warm up, skills and drills and game at the end.

**Comment [n3]:** Change in terminology used in the past warm up now intro activity.

**Comment [n4]:** Now complete role reversal from the past.

**Comment [n5]:** Direct teaching style, second mention.

**Comment [n6]:** Teaching technical this is how we pass the ball.

**Comment [n7]:** Stand on lines to pass ball. [This lines thing emerges as a bit of a thing.]

**Comment [n8]:** Self commenting on past practice.

**Comment [n9]:** Showing reflection. Reflecting on past experiences to understand his own present circumstances with PE and to understand and comment on the practice of other teachers within the school.

**Comment [n10]:** Showing the pressure of current teaching practices in reference to the use of the word observations.

**Comment [n11]:** Many of the staff still at the school worked with Antonia PE teacher.

**Comment [n12]:** Max has been teaching games for understanding in PE and things referring to what he has learned from the 3-14 course and applying this on his PE teaching.

**Comment [n13]:** PE time used as non contact time.

**Comment [n14]:** Still traditional PE teaching going on in PE.

**Comment [n15]:** Debating with other teachers about PE.

**Comment [n16]:** Commenting on what he has seen in the observations he has made of other teachers in the school teaching PE.

**Comment [n17]:** Despite wanting everything to be perfect within schools ...

**Comment [n18]:** Role very firmly in past as teacher, teaching while pupils ...

**Comment [n19]:** Teacher and referee role particularly in games situations.

**Comment [n20]:** Learner is the doer with a lot less thinking

**Comment [n21]:** Comments he is being stark about then and now feeling that tr ...

### Max Interview 1 Emergent Categories

Categories	Annotations
Sporting Background	C1, C8, C10, C12, C13, C14, C15, C16, C18, C62, C105
Current physical activity	C20, C21, C22, C23, C25
Competition	C9, C11, C12, C13, C14, C16, C17, C24
Social/Emotional Aspect of PE and Sport	C11, C13, C17, C18, C24, C26, C174, C175
Confidence	C13, C58, C61, C101, C102, C104, C122, C129, C130, C132, C133, C139, C142, C143, C145, C146, C166, C213, C218, C219
School PE Experience Positive learning PE experience	C2, C8, C9, C11, C13, C14, C76, C78, C105
PE Teaching and Assessment	C3, C31, C34, C35, C36 C45, C53, C59, C62, C63, C67, C69, C73, C74, C75, C79, C80, C83, C84, C85, C87, C90, C92, C94, C96, C97, C102, C109, C114, C115, C116, C117, C120, C12, C123, C126, C127, C131, C142, C144, C174, C183, C192
Extra Curricular PE	C4, C6, C7, C176, C177, C178, C179, C180, C181, C182, C183, C184
Outside Agency Involvement	C154, C155, C156, C157, C158, C159, C160, C161
Pupil Experience of PE	C19, C60, C69, C72, C75, C98, C108, C109, C110, C111, C112, C113, C121, C133, C134, C138, C140, C174, C175, C183, C193, C194, C195, C196, C206
Planning PE	C27, C30, C32, C33, C44, C63, C152
PE Resources	C37, C38, C39, C43, C46, C47, C57, C117
PE Specialist	C27, C28, C29, C30, C31, C32, C33, C34, C38, C40, C42, C44, C45, C46,

	C48, C52, C53, C54, C55, C56, C58, C60, C61, C63, C64, C70, C71, C76, C78, C89, C101, C102, C103, C104, C105, C118, C119, C132, C135, C138, C139, C140, C144, C147, C148, C150, C151, C152, C162, C186, C189, C190, C191, C192, C195, C203
<b>PE Curriculum</b>	C49, C50, C51, C54, C55, C57, C58, C64, C70, C75, C78, C80, C84, C85, C87, C90, C91, C92, C94, C105, C106, C109, C129, C134, C135, C136, C137, C140, C151, C152, C162, C163, C164, C172, C175, C183
Active involvement by class teacher in PE	C29, C34, C36, C45, C64, C71, C73, C143, C145, C153, C166, C182, C184
Compliant Teachers	C61, C63, C64, C66, C68, C70, C71, C76, C77, C78, C92, C106, C107, C129, C130
<b>Purpose of PE</b>	C168, C169, C170, C172, C175
<b>Importance of PE</b>	C65, C90, C138, C168, C171, C182, C186, C187, C189, C191, C193, C196, C197, C200,
<b>PE talk</b>	C201, C202, C203, C204, C206, C207
<b>PE CPD</b>	C203, C204, C205
3-14 PE Programme	C73, C81, C86, C91, C93, C94, C99, C100, C103, C143, C145, C208, C209, C215, C216, C217, C218, C219, C220, C221, C222
<b>Comparison</b>	C74, C75, C81, C82, C86, C87, C90, C92, C95, C99, C100, C101, C103, C123, C139, C142, C146, C149, C151, C152, C158, C159, C166, C175, C183
<b>Reflection</b>	C87, C92, C93, C94, C95, C97, C99, C100, C101, C103, C106, C107, C113, C115, C116, C118, C120, C122, C124, C125, C127, C128,

	C131, C132, C141, C143, C144, C145, C146, C148, C149, C151, C159, C161, C164, C165, C167, C168, C171, C173, C174, C175, C177, C182, C183, C184, C185, C186, C198, C200, C205, C210, C221, C222
Actively seeking out change	C210, C211, C212, C214, C217

### Geoff Interview 1 Emergent Categories

Sporting Background	C1, C17, C20, C24, C25, C27, C230
Interest in PE	C10, C17, C230
PE learning experience	C11, C13, C14, C16, C15, C19, C21, C22, C23, C26, C28, C29, C170, C173, C174, C177
Self Esteem	C15, C16, C18, C19, C20, C21, C26, C28, C29, C30, C39, C41, C46, C53, C55, C86, C88, C91, C92, C103, C105, C106, C110, C111, C112, C113, C114, C115, C184, C205, C234
Current physical activity	C27, C30, C31, C32
Actively seeking out change	C2, C54, C90, C227
Thoughts on PE	C5, C6, C7, C8, C47, C59, C67, C69, C78, C82, C90, C91, C95, C96, C97, C107, C108, C109, C111, C117, C123, C124, C125, C126, C127, C129, C141, C143, C144, C149, C150, C151, C153, C156, C157, C158, C160, C161, C162, C163, C180, C182, C183, C184, C187, C190, C191, C199, C203, C204, C209, C213, C220, C235
Value of PE outside physical	C4, C6, C7, C8, C65, C79
Teaching PE and Assessment	C9, C38, C43, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C69, C71, C72, C73, C74, C75, C78, C82,



	C83, C85, C86, C90, C92, C93, C94, C95, C96, C97, C98, C99, C100, C102, C107, C108, C109, C111, C113, C122, C123, C124, C125, C144, C145, C146, C158, C159, C167, C169, C170, C171, C173, C174, C176, C183
<b>PE Specialist</b>	C9, C34, C37, C44, C53, C56, C72, C75, C76, C84, C87, C88, C89, C91, C94, C98, C99, C101, C104, C105, C113, C116, C117, C118, C119, C120, C121, C128, C130, C153, C154, C155, C158, C167, C169, C171, C172, C174, C176, C177, C178, C203, C207, C218
<b>Planning PE</b>	C34, C42, C44, C87, C104, C105
<b>PE Resources</b>	C48, C50, C51, C138, C148, C150, C175, C212
<b>PE Curriculum</b>	C52, C63, C64, C65, C79, C81, C82, C85, C119, C120, C132, C133, C136, C156, C159, C163, C164, C166
<b>Pupil Experience</b>	C62, C63, C64, C65, C70, C71, C74, C77, C78, C79, C81, C82, C83, C85, C86, C90, C93, C100, C102, C122, C168, C178, C180, C181, C182, C189, C190, C216, C217, C218, C219
Compliant Teacher	C33, C35, C36, C37, C39, C40, C41, C53, C55, C56, C72, C75, C76, C80, C87, C88, C99, C104, C105, C128, C144, C145, C167, C169, C205
<b>Showing initiative</b>	C38, C45, C49, C54, C58, C59, C61, C62, C64, C65, C67, C73, C74, C78, C81, C82, C83, C85, C90, C96, C107, C108, C109, C111, C121, C170, C173, C174, C178, C191
3-14 programme	C54, C151, C228, C229, C230, C231, C232, C233, C237, C238, C239, C240, C241, C242

Outside agency Involvement	C131, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C165, C208
Extra Curricular Activities	C135, C165, C181, C185, C186, C187, C188, C189, C190, C191, C226
PE CPD	C138, C236
Issues Affecting PE (safety)	C147, C148, C151, C152, C153, C201, C202, C204, C211, C213
PE talk	C192, C193, C194, C195, C196, C197,
Importance of PE	C198, C199, C200, C201, C203, C204, C205, C206, C207, C208, C210, C211, C212, C214, C221, C222, C223, C224, C225, C226

#### Imogen Interview 1 Emergent Categories

ITE PE/PA Experience	C2, C3, C7, C25, C31, C32
PE Specialist	C4, C34, C35, C86, C109, C110, C111, C112, C127
Teaching PE Control Direct/Behaviourist	C4, C5, C34, C35, C36, C37, C59, C63, C64, C65, C66, C67, C70, C76, C78 C69, C71, C72, C74, C75, C79
PE Curriculum PE Activities	C48, C49, C50, C52, C54, C55, C56, C113, C116, C124, C157
Assessment Differentiation	C81, C82, C83, C84, C85, C86, C87, C89, C90, C91, C92
Outcome of PE	C104, C105, C106
Resources Financial, Written, Equipment	C41, C45, C50, C51, C52, C95, C96, C98, C99, C100, C101, C102, C125

Comparison	C84
PE Thinking	C37, C65, C66, C67, C99, C116, C127, C150
Teacher Learning CPD	C4, C155, C157, C158, C161, C163 C8, C9, C36, C39, C41, C95
McCrone	C5, C35, C110, C115
School PE Experience Lack of Confidence/Body image issues Music over PE	C6, C12, C14, C15, C16, C18, C19, C20, C22
Outdoor Education	C7, C8
Core Learning Phys, Soc, Cog, Emo	C84
After School Clubs	C9, C134, C135, C136, C137, C139, C140, C141, C142, C143, C150
3-14 Course	C11, C152, C153, C154, C155, C156, C157, C158, C160, C161
Using Initiative, proactive	C4, C8, C9, C32, C34, C36, C39, C41, C51, C52, C95, C96, C99, C100
Active Childhood Tomboy	C13, C22
Confidence Lack of Self Confidence Confidence teaching PE	C14, C15, C18, C20, C37, C94
Current Physical Activity Waning recently	C24, C26, C27, C28
Social	C25, C30, C31, C32
Planning PE	C34, C43, C112, C114
Comfort Zone	C28, C35, C36, C50, C55, C56, C58,

	C60, C94
HT support – financial (previous school)	C41
Difficult to recall Past	C47, C106, C111
Cross curricular links	C53
Experimentation	C58, C95
Health and Safety	C60, C61
Children	C59, C61, C64, C65, C70, C85, C104, C105, C123, C129, C148
Outside Agencies Active Schools, D.O's	C118, C119, C120, C134, C135, C137, C138
Interscholastics Sport Events	C122, C123
School and PE	C129, C131, C132, C144, C145, C147, C148
Sharing knowledge and practice in PE	C147, C161, C162, C163, C164
Parents	C130, C149
Physical Activity	C130
Reflection	C107, C158, C160, C161, C162, C163

### Jackson Interview 1 Emergent Categories

Background Information	C2, C3, C4
PE within School	C5, C22, C70, C71, C73, C74, C75, C81, C89, C91, C92, C93
PE Teacher	C28, C31, C32, C33, C42, C65, C70, C72, C87, C93, C94
Activities	C33, C67
Planning PE	C22, C31
PE Curriculum Confidence	C35
Assessment Differentiation	C42, C58, C63, C67, C68 C54, C55, C56

Teaching PE	C40, C41, C42, C43, C45, C48, C49, C52, C55, C56, C60, C61, C62, C63, C66, C67, C91
Practicalities	C36
Different now PE teacher	C37, C51, C52, C95
Teaching	C47, C66
Resources	C22, C27, C29, C73
5-14	C30
Creative Teacher (adapting)	C22, C34
Interest in PE	C6, C7
Social, Emotional, Cognitive PE	C8
Seeking career change	C9, C100
Influence of colleague (M)	C9, C25, C97
Approaching HT	C9, C99
ITE PE	C10
School PE Experience	C11, C12
PA/Sport experience when younger	C13, C15
Clubs	C20
Confidence	C14, C16, C17, C60, C61, C66, C101
Lack of confidence at school	C11
PA/Sport in adult life	C14, C16, C17, C18
Running School Clubs	C19
Tackling things head on	C23, C24
CPD	C24, C25, C77
3-14	C25, C38, C51, C52, C55, C97, C98, C101, C102, C103, C104, C105, C106, C107
McCrone	C28
Children	C22, C34, C35, C36, C40, C41, C42, C45, C47, C49, C54, C55, C65, C67, C93, C95
Reflection	C65
CfE	C66, C89
Interscholastic Events	C87
Active Schools	C76, C85, C86
After School Clubs	C76, C83, C84
Outside Agencies	C77, C78
Purpose of PE	C80
Other Teachers	C81, C82, C91
Parents	C94, C95

### Lara Interview 1 Emergent Categories

Sporting Background	C1, C2, C3, C4, C5, C30, C77, C79, C81
Current physical activity	C31, C32, C33, C34
Competition	C21, C24, C26, C27
Social/Emotional Aspect of PE and Sport	C8, C9, C10, C11, C25, C108
Confidence	C40, C75, C109, C110, C116
School PE Experience	C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C23, C24, C25, C26, C27, C28, C29, C77, C79, C81
PE Teaching	C41, C44, C48, C53, C76, C77, C78, C79, C80, C83, C84, C85, C86, C87, C88, C91, C92, C93, C94, C95, C96, C97, C116, C118, C119, C121, C124, C125, C143, C151, C152, C160, C161, C162, C163
PE Assessment	C67, C98, C99, C100, C101, C102, C103, C104, C105, C106, C108, C115, C116, C117, C125, C127, C144
Education Comments	C36, C37, C65, C122, C123, C158, C159
Extra Curricular PE	C34, C51, C168, C169, C170, C171, C172
Outside Agency Involvement	C74, C82, C149, C150, C151, C153, C154, C155, C156, C157, C168, C171, C172, C177, C178
Pupil Experience of PE	C67, C68, C80, C85, C89, C90, C91, C92, C96, C97, C103, C104, C105, C108, C114, C115, C120, C121, C126, C174
Planning PE	C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C59, C60, C61, C62, C65, C66, C67, C107, C123, C124, C128, C129, C162
PE Resources	C50, C51, C55, C56, C57, C58, C59, C82, C111, C113, C163
PE Specialist	C58, C68, C69, C70, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C162, C166, C167
PE Curriculum	C54, C43, C64, C65, C67, C71, C72, C73, C74, C75, C81, C91, C114, C138, C146, C147, C148, C162
Compliant Teachers	C130
Collaboration	C57, C58, C48, C43, C111, C112, C133, C134, C143, C144
Purpose of PE	C164, C165, C166, C167
Importance of PE	C136, C137, C158, C159, C173, C174, C175, C176, C177
PE thinking	C52, C53, C69, C70, C72, C76, C78, C87, C106, C111, C121, C124, C126, C135, C136, C183, C191, C193

<b>PE CPD</b>	C77
3-14 PE Programme	C120, C131, C132, C134, C187, C188, C189, C190, C191, C192, C193, C194, C195
<b>PE talk</b>	C179, C180, C181
<b>Reflection</b>	C8, C9, C12, C15, C22, C25, C35, C36, C47, C52, C53, C54, C57, C60, C61, C65, C67, C68, C69, C71, C72, C74, C75, C76, C77, C78, C82, C85, C86, C87, C90, C91, C92, C96, C99, C104, C106, C108, C110, C111, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C128, C130, C131, C132, C133, C134, C135, C137, C138, C141, C146, C147, C148, C149, C152, C165, C166, C167, C168, C171, C174, C183, C186, C191, C192, C193, C194, C195
<b>Actively seeking out change</b>	C182, C184, C185, C186, C188

### Interview 1 Emergent Themes

<b>Blue</b>	School, Wider Community, PE Specialist
<b>Green</b>	Teacher Reflections on PE provision
<b>Yellow</b>	Teacher Background –personal experiences of PE and Physical Activity presently and in the past
<b>Pink</b>	PE Curriculum and Pedagogy

### Interview 1 Focused Coding identifying Theoretical Themes

<b>TEACHER BACKGROUND</b>	
Morgan and Hansen (2008)	Positive Experience of PE in the Past
Morgan and Bourke (2008)	Enthusiastic about teaching PE Negative Experience of PE in the Past Wanting to improve experience of PE for children
Lawson (1983a & b)	Influence of Acculturation Childhood experience of physical education and physical activity Professional Socialisation

	<p>Influence of CPD</p> <p>Limited influence of ITE</p> <p>Influence of physical education specialist teachers</p> <p><b>Organisational Socialisation</b></p> <p>Influence of school, colleagues and head teacher</p>
Lave and Wenger (1991)	<p><b>Situated Learning</b></p> <p>Lived in world experiences</p> <p>Learning from others within the social system</p> <p>Learning part of social practice</p>



## **Max Interview 1 Example Memos**

**PAST INVOLVEMENT WITH PHYSICAL ACTIVITY/SPORT** Max speaks a lot about being involved with lots of sports when younger as does Geoff. Lara talks enthusiastically about her previous involvement in PE particularly positive secondary school PE experience. Could this be an emergent theme related to their interest in the subject and interest in doing the PGCert and being proactive about PE in their schools.

**INVOLVEMENT WITH EXTRA CURRICULAR ACTIVITIES**, is this an emerging pattern amongst the participant teachers? Max speaks about his involvement with extracurricular activities before the PGCert. This involvement would appear to be quite influential on his interest and involvement with PE. Lara and Imogen were also involved with extracurricular activities.

**COMPETITIVE EDGE, BUZZ FROM SPORT**, this is a theme emerging from Max's experience of sport when he was younger and from the activities he does now. On numerous occasions he talks about "the buzz", "for kicks".

**THINKING REMOVED** Planning done for him by the specialist initially in PE.

**STRONG PE SPECIALIST** - This emerged as a theme from Geoff as well in the way he spoke about the PE specialist that he worked with and how she worked. The PE specialist Max worked with was very strong willed and would appear to have been very much in control of the PE curriculum that was planned and delivered. This is illustrated by John when he talks about the PE specialist checking up on the follow up lessons delivered by the class teachers.

**RESPECT FOR THE PE SPECIALIST/COMPETENT PE SPECIALIST** Max describes the PE specialist he worked with as one of the best teachers he had ever met, despite her tight grip on the PE curriculum. Geoff also talks about huge worth of the PE specialist and the good stuff she did. Lara talks about the PE specialist that had worked at both the Infant and her Upper school as being very good.

## **APPENDIX F - OUTLINE OF THE CONTENT OF THE PGCERT**

### **The DPEG Vision of Physical Education**

Since 2001 the Developmental Physical Education Group (DPEG) at the University of Edinburgh has been involved in a long-term curriculum, pedagogy and professional learning project to create a contemporary vision of developmental physical education.

(Jess, 2011, p.16)

The DPEG vision of developmental physical education is underpinned by four key principles emphasising the need for physical education to be:

- developmentally appropriate addressing social, cognitive and emotional development as well as psychomotor;
- inclusive;
- connected linking physical education across the curriculum and beyond the school into the community;
- lifewide connecting to children's 'real life' experiences beyond school.

### **Aims of the PGCert**

The aims of the Postgraduate Certificate in 3-14 Physical Education, as stated in the student handbook, are to help teachers develop:

- a critical knowledge and understanding of global, national and local policy discourses on the development of physical education in the 3-14 age range
- the curricular and developmental knowledge and understanding to consistently plan, deliver and assess developmentally appropriate physical education learning experiences for children throughout the 3-14 age range
- an understanding of the collaboration and partnership issues related to the development of 3-14 physical education within broader learning communities, namely the primary school, the local secondary school cluster of primary schools, the secondary school and the local community.
- the ability to systematically evaluate knowledge, skills and attitudes in relation to personal and others' professional practice
- the capacity to undertake critically reflective study which integrates theory, research and practice

(DPEG, 2010, p. 3)

## The Content of the PGCert

### **Course 1: 3-14 Physical Education, Setting the Context**

The aim of this introductory course is to help teachers develop their understanding of key contextual factors influencing physical education. These factors are considered at three interrelated but contextually different levels: the developing child; the school/local authority and the national context.

Examining the national context the impact of contemporary developments in education, health and sport on physical education are analysed with particular reference made to *CfE* and Active Schools. From a local authority and school perspective the participant teachers are encouraged to share their varying experiences of planning and delivering physical education. This illustrates the different approaches to the development of physical education taken by schools and local authorities. Additionally the role of class teachers, specialist physical education teachers and related professionals in the delivery and support of physical education is explored. Considering the developing child within this first course teachers are supported to analyse the impact of children's psychomotor, cognitive, social and emotional development on their participation and learning in physical education contexts.

### **Course 2: The Early Years Physical Education Curriculum (ages 3-8)**

The aim of the second course is to explore early years physical education within a lifelong developmental framework. This course advocates using *Basic Moves* to underpin the physical education curriculum: “the Basic Moves Programme sets out to help all children develop the basic movement competence that lays the foundation for lifelong physical activity” (Jess, Dewar and Fraser, 2004, p. 24). The main premise of Basic Moves is to develop fundamental movement skills so that they can be performed in a technically efficient, adaptable and creative manner and then applied in different sport and game contexts (Jess, Dewar and Fraser, 2004). To develop children’s basic movement competence a Basic Movement Framework is used that outlines interrelated basic movements and movement concepts.

<b>Basic Movement Categories</b>	<i>made adaptable and creative by</i>	<b>Movement Concepts</b>
Travel		Space
Object Control		Effort
Balance and Coordination		Relationships

(Jess *et al.*, 2006, p. 27)

Basic Moves posits a more “generic, non-activity specific approach” to early years physical education, directing it away from the traditional multi-activity block system and highlighting the need to make connections beyond school into the wider community (Jess, Dewar and Fraser, 2004, p.27). The curriculum and pedagogy advocated by the Basic Moves programme requires teachers to create learning

opportunities that enable children to explore, consolidate and extend their movement effectively “learning to move and moving to learn” (Jess, 2011, p. 17). Guided discovery is the suggested pedagogical approach used to deliver Basic Moves. This approach combines direct teaching with the teacher facilitating learning experiences in physical education lessons and guiding children’s learning using questioning.

While this course may advocate the use of a specific programme for teaching and learning in early years physical education Basic Moves is far from prescriptive. Instead of providing lesson plans the manual that accompanies the Basic Moves programme provides content information and a basic outline for physical education lessons that can be easily adapted to suit individual school contexts.

### **Course 3: The Upper Primary/Early Secondary Physical Education Curriculum (ages 9-14)**

The third course extends the developmental approach to physical education advocated by the PGCert focussing on the upper primary and early secondary age range. Building on Basic Moves the course introduces teachers to the related concepts of core learning, developmental applications and authentic applications.

Exploring core learning the PGCert emphasises the key role that physical education plays in cognitive, social and emotional learning as well as psychomotor learning. Developmental applications are outlined as physical activities such as games, gymnastics, dance and athletics. In line with the Teaching Games for Understanding (TGfU) approach to teaching and learning developmental games are categorised as invasion, central net, striking and fielding, and target. Teachers are encouraged to consider the purpose behind activities undertaken in physical education by exploring the connections within and between these games categories and other activities. Authentic applications complement core learning and developmental applications by making links to ‘real life’ sport and physical activity scenarios, while also highlighting the cross-curricular potential of physical education. The authentic applications the PGCert explores are: Sport Education, Dance Education and Outdoor Journeys.

Sport Education was developed by Siedentop (1994) in response to his concerns about the lack of authenticity in many areas of physical education. He felt that the multi-activity physical education programme predominant in primary and secondary schools had limited success in achieving the goal of active lifelong participation. To counteract this, Siedentop created a model of curriculum and instruction for physical education that attempted to incorporate features of authentic sport to offer a more culturally relevant and inclusive experience. The core characteristics of Sport Education are: it is delivered over an extended period of time as a season incorporating an element of competition; the children work in teams, and the children take on roles beyond that of player, such as referee and coach to help facilitate the season. Dance Education follows a similar format to Sport Education with the medium for the experience being dance and the children working in groups to choreograph and create a dance over an extended sequence of lessons.

Outdoor Journeys (see Beames, Atencio and Ross, 2009) offers a framework to engage children in cross curricular learning mixing physical education and outdoor education with other areas of the curriculum. Similar to Sport Education, Outdoor Journeys aims to contextualise children's learning in the 'real world'. Children are actively involved in negotiating a Journey Plan and the Risk Assessment for the journey into their local environment (Beames, Atencio and Ross, 2009). Throughout the journey children generate questions about human influence on the land and other inhabitants of the land. Following on from the journey children research some of the questions emerging from the journey and then share their findings with each other. "Outdoor Journeys focuses on allowing young people to take responsibility for their actions and their learning in a generative process that is negotiated with, and managed by, their teacher (Beames, Atencio and Ross, 2009).

## **APPENDIX G - VISIONS OF PHYSICAL EDUCATION**

### **Imogen**

I would say that I am now delivering a developmental approach to physical education because definitely it's developing the children from where they are which I wouldn't have done before. So it's like focussed on the children, it's child centred rather than the top down approach, so you're assessing it. I'm also I would say that as a result of that I'm doing a lot more assessment and some of that assessment is just visual and watching and it's providing opportunities for you to be able to do that but also my assessment can be video as well. Quite often with the younger children where you have to be more hands on I'm watching a lot more. I like to video and then I can sit down and watch it more and I can see a lot more. So I'm assessing it, it's developmental; the focus is on the children. It's Basic Moves where it's needed really and what I mean by that is that it starts in primary one to three; I mean the plan is that in primary one to three that they reach mature [movement]. But when you pick up the primary four class or the primary seven class, if your assessment shows you they're not mature then you still have to do that. So again it's just focussing where the child is instead of just accepting that they should be able to do this, before you develop them on

I do developmental games with the older children so and I look at the three different categories [invasion, striking and fielding and central net] so that they're getting the range

### **Max**

At the moment it's a bit separate, so there's a physical education and at the moment I feel it's a bit separate from the school. That's a big thing in that what I least wanted to happen has happened where I think, because of timetables and changes, important people saying I think we should do this, it being 'McCrone cover', it's ended up being a bit separate like and that's the last thing I ever wanted to happen.

Progression from early moves work with primary one through primary two, great work in primary three, four, a lot of core stuff and then a lot of kids are able to do good things in the upper school. And I can see all the hard work in the middle years, all the hard work from the early years and their basic skills development coming through. So in the middle years we can use those and scaffolded wee games and working lots in co-operation and competition. And then take all of those social and emotional and cognitive skills and physical skills and they can sort of fly with them in primary six and seven and organise their own tournaments and measure and record their own PBs and do all this good stuff.

I think we need to go somewhere else with it and keep on freshening it up and doing new things.

Next year it's about getting it back so that the class teachers are teaching more and I work better with the class teachers. I think, you know, you do something and take your eye off something and then all of a sudden you're in this situation that you didn't want to happen. Next year I want to do an awful lot more planning with the children and with the class teachers

You try to do lots of things, like I've set up, I spend an awful lot of my time before and after school doing clubs and running things and that's great and I think that's totally the role a physical education teacher should be.

I think we've got the early moves, the basic moves, the core and application things and I like the balance of sort of core activities and it's just continual learning.

## **Lara**

I suppose through physical education I am wanting to engage them in the sort of general subject and because of that I suppose the areas that I've chosen to sort of base the curriculum round or the if you like the subject areas I have chosen to go through with the children is based on as much as I can choice and past experience. So I know some of it's not particularly up to date but going back about three years ago I did quite a few round robins with the [primary] sixes and sevens and spoke to them about the experience of physical education in the school and to get some insight into how they felt and thought. So there was still at that point a real drive for them to have a traditional sense of physical education i.e. things like gymnastics and games and you know, like sport specific. So bearing that in mind and also trying to match it with like a developmental approach so in a way you're delivering their expectations to try and increase motivation.

So I want it to be motivating and motivating in a way that it's going to include everybody and I'm not just talking about children with specific needs but so we're looking at the gender bit you know I'm looking at the drop off. So yeah, interesting, inclusive, choice, looking at where they are and what might suit.

Trying to be as motivational and inclusive and developmental, I'm trying to fit it into the community so again it all ties in with motivation too. So it's relevant to them, I think that's a big thing but I think it's something we can hold and try and aspire to as much as we possibly can and that would not just be through my planning but also hopefully drawing on knowledge and experience from the children in the delivery too and I think we've done that particularly or I've done that particularly with the older children with *Sport Education*.

I'm always holding the fitness ball in the air as well and I don't know in some ways when I first started out that was really important to me to almost have a fitness section to a lesson. I would say this year I've relaxed that a little bit more and moved more towards an educational side but there's times when I'm bringing it back in,

cause there's times when I feel that their [the children's] fitness is maybe falling. I'd go to apply say skills to something and you know it's falling down so fitness is important but it's not the be all and end all. The education part to me I mean the more you do it the more you realise that it falls into social education part, you know and I think the outdoor education was brilliant in that they [the children] worked much better than I think any of us hoped they would but again it was like an isolated thing they can apply these skills in this but they can't apply these social skills across the board. But I would say that for physical education as with most educational things it's about working on their social emotional skills so that they can work together and ultimately take that to a competition level be it individual or team and deal with the emotions or whatever that come with it. And then secondary to that would be if you like the cognitive development, placement of a shuttle, a tactic in a pass-back and all these situations. So yeah, for me I would always start with the social/emotional and again there's times we miss it cause you get focussed and go down one route but ultimately in planning and thinking about it, thinking about looking at what the children have got first.

## **Jackson**

After the course the keyword I would come up with would be developmental. From that, I would say that I really want my physical education to be focused, and I want it to be developmentally appropriate. A huge part of my physical education lessons I want them to be fun, I want the kids to enjoy them. I want there to be a sense of, from the focus, a sense of direction in where we're going, purpose, so that anybody watching my lesson would have an idea what my goal is, what my target is, and hopefully if they were coming along regularly they would see that there's progression and that hopefully flows between the different stages in the school. Flowing between stages, fun side, I want it to be dynamic. I really want the kids to enjoy the experience, for it to be interesting for them to have different kind of dynamics to the lessons. It's not just about them sitting down and listening to me, it's about them contributing during the lessons and feeding off their energy and their ideas, it's not just me spoon-feeding answers.

And I think a really brilliant thing I just really noticed in the, well, we've been working on our kind of yearly reports, and asking the kids about their physical education, you're finding, with more experience, they're getting a larger vocabulary and a better understanding – a better cognitive understanding – of physical education, therefore they can articulate their thoughts more clearly. Instead of: "What are you trying to get better at?" "I'm trying to get better at throwing", they're saying: "I'm trying to get better at throwing at a target." "I'm focusing my eyes on my partner." I'm now, kind of, really teasing out more from them their actual experience which is wonderful, which truly is physical education because they can quickly grasp it's throwing, it's catching, but actually drawing more out of that is really exciting. And



it's not me, it's obviously part of the teaching, but they're getting it for themselves and they're learning it for themselves. So the key is obviously learning. You want there to be good learning, quality learning and going back to the course [PGCert], there are also the links that I make with maths, there are the links that I make with language, there's the links that I make with personal and social education, just the way that they conduct themselves in physical education.

I want, as a physical education teacher, to be a motivator. I want to be enthusiastic in what I do and how I come across, my approach. I want, developmental focus (I was going to use the word clarity) in explanations and just in lessons. I want to make sure there is clarity so the kids know what they are doing

I think in terms of the course, that's really given me knowledge of physical education, so my knowledge bank has grown.