## Capacity Building for Primary Physical Education: Enhancing Teacher Expertise for Quality Teaching and Learning

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy, Department of Education, Faculty of Education, St. Patrick's College, Drumcondra

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#### **Declaration**

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed:

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# Abstract Capacity Building for Primary Physical Education: Enhancing Teacher Expertise for Quality Teaching and Learning

The publication of the Physical Education Curriculum (1999) in Ireland represented a significant step in providing quality opportunities for the development of the child through physical education. The focus of this thesis is on the potential impact of a programme of professional development in physical education on the provision of improved programmes of physical education for children in Irish primary schools. The programme of professional development based on the Physical Education Curriculum was developed and implemented for primary teachers who were assigned responsibility for leading in-service provision for physical education in the primary school. This programme was provided on a phased basis as they taught in their own school contexts and as they embarked as tutors on the facilitation of the national in-service programme for primary teachers. Underlying the development of the programme are principles of adult learning, teacher change, professional development and programme design. The aims of the thesis are (1) to describe the development of a specific programme of professional development for tutors whose responsibility is to facilitate a programme of in-service education, (2) to evaluate its effectiveness in helping tutors to facilitate the programme, and (3) to investigate the views of a sample of teachers on the initial phase of the in-service programme and their intentions to implement the curriculum.

Survey questionnaires, interviews and observations of tutors - as they taught physical education and as they facilitated the first phase of the in-service programme during the academic year 2004/2005 - were used to investigate the effectiveness of the programme of professional develoment. Similar methods were used to investigate the effect on teachers of the first phase of the in-service programme designed by the tutors.

Findings from the study indicated that treatment of relevant content and use of a wide variety of appropriate teaching methodologies significantly impacted on this programme of professional development. Issues such as the provision of differentiated sessions, overload regarding treatment of content and the need for exploration of facilitation skills were highlighted. Data gathered revealed that engagement with the programme had impacted on many aspects of the teaching of physical education by tutors, particularly on their planning, the breadth of content taught and the range of methodologies used. In terms of preparing tutors to design and facilitate the in-service programme, the study found that tutors were satisfied that the programme had prepared them well for facilitation. This confidence to facilitate the in-service programme was based on factors such as their content and subject knowledge, the extended period they spent teaching physical education as they engaged with the programme of professional development and time spent on planning for implementation of the in-service programme for teachers. Evidence gathered from tutors and from a small sample of teachers indicated an increased likelihood of teachers planning and implementing improved programmes of physical education provided constraints identified, such as those related to provision of further support for teachers and funding, are addressed.

The study confirmed the importance of the development of expertise in physical education of primary teachers to build capacity to support the teaching of physical education in Irish primary schools. The implementation of such a policy will require sustained support for the development of expertise beginning with quality programmes of professional development.

#### CHAPTER ONE

#### Research Context and Aims

The publication of the Primary School Curriculum in 1999 (Government of Ireland, 1999a) constituted the first revision of the primary school curriculum in Ireland since 1971. While the 1971 Primary School Curriculum, Curaclam na Bunscoile, (Government of Ireland, 1971) represented a radical shift of ideological and methodological approaches to primary education in Ireland, the focus in the 1999 Primary School Curriculum was on redesign and restructuring while incorporating the child centred principles of its predecessor. Physical Education is one aspect of the primary school curriculum and efforts to enhance implementation of programmes of physical education are a central concern of the research described in this thesis.

Following on the publication of the curriculum, the Department of Education and Science (DES) established the Primary Curriculum Support Programme (PCSP) to provide and oversee an in-service programme for teachers in implementing the curriculum. The purpose of the programme initiated during the academic year 1999-2000 was to "mediate the Primary School Curriculum for teachers towards enabling them to implement it in their schools" (PCSP, 2007, para.1). The initial phase was designed to provide an overview of the aims, principles and defining features of the revised curriculum while examining the main changes in emphasis. The subject-based in-service programme, which followed in 2000, was introduced on a phased basis. An in-service programme for physical education was rolled out in the academic years 2004-2006 with the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) beginning in primary schools in 2006-2007.

While the time lapse between publication of the curriculum and implementation might be interpreted as being unduly slow, it did provide Colleges of Education with a period for facilitation of courses based on the curriculum. Hence, a cohort of over 6,000 newly qualified primary teachers began their teaching careers in that period with knowledge of curriculum content and methodologies. It should also be noted that during this period teachers participated in in-service programmes associated with the 1999 Curriculum where they were exposed to methodologies common across the

curriculum including the Physical Education Curriculum (Government of Ireland, 1999b).

In accordance with the PCSP policy for the selection of tutors for training in other subject areas, tutors were selected from the primary teaching profession by open competition to undertake the facilitation of the in-service programme for physical education for teachers. The tutors selected were classroom teachers with some background in physical education but, like most Irish primary teachers, were not necessarily subject specialists. The research described in this thesis is concerned with the examination of professional development of the tutors during this period of preparation and implementation of the in-service physical education programme for primary teachers. While the Physical Education Curriculum (Government of Ireland, 1999b) provided much-needed direction, the provision of an in-service programme for teachers represented a significant effort by the DES to support implementation.

The overall aims of the study described in this thesis are (1) to describe the development of a specific programme of professional development for the training of tutors, and (2) to evaluate its effectiveness in helping tutors to implement the national programme of in-service. The professional development programme was a key component in the process of enabling tutors to support teachers as they implemented the curriculum. The timing of the study preceded the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) by teachers. Hence, a further aim of the study is (3) to investigate teachers' views of the initial phase of the inservice programme and their intentions to implement the curriculum. It was not possible during the time period to investigate their actual implementation of the curriculum.

#### Rationale for the Study

The rationale for the programme of professional development or tutor programme derives from two distinct but interconnected elements: the researcher's experience of teaching physical education both in primary schools and at third level and the literature related to Continuing Professional Development (CPD) in an adult learning context. With reference to the first element, the study of this particular

experience of CPD for primary tutors and teachers was undertaken by this researcher in parallel with her role as representative of the National Council for Curriculum and Assessment (NCCA) on the Design Team for Physical Education. Design Teams were appointed by the PCSP related to each of the subjects of the curriculum. While my role on the Design Team allowed me to work as part of a team that had responsibility for the in-service programme of physical education for teachers, my background in primary physical education could be considered equally significant in shaping my understanding of the needs of tutors and indeed primary teachers in the area of physical education.

Having qualified as a primary teacher I taught physical education-informed by the 1971 Curriculum-as one of eleven subjects to a range of age groups in different school contexts. Having undertaken postgraduate study in physical education, working again as a primary teacher provided me with opportunities to provide support for colleagues in their teaching of physical education. The design and implementation of summer and evening in-service courses undertaken at this time made me acutely aware of the needs of primary teachers in relation to physical education at various stages of their careers. Following on my involvement as Education Officer in the design of the Primary Physical Education Curriculum (Government of Ireland, 1999b) I commenced work as a lecturer in physical education at pre-service level. This allowed me to develop an understanding of the extent to which initial teacher education could prepare teachers for teaching physical education and to identify the supports teachers need as they endeavour to design and implement programmes of physical education for primary school children. This biographical detail is provided to explain the place of the researcher in the study and to situate the work that follows which has as its central focus a study of the theoretical and practical aspects of a programme designed to support the implementation of the revised Physical Education Curriculum by teachers in Irish primary schools. Clearly, my biographical detail is illustrative of a professional profile that underpins my study and impacts on aspects of my research.

The second element underpinning the rationale for this study identified above, is the literature on professional development. CPD has become the focus of considerable attention in recent years in the research literature on teaching and teacher education. The professional development of teachers has been recognised as a central element both nationally and internationally to improve education by fostering high standards of

teaching and learning which in turn impact significantly on children's learning. Successful school improvement strategies have been linked to teacher development (Reynolds and Teddlie, 2000) and at national level, the importance of professional development has been encapsulated by Sugrue, Morgan et al. (2001) when commenting on continuing professional development in Ireland at primary and post-primary level:

Professional learning needs to become an integral element of the lives and work of teachers and the quality of teaching and learning in the nation's schools depend crucially upon it (Sugrue et al., 2001, p. 126).

With reference to physical education, which is at the centre of the research described in this study, Hardman (2007), commenting on the current situation and prospects for physical education in the European Union, has supported the concept of professional development as a continuous process throughout a teacher's professional career. He identified the irregular and unstructured provision in primary schools in particular as a potentially serious problem.

A broad definition of Continuing Professional Development provided by Craft (1996) is useful in the context of the study, where CPD encompasses "all types of professional learning undertaken by teachers beyond the initial point of training" (p.9). While there is very little research-based knowledge about the impact on children's learning of teachers' practices, the effect of teachers' professional development, its impact on teacher practice and on children's learning is gradually becoming a focus of research. A growing body of research shows that to be successful, teacher professional development should address both content and process elements (Reeves, McCall and MacGilchrist, 2001; Wilson and Berne, 1999). Teachers have always needed strong content knowledge and subject matter knowledge. Modern conceptions of teacher growth emphasise also how teachers learn and how transfer of learning takes place. Both elements lie at the heart of the theoretical framework that underpins the programme described in this thesis.

The challenges in supporting teachers with the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) are clear. While the poor

provision of equipment and facilities has been identified as one constraint that impacts on the quality of physical education in Irish primary schools, there are other significant issues that are directly concerned with supporting the primary teacher in the task of implementation. The teachers' confidence and competence to teach the Physical Education Curriculum linked to the limited amount of initial training that they receive and the lack of on-going in-service support constitute a major challenge for implementation of the curriculum. While a comprehensive curriculum can provide the blueprint for work in this area, the need for quality CPD beginning with a quality programme of in-service facilitated by quality tutoring cannot be overemphasised. The need for quality CPD in turn points to the importance of programmes that prepare tutors for supporting primary teachers' professional development during the in-service programme and beyond. This issue is central to the task of raising the levels of teacher competence and confidence to teach physical education and improving the experience of physical education for the primary school child. Hence, while the main focus of this study is on the development of the tutor programme, an attempt is made also to evaluate its potential impact on the teaching of physical education by primary teachers as teachers' intentions to implement the curriculum are investigated.

#### The Physical Education Tutor Programme

The tutor programme outlined in a later chapter addresses the content and subject matter knowledge of physical education and the process of teacher learning that are central to the provision of quality programmes of physical education. It formed a significant part of the programme of professional development that was offered to tutors to prepare them for implementing an in-service programme for teachers. The content and subject matter knowledge treated was built on the content and pedagogy outlined in the Physical Education Curriculum (Government of Ireland, 1999b). A key feature of the programme is that it was based on theoretical considerations underpinning two interrelated issues: how tutors as adults learn and how teachers change their practice. The beginnings of adult learning theory and the application of the principles of adult learning (Knowles et al., 1998) based on this theory have formed the basis of the programme. Teacher change was explored informed by the writings of Cuban (1993), Lieberman and Miller (1986) and the extensive review of literature undertaken by Randi and Corno (1997), since change was such a critical issue for both

tutors and teachers as they engaged with the tutor programme and the in-service programme respectively. The importance of the promotion of critical thinking (Brookfield, 1986; Moon, 1999, 2004) and transformative learning (Mezirow, 1991; Cranton, 1996) were emphasised as key principles in the process of change for tutors. As teacher change was discussed, the role of collaboration particularly in the context of communities of practice (Wenger, 1998) was explored. As professional development issues had a strong bearing on both the tutor programme and the in-service programme for teachers, these issues were examined in relation to (a) the models that underpin both of the programmes, and (b) the challenges that impact on provision of CPD in the context of physical education in primary schools.

While the issues of adult learning, teacher change and the nature of CPD were highlighted as important factors in shaping the tutor programme, sources that explore planning programmes for adults provided the primary material for structuring the model for the programme (Houle, 1972, 1996; Knowles, 1980; Brookfield, 1986; Cervero and Wilson, 1996). Caffarella's (1998) model of programme planning proved particularly appropriate as it allowed for contextual factors, negotiation and adaptations that could be applied in developing the tutor programme. The programme was informed also by an examination of the implementation of the previous primary school curriculum that was introduced in 1971 (Government of Ireland, 1971), the implementation of the Primary School Curriculum (Government of Ireland, 1999a) to date, and some examples of the implementation of physical education curricula internationally. Some of the practical activities outlined within the tutor programme are based on a selection that the author has already offered to student teachers and primary teachers during the course of pre-service and in-service education. These have been refined and developed to meet the needs of tutors. Other subject matter content that had not been presented previously to either student teachers or teachers has been presented as part of the tutor programme. It is important to note, however, that the tutor programme outlined by the author was not adopted fully by the DES and the PCSP as their practice was to appoint a Design Team for each subject of the curriculum with responsibility for the design of programmes related to each particular subject. This issue will be described more fully in chapter 4.

Deriving from the overall aims, the research questions that underpin this study are:

- Can a programme of professional development in physical education, based on theoretical considerations centred on how adults learn and on how teachers change their practice, be effective in preparing tutors to facilitate programmes of in-service to teachers?
- Can a subsequent programme of in-service designed and facilitated by these tutors for teachers in primary schools impact on teachers' attitudes towards teaching of physical education in primary schools?

The evaluation of the appropriateness and effectiveness of the programme involved, firstly, examining its effectiveness in preparing the tutors to facilitate the in-service programme which included evaluating the impact of the tutor programme on tutors' own teaching and evaluating their facilitation of the in-service programme for teachers. Secondly, it involved evaluation of the responses of primary teachers as well as tutors to the facilitation of the in-service programme by tutors after initial engagement with the in-service programme. This aspect of evaluation by teachers is based on teachers' intentions and on their account of the ways they might endeavour to link the professional development they had experienced with their planning and practice of teaching physical education, while acknowledging that it is difficult to measure the impact of professional development given the level of complexity of the process of teaching and learning. A further constraint is that the study took place before implementation of the curriculum began, which prevents evaluation of actual practice.

The research design involved use of a strategy that would integrate components of the study in a coherent way. Hence, a mixed-methods research design was used to gather and analyse both quantitative and qualitative data from tutors and teachers. Observation, questionnaire surveys and interviews were selected as the methodologies that would provide data that could be used to answer the research questions outlined and contribute to the overall credibility of the findings. Ànalysis of data was conducted and findings reported based on emergent themes.

The thesis is organised around eight chapters. Following this introduction

Chapter two contains a review of the literature on how adults learn and the literature on
how change can be effected in their practice. The chapter begins with a description of
how adult learning theory has developed and outlines the principles of adult learning
that are currently identified in the literature. The principles of learning are then related
to principles of teaching with a particular emphasis on the role of facilitators in
learning. An examination of how adult learning might be designed to promote critical
or reflective thinking by tutors is followed by an examination of models of continuing
professional development and of some of the challenges facing providers of
professional development. The design of programmes of learning is then investigated as
a critical dimension in the implementation of the programme of physical education to
be offered to tutors. Finally, conclusions are drawn that inform the design of the tutor
programme described in chapter 4.

Chapter three is concerned with an examination of the content and implementation of the 1971 curriculum (Government of Ireland, 1971) and the 1999 Primary Curriculum (Government of Ireland, 1999a) on which the tutor programme at the centre of this study is based, with particular reference to physical education. The differences between both curricula are outlined and aspects of the 1971 Physical Education Curriculum (Government of Ireland, 1999b) that were implemented as well as those that received little treatment are explained. The context for teaching physical education, as implementation of the 1999 Curriculum is initiated in primary schools is described, informed by a number of recent studies related to physical education. CPD in an Irish context is described and discussed with particular reference to recent developments in England in designing support for teachers that might prove useful in the Irish context. The chapter concludes by identifying a number of elements drawn from previous experience of implementation that inform the design of the tutor programme described in chapter 4.

Chapter four explores some of the key issues in programme design and the design of the physical education tutor programme, which is the focus of this study, is discussed. The specific aims and structure of the programme are outlined. The structure of the programme is aligned with the strands of the Physical Education Curriculum (Government of Ireland, 1999b). Hence, activities are categorised under the strands

athletics, dance, gymnastics, games, outdoor and adventure activities and aquatics. Each section contains a discussion of the particular strand of the curriculum, an outline of the practical activities that each tutor should experience and a framework for devising appropriate assessment and evaluation of the strand. The tutor programme is concerned also with how tutors will learn most effectively within each strand and this process of learning is informed by the review of literature outlined in chapter 2 as well as the issues underpinning the curriculum and professional development in physical education discussed in chapter 3. However, due to the volume of material involved, exemplars drawn from the content of the tutor programme are contained in Appendix A. The chapter concludes with a description of the phased implementation of the tutor programme.

Chapter five outlines the theoretical framework underpinning the study as well as the methodologies employed in undertaking the study of the effectiveness of the programme of professional development and the in-service programme facilitated by the tutors. Survey questionnaires, interviews and observation of tutors were used to investigate the appropriateness and effectiveness of the tutor programme. Similar methods were used to investigate the effect on teachers of the in-service programme designed by the tutors.

Chapter six contains the results of the investigation of the effectiveness of the tutor programme in preparing tutors for facilitating the in-service programme of physical education for teachers.

Chapter seven contains the results of the investigation into the initial impact of the in-service programme, designed and facilitated by the tutors, on teachers.

Chapter eight begins with a brief summary of the main focus of the study. Conclusions drawn from the study are discussed. Limitations and strengths of the study are outlined. A number of recommendations on how the programme might be presented as a basis for the education of support personnel responsible for the support of the primary teacher in the teaching of physical education and as a model for the in-service of other subject areas are outlined. The chapter concludes with suggestions in relation to areas for further study.

#### CHAPTER TWO

## Learning and Teaching in a Professional Development Context Introduction

The literature review that follows was conducted to explore some of the issues central to shaping a programme for tutors of physical education for primary school teachers. Tutors and the teachers for whom they design and deliver professional support, have at least one thing in common – they are all adult learners. Consequently, the review is concerned chiefly with the theory and practice of adult learning in a context of professional development. It has four main aims that require examination of four distinct but related literatures. Firstly, its function is to provide an insight into how adults learn based on the literature on adult learning theory. The most recent thinking on principles of adult learning and the promotion of critical reflection as a means of encouraging innovation by adults are examined with a view to informing the development of the tutor programme. Second, the concept of teacher change is explored to prompt change in approaches to teaching physical education by tutors and teachers. Third, an examination of some aspects of continuing professional development (CPD) is undertaken with a focus on two main areas: the challenges of CPD for providers of professional development and an examination of some models of CPD. Finally, the review highlights aspects of programme design with the intention of establishing a foundation for the design of the tutor programme for physical education that follows later in this thesis.

It should be stated that although the emphasis is on adult learning in the context of professional development of teachers, a wider literature is examined to complement the insights gained from the study of teachers alone. In addition, while aspects of adult learning and the design of programmes of learning are examined, the review does not attempt to provide a comprehensive review of all aspects of the processes concerned. Instead, the author attempts to focus on aspects that particularly merit examination in light of the design of the tutor programme while acknowledging that some aspects which are the subject of considerable attention in the current literature such as women's learning, for example, are not reviewed.

The review is divided into six main sections. Following the introduction, section two deals with learning and teaching in an adult context. Section three is concerned with the concept of teacher change. Section four explores the challenges for providers of professional development, examines traditional models of professional development and recommendations based on the research for improving CPD. The fifth section focuses on the design of professional development programmes for adults. In the concluding section key implications for the tutor programme based on the review of literature are discussed.

#### Adult Learning and Teaching in an Adult Context

This section begins with a brief outline of how adult learning theory has developed historically. Principles of adult learning currently identified in the literature and the ways in which these learning principles are applied to form principles of teaching in the adult education context are then examined. The section also includes a review of the literature on critical or reflective thinking as a means of promoting innovation and change in an adult education context.

#### The Development of Adult Learning Theory

Adult learning theory is a relatively new area of investigation in the social sciences. Here its focus is on how adults learn and how principles of teaching emerge from theories of learning in the adult context. A distinction is made between learning and education: the term learning is generally used with reference to the person in whom the change occurs or is expected to occur whereas the term education emphasises the activity that is undertaken to effect changes in the learner. Some learning theorists see learning as a process by which behaviour is changed, others define learning more in terms of fulfilment of potential or growth. There is a wide interpretation of the term 'adult' but possibly the most useful definition is the psychological definition which suggests that we are adults when we "arrive at a self-concept of being responsible for our own lives, of being self-directing" (Knowles et al., 1998, p. 64).

There has been relatively little thinking or writing about adult learning until the twentieth century and yet the early teachers of ancient times were all concerned with

teaching adults. Aristotle, Socrates and Plato in ancient Greece, as well as Cicero and Quintillian in ancient Rome were all teachers of adults. These educators used methods of teaching that are closely related to some of our modern teaching methods. It was in the seventh century in Europe that schools were organised for the teaching of children and strategies for teaching were developed which came to be known as 'pedagogy', meaning the art and science of teaching children. Pedagogical methods lasted to the present day and it was only in the 1920s that the different characteristics of adult learners began to be investigated. The American Association for Adult Education was founded in 1926 and contributed to the early debate on how adults actually learn.

Many of the theories of adult learning have been derived from the study of learning in animals and children. Bruner (1961) and Piaget (1970) have both investigated the process of intellectual growth beginning at childhood. Early writers in the field of adult learning were discussed by Knowles et al. (1998). They reported on the work of Thorndike (1928) who was concerned with the ability of the adult to learn and the capacity of adults to engage in lifelong learning and Sorenson (1938) who produced scientific evidence to support the idea that adults possessed abilities that were different from those of children. Lindeman (1926) began to study how adults learn and argued that in adult education the curriculum is built around the student's needs and interests in contrast to the conventional education system that required the student to adjust to an established curriculum. He argued that texts and teachers play a secondary role in adult education and must give way to the primary importance of the learners, referring to the experience of the adult learner the adult learner's "living textbook" and so the most important resource that an adult has in approaching learning is his/her experience. Education for the adult in Lindeman's view involves becoming aware of how significant this experience is as the richest source for adults' learning. He emphasised the need for adults to be self-directing in their learning. His belief that individual difference among people increases with age has significant implications even for the designer of adult learning programmes today. These three elements debated by Lindeman: the importance of the learner's experience, the concept of self-directed learning and the recognition of individual difference are dimensions that need to be emphasised within the tutor programme which is the focus of this study.

The questions that Lindeman posed were raised over and over again during the period between 1929 and 1941 creating a body of literature that informs thinking on adult education to the present day. Most of the elements of a theory of adult learning had been articulated by 1940 but were disjointed in nature. Contributions from the social sciences were important in the clarification and elaboration of these elements during the 1940s and 1950s.

Influences of Psychology, Psychotherapy, Sociology and Philosophy

Psychologists and psychotherapists have contributed quite considerably to adult learning theory. Freud identified the influence of the subconscious mind on behaviour. Concepts such as anxiety, projection and transference (in blocking or motivating learning) have exercised the minds of learning theorists. Jung (1969) proposed a theory that suggested that four ways of extracting information from experience to achieve understanding (sensation, thought, emotion and intuition) should be used in a judicious way to inform a balanced curriculum. A.H. Maslow (1972) emphasised the role of safety: when the learner feels safe enough to dare, learning can take place.

Carl R. Rogers (1969) developed an approach to education that was studentcentred based on the hypothesis that we can only facilitate learning rather than teach another person directly. He described the role of the facilitator in terms of setting the initial mood or climate for learning, making available the widest possible range of resources for learning and as a flexible resource to be utilized by the group. His focus on facilitators will be discussed further on p. 25. Learning, then, required a shift in focus from what the teacher does to what is happening in the student. He suggested that a person learns only those things that he perceives as being involved in the enhancement of self thus underlining the importance of making the learning relevant to the learner. He further hypothesised that experience, which would involve a change in the organisation of self, tends to be resisted, and that the structure and organisation of self appear to become more rigid under threat and to relax its boundaries when completely free from threat. These hypotheses suggest that learning often poses a threat to the learner. He concluded that the most significant learning will take place when the threat to the self of the learner is reduced to a minimum, hence, the importance of providing a supportive climate for learning. The creation of contexts that facilitate

understanding and provide 'safe' climates for learning are important considerations in the design of programmes of learning that have particular relevance for the tutor programme for physical education. As tutors engage in the tutor programme there is an underlying risk that learners will feel particularly exposed in areas where they have little experience due especially to the practical nature of many of the activities. Provision of 'safe' climates for learning throughout the various phases of the implementation of the tutor programme will be particularly important.

Developmental psychologists outlined changes with age through the life span related to our physical capabilities, mental abilities, interests, attitudes and lifestyles. Havighurst (1972), for example, identified a person's readiness to learn different things at different times and create 'teachable moments'. Further work has been undertaken too on the ageing process and its implications for learning. Kotulak (1997) has studied the function of the aging brain while Fishback (1999) has argued that our 'neural networks' have the potential to become more sophisticated as we age. Carper (2000) has argued that the intelligence age confers depends on accumulated life experience, well-developed verbal abilities and judgement.

Sociology has informed us of the influence of social groups on our learning and the works of Lewin (1951), Zander (1982) and Schlossberg, Lynch, and Chickering (1989) have contributed to our knowledge of these influences. The latter have written extensively about accommodating adult learners in colleges and universities. The effect of environmental influences such as race or culture on our learning has been studied by sociologists such as Harris and Moran (1996). The implications of the debate centred on the influence of social groups on our learning, for professional development in physical education will be discussed further in the context of the more recent debate around the development of communities of learning (p. 38). Philosophical issues too have been prominent in the literature on adult education with argument being centred on the goal of adult education being the improvement of individuals or the improvement of society. These issues have stimulated continuing debate with Bergevin (1967), Elias and Merriam (1980) and Apps (1985) all contributing to the debate on the philosophical issues in adult education. Elias and Merriam (1980) argued that adult education is heavily influenced by progressive, humanistic and radical philosophies while Hiemstra (1988) emphasised the importance of educators analysing personal

values and philosophies in terms of their professional action as adult education professionals. He argued that a philosophy promotes an understanding of human relationships, sensitises to the various needs associated with positive human interactions, provides a framework for distinguishing, separating and understanding personal values and promotes flexibility and consistency in working with adult learners. Merriam (1982) argued that philosophy can inform practice and provide guidelines for policy decisions, guiding adult educators in everyday practices. Hiemstra and Brockett (1994) contended that much of the scholarly thinking and resultant programmes related to self-direction in learning can be traced to the humanistic model developed by writers such as Rogers and Maslow. While adult learning theory continues to be shaped by researchers from different disciplines the concept of adult learning as 'andragogy' emerged based on the work of some key writers on adult learning theory.

#### Adult Learning as 'Andragogy'

Study of the development of adult learning theory leads to an examination of the term 'andragogy' as defined by Knowles et al. (1998). Andragogy can be conceptualised as an integrated framework of adult learning and was adopted initially during the 1950s in Europe. Leading Yugoslavian adult educators including Filipovic and Samolovcec began speaking and writing about andragogy and it was introduced into the American culture by Yugoslav, Dusan Savicevic in 1967. Knowles wrote of it in 1968 in the American Journal *Adult Leadership*. Throughout the 1970s and 1980s several major articles by European and American writers expounding the theory of andragogy appeared in the United States. The focus of many of these articles was on the application of andragogical principles to work in fields such as education and management.

#### Six Principles of Andragogy

The andragogical model is based on assumptions that proponents of the model claim are different from those of the pedagogical model. Critics of the andragogical model (Jarvis, 1987; Tennant, 1988), however, argue that proponents of andragogy adopt an overly simplistic view of children's learning and that some of the characteristics of adult learning that they define are also applicable to the learning of

children. Andragogy is based on a number of principles. These principles have developed from the works of educationalists such as Bruner, (1961) and Cross, (1981). Six important principles are outlined by Knowles et al. (1998).

Firstly, it is argued that adults need to know why they need to learn something before undertaking to learn it. This implies that one of the first tasks of the facilitator of adult learning is to help the learners become aware of the 'need to know'. Freire (1970) referred to this as 'consciousness-raising'. Tough (1979) found that when adults undertake to learn something on their own, they will probe the benefits of learning it. In relation to the tutor programme, which is the focus of this study, this dimension of learning, while applicable to the tutors involved in the study, would be a concept that merits particular consideration when planning how to help teachers as learners to become aware of 'the need to know'.

This principle that adults 'need to know' leads to the premise that adults should be engaged in a collaborative planning process for their learning. Knowles et al. (1998) cited the research of Tannenbaum, Mathieu, Salas and Cannon-Bowers (1991), Baldwin, Magjuka and Loher (1991) and Clark, Dobbins and Ladd (1983) to support his contention that the research "...seems to point to three areas in which adults need information and involvement before learning: the how, what and why of learning" (p.135). These studies all focused on adult learning in organisational training and emphasised involving adults in mutual planning and as learning partners. This principle is raised again in the context of the discussion below on collaborative learning.

A second principle proposed by Knowles (1975) is that adults have a concept of being responsible for their own decisions. This potential, he argued is precisely what sets adults apart from younger learners and adult educators need to treat them as being capable of such self-direction. They need to create learning situations where learners can move from being dependent to becoming self-directed. Others contend that this capacity is evident also in children's learning (Brookfield, 1986; Tennant, 1988). Brookfield (1986) defined self-directed learning as self-teaching. Candy (1991) defined self-directed learning as personal autonomy (autodidaxy) where the goals and purposes of learning are controlled by the learner and ownership of learning is assumed. There is overlap within these definitions but the clear message for the teacher, according to

Knowles et al. (1998), is the importance of structuring the learning situation to accommodate whatever stage the individual is at on the way from being dependent to becoming self-directed. This allows for the mixed nature of adults' capacities for self-direction (Candy, 1991). Taylor, Marienau and Fiddler (2000) in discussing self-direction and empowerment agreed that most adults do have a clear sense of what they want to know (and by extension, what they feel is irrelevant to know) and many want to discuss ideas (rather than be incessantly lectured to)" (p.300). However, they cautioned that adults need a balance between being told what to do and making decisions for themselves. They suggested that several self-directed learning strategies and techniques provide guidance, offering learner-centred structures within which learners and educators can negotiate particulars. These tasks can be challenging, requiring a shift from a view of learning that is mostly authority-directed to one in which learners assume greater responsibility.

A third principle outlined by Knowles et al., is concerned with the wealth of experience that adults have accumulated. While traditionally adult educators have focused on the wide discrepancies between any group of individuals and the rich resource for learning that this experience constitutes, greater emphasis in adult education is placed on differentiation and modifying strategies to suit the learner and on using this experience to enhance learning. Strategies such as group discussion, problem solving exercises and peer tutoring have, as a result, been considered more necessary in working with adults. Facilitating discussion, for example, involves developing the skills of questioning to promote deep approaches to learning. Taylor et al. (2000) argue that "it takes considerable sensitivity and skills to encourage learners to openly examine their values and beliefs" (p. 302) and emphasise that this process needs time to develop momentum, to engage learners at deeper levels and to come to some resolution. They outline strategies that focus on giving tasks that are clear and uncomplicated to ensure that activities are not overly intricate and hence, overly time consuming. Critics of this view of adult learning being based on the often rich experiences of adults argue that there may be times when strategies that are based on using experience as a resource of learning are not appropriate, such as when substantial amounts of new information are required. Recognition of the contribution of the adult learner's experience to their learning as well as recognition of the instances where particular experience is lacking are important factors that should be relevant to the tutor programme for physical education.

Sometimes it is argued, however, that adults' experiences can inhibit learning as minds can be closed to new ideas and ways of thinking. Argyris (1982) and Schon (1987) have studied the tendency to resist new learning that challenges mental schema developed from prior experience. Argyris 'double-loop' learning refers to learning that does not fit the learner's prior experiences. Schon wrote of 'knowing in action' (the somewhat automatic responses based on our existing mental schema) and 'reflection in action' (the process of reflecting in action to discover where existing schema are no longer appropriate and changing those schema when appropriate). Changing schema, in this way, opens the way for changing practice based on reflection. Merriam and Cafarella (1991) spoke of the set of schema possessed by adults that reflect our experiences and become the basis for assimilating new information. Kurt Lewin (1951) referred to the first stage of change being the "unfreezing" stage and the unlearning process becoming as important as the learning process. Individuals will need to change existing beliefs and perspectives to learn in many instances. Kolb (1984) saw all learning as a continuous process of relearning. These aspects of reflection on learning and promoting change in the learner constitute key principles underpinning the tutor programme and will be elaborated upon in the context of a discussion on teacher change that is crucial for the long-term impact of the programme on teachers' practice.

A fourth principle of adult learning revolves around the readiness of the adult to learn. "Adults become ready to learn those things they need to know and be able to do to cope effectively with real-life situations" (Knowles et al., 1998, p. 67). They argued that the timing of learning experiences to coincide with the developmental tasks that are part of the process of moving from one developmental stage to another is a critical task of the adult educator. While the principle is centred on adults' readiness to learn there is much debate around this issue of supporting adults in moving from the stage of readiness to learn. Taylor et al. (2000) suggested that "to start where learners are, we use experience they already have or else create activities based on new experiences authentic to the content" while cautioning that the learner may not see himself in the same light as the educator or may not be ready to engage with experience as a basis for learning (p. 313). Pratt (1988), recognising that most learning experiences are highly situational, identified two core dimensions: direction and support. These refer, respectively, to the need of the learner for assistance in the learning process and to the encouragement the learner needs from others. Foxon (1993) examined transfer of training in the workplace and concluded that "the learner's perception of organisational

support from supervisors and co-workers, and the likely availability of resources and technologies necessary to support transfer" positively influences motivation to learn as well as intention to transfer. These factors, central to enhancing transfer of learning, will be critical when tutors and teachers will be contemplating change. Pratt's model emphasises the need for facilitators to recognise the position of the learner initially and to be aware of the changes in needs during the learning experience. Noddings (1984) described the issue of taking the position of the learner as beginning "with the view from his eyes" (p.15). The concept of being aware of the readiness of the adult to learn and providing the appropriate support during the learning process is an important element in designing a programme of physical education for tutors who may be at different developmental stages. This consideration is particularly important for facilitators of the programme that is the focus of this study to understand so that they might support the learners where necessary. An example of this support is the use of video material, for example, in portraying dance activities within the dance module, given the generally poor understanding by teachers of creative aspects of dance.

A fifth principle derives from the adult's orientation to learning. Knowles et al. (1998) argue that this orientation tends to be life-centred rather than subject-centred in so far as adults cope most effectively when new knowledge, skills and attitudes are presented in the context of application to real-life situations. There is strong evidence to support the view that both primary teachers and those whose particular interest is in physical education (bearing in mind that the tutors are representative of both of these groups) respond best to knowledge and skills that are closely linked to real-life situations that they experience as part of their daily professional lives (McGuinness and Shelly, 1995). Caffarella (2002) claimed that "adults are not likely to willingly engage in learning unless the learning is meaningful to them" (p. 29) and was one of the beliefs that influenced her work on designing programmes of learning. Implicit in this argument is the suggestion that as a person matures orientation changes from one of 'subject-centredness' to 'problem-centredness' to be relevant to real-life situations. Critics of this view (Brookfield, 1986) suggest that the focus on problem-solving leads to an emphasis on competence and undervalues the large amount of learning undertaken by adults for its intrinsic worth. This leads to discussion of the sixth principle, which is concerned with adults' motivation as an element of their learning.

The sixth principle proposed by Knowles et al. is concerned with the motivation of adults to learn. They contend that adults, although responsive to some external motivators, are more influenced by internal motivators. Adults tend to be "more motivated toward learning that helps them solve problems in their lives or results in internal payoff" (Knowles et al., p. 149). Tough (1979) concluded that adult learners proceed through several phases of engaging in a learning project. The fact that learning was pleasurable, and contributed to the learner's self-esteem were important factors in motivating learners. However, motivation can be blocked by factors such as time constraints, negative self-concept or programmes that violate principles of adult learning.

Wlodowski (1985) suggested that adult motivation to learn is related to success, volition, value and enjoyment. Vroom (1995) stated that adult learners will be most motivated when they believe they can learn the material, that the learning will help them and that it is important to them. Caffarella (2002) summarised the arguments underpinning this sixth principle defined by Knowles et al.(1998) in her statement of principles on which she bases her planning framework for development of adult programmes: "adults are motivated to learn based on a combination of complex internal and external forces" (p. 29).

Beyond the work of Knowles et al. (1998) two other elements of learning in an adult context are worth considering. These are the importance of experiential learning and the recognition of individual learning styles as influences on how adults learn.

#### Experiential Learning

While discussions of the principles of adult learning defined above focus on the role of prior experience in shaping learning, consideration of the role of current experiences has been given an increasing amount of attention in more recent times and has led to the experiential approach to learning becoming an essential feature of adult learning practice. Probably the most common understanding of experiential learning is that based on the work of Kolb (1984) with his cycle of experiential learning which was developed from the work of Piaget, Lewin and others. "Arguably it is because of the 'recipe' type of approach that is demonstrated in Kolb's work (Rowland, 2000) that

experiential learning has become so much a topic of discussion and use in educational and training circles." (Moon, 2004, p. 114). Kolb (1984) has proposed experiential learning as the way to facilitate learning based on the problem-solving model of action research. Due to the practical nature of physical education it can be regarded as natural that experiential learning would be emphasised within any programme of learning. Kolb, however, provided an indication of the depth of such experiential learning when he suggested that the learner should engage in four steps of development: exposure to concrete experiences, reflecting on these experiences, creation of concepts that allow the learner to form sound theories and testing these theories to solve problems. Attention to these four steps involved in experiential learning leads the author to uncover means of building on experiences to ensure that real learning occurs. Kolb further suggested that these four steps combine to create distinct learning styles.

#### Cognitive and Learning Styles

When the principles of adult learning are applied to programmes of learning for adults another concern emerges: the extent to which cognitive and learning styles can determine the quality of the learning experience of the adult. "The significance of the approach that learners take to learning tasks for the results of the learning process has been a key development in research on learning" (Moon, 2004, p. 59). Cognitive styles are thought to be stable traits and refer to a person's typical manner of acquiring and processing information (Messick, 1984) and generally describe a person's typical mode of thinking, remembering or problem solving. Learning style embraces more than just the cognitive style of the learner and refers to more general preferences for types of learning situations. A review of the literature on learning styles presents us with a range of definitions. The definitions are concerned with the cognitive, affective and psychomotor dimensions as well as the characteristics of instruction and instructional settings. Riding and Rayner (1998) distinguish between definitions based on the process of learning, on orientation to study, on instructional preferences and on cognitive styles. Learning styles classify different ways people learn and how they approach information (Conner, 2004). In most situations, cognitive styles and learning styles are used interchangeably.

Studies of cognitive styles and learning styles tend to focus on acquiring information and discuss ways in which learners prefer to receive information. This process of learning or receiving information has been categorised as visual, tactile or psychomotor (Wislock, 1993). "The implication of this for learning professionals is that information must be presented in multiple approaches so that different learners can understand it" (Knowles et al., 1998, p. 162).

The process of learning is discussed by Kolb (1984) who classified learners as divergers, convergers, accommodators, or assimilators. Similar classifications were outlined by Honey and Mumford (1992) who describe four learning styles: activists, reflectors, theorists and pragmatists. Another model which examines the learning process is that defined by Felder and Silverman (1988) and further developed by Soloman and Felder (1999). It presents four dimensions of learning: active-reflective, sensing-intuitive, visual-verbal, and sequential-global. Entwistle and Tait (1996) identified approaches to learning as deep, surface, strategic and apathetic.

Dunn, Dunn and Price (1984) examined instructional preferences and identified learning preferences that included environmental factors such as temperature or lighting, emotional aspects such as responsibility, physiological factors such as energy level, perceptual influences such as auditory or visual influences, sociological factors such as working alone or with peers, and cognitive factors relating to the learner's global or analytical preferences. Riding and Rayner (1998) examined cognitive factors and identified two varying dimensions of learning: wholisitic/analytic which involves organising information into whole or parts and verbal/imagery which is concerned with representing information as words or images. Gardner's theory of multiple intelligences (Gardner, 1983) has led to a broader understanding of how people learn rather than the traditional purely academic view of learning. He proposed that we should spend less time on ranking and more time helping learners to identify their natural competencies and gifts and cultivate these. Even in a limited review of research into learning styles many examples of instruments to measure learning styles can be identified. Kolb's Learning Style Inventory (Kolb, 1984), Gregorc Learning Style (Gregorc, 1982), and Costa and McRae's (1992) NEO-PI-R are some examples of such instruments.

Theoretically, cognitive and learning styles could be used to predict what kind of instructional strategies or methods would be most effective for a given individual and learning task. The learning styles framework developed by Dunn & Dunn (1999) has raised the issue of individual differences in learners. While acknowledging that most professionals recognise intuitively that differences in style exist among adult learners, the research support for learning styles is not conclusive. Limited research and difficulties with the psychometric qualities of the instruments used for measuring learning styles have led researchers (Coffield et al., 2004) to be cautious in recommending the use of learning styles. Possibly the best approach has been proposed by Merriam and Caffarella (1991) when they advocate that the instruments should be used to create awareness that differences exist, as a starting point for learners to explore their preferences and as areas for discussion about the best learning strategies. With that in mind a study conducted by Sweeney (2001) is of interest in so far as it relates to learning styles in the Irish context.

Sweeney's study involved undergraduates of Physical Education in the University of Limerick with the purpose of determining student-learning preferences and exploring the implications of different presentation methods used in courses. Using the Felder-Soloman Index of Learning Styles she found a predominance of moderate to strong class preference for the active, sensing, visual dimensions and concluded that this finding "re-inforces the need for imaginative presentation methods on the part of tutors" (p. 13). She highlighted in particular the use of video, diagrammatic task-cards, demonstrations and imaging to provide "...the appropriate learning environment for the visual learners" (p. 13). Learning will be further enhanced for those with a preference for the active, sensing dimensions of learning by 'hands on' movement exploration in a variety of contexts.

In her exploration of the needs of students who prefer subject-matter presented sequentially and those who need the 'whole picture', those (albeit a minority) who are reflective and intuitive learners or verbal learners she concluded that the challenge for tutors is to facilitate the learning preferences of students. While learning styles or preferences were relatively stable Sweeney contended that learners can develop learning strategies that enhance their learning potential "particularly in contexts which do not facilitate their learning preference" (p.15).

In conclusion, based on the data gathered on learners in general the implication is that adult learning professionals should design learning experiences that accommodate multisensory preferences. It would seem critical that an awareness of general learning preferences should inform the approach taken in presenting programmes to adult learners and prompt facilitators to devise some learning strategies to facilitate learning. But that is just one side of the coin. Attention must now be focused on the important issue of teaching in an adult context.

#### Teaching in an Adult Context

In the early 1900s Dewey's examination of the theories of teaching resulted in the development of a system of principles based on the concepts of experience, democracy, continuity and interaction. He identified experience as the key starting point of an educational process while democracy, continuity and interaction informed the process.

From this thinking grew another set of concepts that are referred to as the discovery or inquiry method. Although rooted in Dewey's work and in the work of cognitive theorists, Bruner (1961, 1966) is probably the "most notable proponent of this approach to teaching" (Knowles et al., 1998, p. 97). He offered a perspective on inquiry teaching and learning which identified three roles of teachers. One role was defined that described teachers as communicators of knowledge, a second described teachers as models who inspire and another described the role of teachers as constituting symbols of 'education'. He contended that inquiry teaching should, for example, "specify the experiences that most effectively implant in the individual a predisposition toward learning" (Bruner, 1966, p. 40). When students engage in acts of discovery, he argued, it is more likely that they will nurture the will to learn. He based his system on this willingness to learn, a trait he believed exists in all people. Postman and Weingartner (1969) further developed the work of Bruner by identifying behaviour observable in teachers employing the inquiry method. Another significant contribution to the theory of teaching was that of Bandura and Walters (1963) who developed modelling as an approach to teaching where role modelling is the fundamental technique of the teacher. The teacher behaves in ways that he or she wants the learner to imitate. Benefits that can be accrued from exposing the learner to a model include the learner acquiring new

kinds of responses or decreasing or increasing the frequency of previously acquired responses.

#### Early Principles of Teaching

Early principles of teaching were based on learning theories about children and animals and so Hilgard's (1966) identification of principles based on stimulus-response theory, cognitive theory and motivation and personality theory informed early teaching theory. Skinner (1968) and Gagne (1965) identified theories of teaching that emphasised management of procedures that cause behavioural changes that can be looked on as products of learning. The main role of the teacher as defined by these theorists, who used other prominent theorists to validate their work, was that of someone who shapes behaviour.

Other writers outlined theories of teaching that focused on teachers facilitating learning. Carl Rogers (1969) described the aim of education as the facilitation of learning (p. 104-105) and described the role of the teacher as that of a facilitator of learning. He defined the critical elements in performing this role in terms that are very important for the author's programme. Rogers' belief was that the facilitator should show qualities of genuineness, caring and respect, empathic understanding, and sensitive and accurate listening. His guidelines for facilitators include the importance of setting the initial mood or climate of the group experience and the necessity for eliciting and clarifying the purposes of the individuals in the group. He believed too that the facilitator must allow the learner to be motivated by the purposes that have meaning for him/her and must endeavour to organise and make easily available the widest possible range of resources for learning. The facilitator must regard herself as a flexible resource and not feel downgraded by this position. She must accept both intellectual content and attitudes that may be formed by emotion or personal feelings. She becomes a participant learner as the climate of the classroom becomes established, she shares herself with the group and allows them to accept or reject her feedback which she is free to offer honestly with an expression of her own feelings. She remains alert to the expressions indicative of deep or strong feelings and brings them into the open for understanding by the group. Significantly the facilitator is urged to recognise

and accept her own limitations, which might for example be her tendency to feel strongly judgmental and evaluative.

While theories of learning have focused on how adults learn or methods of learning, and theories of teaching have examined the nature of teaching or the methods employed to influence learning and the teacher's role in this process, research continues to result in new systems of thought. Within the context of adult education the value of teaching and learning as a means of promoting critical or reflective thinking on the part of adults is an emerging concept that continues to merit significant attention in the literature.

The Concept of Critical Reflection as a Central Element in Teaching Adults

The more recent literature suggests strongly that it is not sufficient for adult education programmes to merely satisfy the identified needs of learners but that they should help adult learners to transform their way of thinking about themselves and their world. Theorists such as Freire (1992) focused on a variety of changes that may result when learning is viewed as having the potential to transform (Taylor et al., 2000, p. 22). Mezirow (1985) called this 'perspective transformation' and described the process of 'emancipatory learning' which frees individuals from limiting beliefs so that they may arrive at "an informed and reflective decision to act" (p. 164). Brookfield (1986) proposed that this can be achieved through the development of competence in 'critical reflectivity'. Taylor et al. (2000) saw reflection and critical reflection as a necessary process "for experience to lead to shifts of perception associated with meaningful learning and development" (p. 27).

Boud, Keogh and Walker (1985) defined reflection as thinking and feeling activities "in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (p.19). Taylor et al. (2000) argued that *critical* reflection takes reflection to a higher level, asking *why* we think in a particular way (p. 28) and leads the learner to reflect on the process of thinking, learning, and understanding.

Moon (1999) has defined reflection as a form of mental processing that we use to fulfil a purpose or to achieve some anticipated outcome. It is largely based on the further processing of knowledge and understanding and emotions that we already possess. The process of reflection lies "...somewhere around the notion of learning and thinking" and we reflect to learn something, or we learn as a result of reflecting. She reports that since the end of the 1990s there is a great deal of literature available on how to introduce reflection into disciplines or to embed it in programmes but she cautions that good empirical evidence that the development of reflection in academic contexts has long-term benefit to the majority of learners is still substantially missing (Moon, 2004). McAlpine and Weston (2002) examined the reflective processes of exemplary teachers and noted how they used their prior experiences to reflect on the quality of their teaching. They concluded that reflection aids in the reflective processes themselves, thereby building or expanding knowledge (p. 69). Moon (1999) described the outcomes of reflection as the development of new ideas or more learning, rather than engaging with new material. She linked the idea of reflection to a continuum from surface to deep approaches to learning arguing that

...reflection is involved in the process of meaningful learning when a learner takes a deep approach. In terms of the stages of learning described above, this would imply that reflection is increasingly involved from the stage of 'making meaning' through 'working with meaning' to 'transformative learning'. (Moon, 2004, p. 85).

A definition suggested by Hatton and Smith (1995) is stated very simply: "[Reflection is] deliberate thinking about action with a view to its improvement". Day (1999) discussed reflection related to teachers and teaching. He underlined the importance of placing "learning through reflection at the centre of teachers' critical thinking and development" (p. 31). He questioned, however, writers on reflection who tend to ignore or downplay the importance of attending to emotional development: "It should always be remembered that reflection on teaching is not simply a cognitive process. Like teaching itself, it demands emotional commitment. It will involve the head and the heart" (p.47). Other writers such as Moon (2004) and Boud, Keogh and

Walker (1985) suggest that recognition of emotion is central also to the process of reflection.

Day contended that "in working lives characterized by busyness the constant challenge is to find the means of sustaining such critical thinking and emotional intelligence" (p.33). On the issue of time, Schon (1983) discussed the possibility that we make it more difficult for learners to function "as reflective designers of their own education" as we integrate in a curriculum the knowledge and skills that students, in our judgement, need to learn (p. 341). This dilemma, he argued, was concerned on the one hand with time but also with a possible lack of prior, practice-related experience on which to reflect. Schon proposed that we need to focus on timing, pace and direction to allow free time for reflection so that opportunities can be created for learners to link classroom knowledge with prior experiences.

Ward and McCotter (2004) argued that while there is still some debate over the way in which reflection is defined "the value of reflection to the development of teachers has a growing consensus among teacher educators" (p. 246). Attard and Armour (2006) described the reflective practice of a beginning physical education teacher who had journeyed through different levels of reflection (these were described as 'spontaneous reflection', 'technical reflection' and 'dialogic reflection') and finally engaged in 'transformative/critical reflection', the deepest level of reflection. They concluded that reflection did promote professional learning and led to changes in the professional and personal life of the teacher. Tsangaridou and O'Sullivan (1994) proposed that encouraging reflective thinking among teachers should incorporate reflection on real-life settings and concrete experiences that prompt teachers to desribe, justify and critique their actions. In a further study, Tsangaridou and O'Sullivan (1997) sought to describe teachers' reflection within the teaching and learning environment, as well as the role of refection in their professional development "as it is rather than as what it ought to be" (p. 4). Their study was focused on elementary and secondary physical education teachers. They found that the type of reflection that informed teachers' practices addressed pedagogical, content, ethical, moral and social issues but it was situationally driven and contextually bound. The four teachers' reflection changed over their teaching careers and the macroreflection, the type of reflection that informs teachers' practices over time, was influential in changing classroom practice

and the teachers' professional development. A further study by Ward and O'Sullivan (1998) described the professional 'isolation' of one physical education teacher. They pointed to the lack of opportunity to reflect collaboratively as one facet that contributed to the feeling of isolation that pervaded his practice.

## Critical Reflection leading to Transformative Learning

The transformative learning that results from critical reflection was debated by Mezirow (1991). He based much of his thinking on the writings of Habermas (1971) who identified three forms of knowledge: instrumental knowledge, practical knowledge and emancipatory knowledge. Instrumental knowledge is related to technical interest in how things work while practical knowledge is concerned with our knowledge acquired through our pursuit of social norms. Emancipatory knowledge is developed from our desire to grow and develop and our resulting interest in emancipation. "An interest in emancipation leads, through critical self-reflection to emancipatory knowledge" (Cranton, 1996, p. 20). Cranton claims that the process of gaining emancipatory knowledge is transformative learning and that for the adult educator this type of learning is concerned with the adult "increasing instrumental, practical and emancipatory knowledge" (p. 23). For teachers this might suggest an increased emphasis on critical self-reflection in programmes of learning to guide the teacher towards transformative learning. Within the context of a tutor programme in this study, the promotion of critical self-reflection leading to transformative learning can be thought of as essential in so far as the tutors will in turn be attempting to prompt critical thinking by teachers to effect change in their teaching. Given that the tutors or teachers are generally not specialists in physical education, the instrumental and practical knowledge must merit particular attention as this knowledge underpins their confidence and competence to develop and implement programmes of physical education. This knowledge would constitute the foundation of transformative learning, described by Baumgartner (2001) as "a complex process involving thoughts and feelings" (p. 18). Building on the work of Mezirow (1991), Brookfield and other theorists, Cranton (1996) has created a practical, personal approach to educator development – one that is self-directed, reflective and transformative. She discussed how teachers and facilitators can and must be understood as adults engaged in transformative learning. She

highlighted studies of how individual educators learned about their practice and hence engaged in the process of transformative learning.

In attempting to highlight the importance of critical reflection in the process of transformative learning by adults, Mezirow (1991) speaks of content reflection (where individuals reflect on the content of a problem), process reflection (involves thinking about the strategies used to solve the problem) and premise reflection (where the assumptions, beliefs and values underlying the problem are questioned). He outlines three types of 'meaning perspectives' that influence educators. Educators have epistemic perspectives or knowledge about teaching and learning, they are influenced by social norms, cultural codes and language that constitute their sociolinguistic perspectives and they have an understanding of themselves as individuals, which he labels as their psychological perspectives. In examining the 'meaning perspectives' of the adult educator as presented by Mezirow (1991), Cranton (1996) defined the meaning perspectives as the "...frameworks...that shape our perceptions of ourselves, others and our surroundings. Meaning perspectives are formed through experiences" (p. 96). She argues, as educators, we need to be aware of our meaning perspectives and to open them to questioning. She believes that to do this, educators need to view their development as a self-directed process. Self-directed learning, according to Cranton (1996) needs to be a component of the process of transformative learning. It involves questioning one's assumptions and must ultimately be a process controlled by the learner but need not be carried out in isolation, it can be stimulated by direction from others.

Significantly, however, she argues that educators are often not used to self-directed learning having come through a system that failed to promote this type of learning and having set themselves up as experts in their particular field. She proposes then that becoming self-directed can be a transformation of a perspective on education in itself. The reflection involved in self-directed learning may not always lead to transformative learning, sometimes it provides opportunities to confirm or consolidate views or beliefs. This is still a valuable outcome for the educator.

Critical reflection, Cranton (1996) argues, is "the central process in transformative learning" (p. 116). Strategies that promote critical reflection include,

articulating assumptions, critical questioning and imagining alternative assumptions. These are important components of critical reflection. In the work of educators, aspects of critical reflection must be promoted. Cranton claims that in integrating our learning into our practice we can reconstruct what we know or engage in 'critical reflection' in addition to acquiring knowledge (p. 26).

Strategies that educators have used down through the years to facilitate the acquisition of knowledge have included workshops, retreats, training programmes, and evaluation and performance appraisals. She argues that there has been very little convincing evidence that these strategies have a meaningful impact on practice and suggests ways in which these strategies can be used to promote critical thinking and transformative learning. Workshops, for example, can be isolated from practice and often focus on the technical aspect of teaching. However, "if participants are involved in planning and if the agenda remains open to change as the workshop progresses congruence [with practice] can increase" (p. 34). While this in itself may not be sufficient to transform practice, congruence with practice is one positive dimension of learning by adults which echoes one of the principles of adult learning concerned with the adult's orientation to learning being linked to its application to real-life situations as discussed earlier. Retreats (which Cranton defines as being held away from the educator's practice and tending to be of longer duration than a workshop) are more likely to foster critical reflection if the activities, discussions, or group work are designed with that goal in mind. They need, however, to be revisited to be seen as part of practice. "If a retreat is a one- or two-day event, with no follow-up activities, the likelihood of it leading to sustained critical reflection may decrease" (p. 36). She argues that "the combination of self-assessment and distance from work has the potential to stimulate critical self-reflection and transformation. If the process is continued rather than treated as an isolated event, emancipatory development could occur" (p. 37).

"Traditional 'train-the-trainer' or training programmes for educators tend to view the trainer as technician and adopt a technical approach" (Cranton, 1996, p. 38). Cranton notes that many programmes have moved away from this technical approach which was originally widely used in business and industry. "With the increased emphasis on teamwork, empowerment, and participative decision making...a strictly technical approach is no longer seen as valid" (Cranton, p. 39). Watkins and Marsick

Traditionally much research has gone into the value of evaluations and performance appraisals that Cranton identifies as being most useful when the educator is truly involved in understanding his/her practice and getting feedback from others and discussing it. In this way it can lead to emancipatory learning. Cranton (1996) uses Mezirow's definition of emancipatory learning: "becoming free from forces that have limited our options, forces that have been taken for granted or seen as beyond our control" (Mezirow, 1991, p. 87). This learning process requires thinking deeply about assumptions and constructing new meaning from the new context of learning. This transformative process results in reflective action from changes in life experience (Mezirow, 2000). It could be argued that such learning, with its emphasis on overcoming constraints and engaging in reflective action, has particular relevance in the continuum of learning that will be involved as part of the tutor programme and the subsequent in-service programme for teachers.

Cranton (1996) argues strongly that, as a strong theoretical and practical literature is now beginning to emerge in adult education, we are "witnessing a stage of development in the field that is reflective, critical, and fairly comprehensive. That is, we are beginning to understand how adults learn and how educators can foster, support, and challenge that learning" (1996, p. 6). While this involves self-directed learning, critical reflection and transformative learning, the case must also be made that the total environment of the learner needs to be considered. Learning implies not only change in the learner but also in the educator and the system in which the change is to take place. Hence, it is important to examine the context of the tutor programme for physical education, which will be the focus of chapter 3 as well as examining in some detail the literature on change and innovation.

## Teacher Change

Change theorists such as Lewin (1951), Greiner (1971) and Zurcher (1977) have been concerned with the planning of change, strategies of change and resistance to change that have been features of attempted innovations by teachers. Change and innovation have been used interchangeably in the literature to denote both planned and incidental acts or processes that make something different. There has been an

increasing awareness of the importance of the environment of the teacher on his or her willingness to change or innovate. It has been acknowledged that "differences in the context within which people teach have an influence on how they develop" (Cranton, 1996, p. 180).

Rogers (1983, p. 24) cited in Randi and Corno (1997) stated that "it matters little whether or not an innovation has a great degree of advantage over the idea it is replacing. What does matter is whether the individual perceives the relative advantage of the innovation." The writings of Goodlad (1975), Smith, Dwyer, Prunty and Kleine (1986), and the work of Fullan and Miles (1992) suggest that innovation has been prominent among those concerned with improving schools for some time. Early work on efforts to effect school change relied on the use of the research-development-diffusion (RD&D) model. This model assumes teachers in a passive way engage in educational research and is extremely prescriptive. Studies of implementation focused on the degree of fidelity to the models that had been presented. Randi and Corno (1997) concluded that "measures of implementation have evaluated, and by extrapolation valued, the replication of innovations, not innovation itself" (p.1168) and that as of the early 1980s there was little understanding of teachers' points of view during the process of innovation.

Doyle and Ponder (1977) established the need for considering the role of teacher decision-making in the adoption of innovations and suggested that teachers take three factors into account when responding to innovations. They labelled these as instrumentality, congruence and cost. Thus, they took into consideration whether the innovation suited their classroom situation, whether it was congruent with their existing philosophy and decided whether the extra time and effort would benefit their students. This study provided a framework for further studies that examined why teachers do or do not adopt particular practices.

Guskey (1988) concluded that effective teachers are more receptive to a particular programme because they are most likely incorporating aspects of it into their current teaching practices. Sparks (1986) found that teachers' attitude toward innovation was a person variable that affected implementation. In terms of the tutor programme for physical education the importance of introducing content that is some

way congruent with tutors' existing practice while at the same time building in scope for tutors to innovate, adapt and change will need to continuously inform its development.

# The Role of Adaptation During the Change Process

Randi and Corno (1997) examined large scale studies of school improvement and concluded that adaptations of innovations during the process of implementation occur frequently. It is rare to find innovations replicated exactly. Hence, researchers began to look at the adaptation perspective or the role of adaptation in the change process. This presented some new difficulties the principle one being the tendency for new practice to conform to existing norms and thus 'watering down' the intended reforms. Bird (1986) described "a process of mutual adaptation in which both the innovation and the adopting organization underwent transformation" (cited in Randi and Corno, 1997, p. 1170). Bird suggested that the ideal situation was one where the mutual adaptation resulted in improvement in both the innovation and the school. Randi and Corno (1997) concluded that "this perspective suggested that teachers engaged in the thoughtful practice of adaptation might become originators of new practice" (p. 1171). Duffy (1993) found that teachers initially asked for prescriptions but over time teachers' practices showed progress from modelling strategies faithfully to revising strategies to inventing new strategies.

## The Role of the Teacher in Implementing Change

Cuban (1993) and Goodlad (1984) argued that there is little evidence to show that the implementation of externally developed innovations actually improves schools. Further research indicated that while innovation has been considered to occupy a central role in the change process, teachers have seldom been encouraged to innovate but to implement others' ideas in practice. Fullan and Miles (1992) stated that programmes developed by outside experts have reduced teachers to a role of passive consumers, focusing teachers' attention on learning to use specific strategies rather than solving specific problems. Randi and Corno (1997) have argued that despite the growing interest in teaching as reflective practice, staff development has "seldom supported teachers in becoming critical readers of research" (p. 1178). This concurs with the findings of Ward and

O'Sullivan (1998) who found that teachers rarely read research in the field of physical education.

Lieberman and Miller (1992) claimed that staff development has not acknowledged teachers' contributions to the knowledge base of learning. Teachers have been supported in learning to implement innovations but not in learning to innovate. Lieberman and Miller (1986) maintained that the improvement of teaching and learning depends on teachers "...those closest to teaching and learning" (cited in Randi and Corno, 1997, p. 1165). Innovations in schools cannot be seen as recipes, Randi and Corno argued as "change is not simply a matter of implementing innovations (p. 1165)". They contend that without a clearer understanding of how teachers implement innovations or generate fresh practices - which they do continuously - it is unlikely that staff development can support innovation at the classroom level. They identify teachers responding to the unique and varied contexts of teaching as being a significant factor in successful innovation. One of the challenges for the tutor programme of physical education which is the focus of this study is to prompt tutors to change as part of their practice, responding to the unique context in which each tutor is situated. This should help tutors to gain a deeper understanding of the curriculum and methodologies that they will in turn be dealing with in the in-service programme for teachers.

### Recognition of Change in Practice and Teacher Attitude to Change

Researchers concerned with educational change questioned whether change occurred and what motivated teachers to change their practice. Cuban (1993) and Richardson (1990) recognised the teacher as an active participant in the change process and acknowledged that change had occurred when some teachers, for example, were gradually changing practices within the constraints presented by the realities of their situations even though when change was externally defined it appeared that not much change had occurred. Richardson argued that teachers were not resistant to change but to externally imposed innovations, many of which they could not justify in light of the demands of practice. She concluded that the content of change should emanate both from the practical knowledge held by teachers and empirical knowledge derived from research.

Day (1999) contended that "teachers are willing to engage in change according to whether they perceive need, diagnose a problem, and conceive of a response to the problem that is both within their intellectual and emotional capacity, and appropriate to their personal, educative and ideological perspectives and the context in which they work, and have access to support" (p. 100). Nias et al. (1992) in a study of 5 primary schools in England concluded that although teachers responded throughout the school year to internal and external pressures to change, the main impetus for their learning came from the belief that professional development was "a way of life" (pp. 72-73). Little (2001) reported that when teachers find a 'happy' fit between the reforms and their own lives, they become quite enthusiastic about educational reforms.

Attempts have been made to examine how teachers innovate with regard to designing curriculum. Some researchers have suggested that teachers may have learned through imitation of innovations. Imitation, playing an important role in constructing new knowledge and in the development of new ideas, is the starting point for many teachers in adapting programmes to meet the needs of particular students. Feiman-Nemser and Buchman (1985) argued that learning to teach involves more than just unreflective imitation, emphasising the need to develop from this starting point.

### Promoting a Better Understanding of Change

Closer examination of how teachers learn can provide us with a model for promoting change as part of a programme of professional development. Others such as Clandinin (1985) and Leinhardt (1988) identified knowledge that is learned through classroom interactions. Joyce and Weil (1986) sought to design a model of teacher education that prepared teachers to innovate and to encourage teachers to reflect on their behaviour and to select strategies that were most likely to increase their effectiveness. Rubin (1985) argued that invention is an important condition of effective teaching in that it involves devising ways to solve instructional problems. Bennett and Rolheiser-Bennett (1992) found that teachers need to be provided "...with the opportunity to think critically about innovations and to make explicit connections between the various curricular and instructional concepts during in-service teacher education" (cited in Randi and Corno, 1997, p. 1201). In the context of the tutor programme for physical education, while imitation may be an important starting point

for tutors in adapting programmes it will be important that this cohort of professionals, as they develop expertise, will develop a level of understanding of the content and methodologies that will enable them to adapt and innovate within their own teaching situations. This depth of understanding should be achievable for the tutors who will have exposure to an in-depth programme of preparation but it will probably mean that considerable more support will be needed for teachers to reach this level.

### The Role of the Reflective Practitioner

McLaughlin (1991) has emphasised the need for teacher education to engage teachers in learning in the context of their classroom settings. Waiting for research and policy to invent solutions is inefficient she claimed when the unpredictable nature of schools requires the practitioners themselves to be innovators. Recent approaches to teaching and learning call for invention and not merely the implementation of others' ideas. McLaughlin (1993) called on teachers to replace externally developed innovations with their own inventions. Researchers like Joyce, Bennett, and Rolheiser-Bennett (1990) and McLaughlin (1991) have called for teachers to adapt research findings to their particular teaching situations and to reflect critically on their practices. Underpinning much of the discussion on innovation is the emphasis on critical reflection.

## The Role of Collaboration in Change: Teacher Learning Communities

Another focus emerged from the studies of teacher change: the promotion of collaborative work. One form of collaboration involved teachers working in collaboration with researchers. Krajcik, Blumenfeld, Marx and Soloway (1994) developed an alternative model for disseminating research to practitioners. The researchers worked in collaboration with the teachers throughout a project designed to promote project-based science instruction. They found that teachers moved from justifying practices based on rules to theoretical understandings of project-based instruction.

Another form of practice proposed by Day (1999) involved teachers working together in reflecting in and on action in that collaboration provides checks against

realities constrained by the limitations of the single perspective of the teacher. Analysis and planning which occurs in a collaborative environment clearly "...holds the possibilities for greater learning" (p. 37). Keay (2006) discussed collaborative learning "as a process which requires engagement in a series of collaborative activities with colleagues" (p. 289) involving learning together, valuing each other's input to the process and requiring motivation from all involved. Wasley (1994) urged teachers to collaborate with students and colleagues as well as policy makers and to allow time for meaningful change to occur. Hence, it would appear that for any programme of learning to be effective, it should address the issue of collaboration with colleagues. Within the tutor programme, this might best be achieved by providing opportunities for collaboration with fellow tutors or colleagues. The issue of allowing time for change to occur is one that is particularly relevant to the study where a considerable time gap will be necessary to effect change in the teaching of physical education from the point where tutors embark on the tutor programme to the point where teachers begin to implement the Physical Education Curriculum (Government of Ireland, 1999b) and, in turn, time for change to occur as implementation traditionally has presented such a range of constraints (discussed in chapter 3).

The concept of working collaboratively leads to discussion of communities of practice. Wenger's concept of communities of practice is based on a social theory of learning where the primary focus is on learning as social participation (Wenger, 1998, p. 4). It is a concept that has grown in importance as a means of promoting "...through sustaining enough mutual engagement in pursuing an enterprise together to share some significant learning...communities of practice can be thought of as shared histories of learning" (p. 86). Wenger describes communities of practice as involving ongoing, social interaction, negotiating new meanings and learning from each other as participants share their competence with new generations of learners. This leads to discussion of teacher learning communities which are based on forming communities of practice where teachers are working in collaboration. This concept emerged during the 1980s when Rosenholtz (1989) suggested that teachers who felt supported in their own ongoing learning and classroom practice were more committed and effective than those who did not receive this confirmation. She found that the support of teacher networks providing opportunities for cooperation with colleagues increased teacher effectiveness. Likewise, Rosenholtz found that teachers with a high sense of personal efficacy were more likely to adopt new classroom approaches to promote school improvement and to

remain in the teaching profession. Day (1999) argued that within learning communities, by starting with dialogue, the culture of reflection in, on and about the action will occur routinely. Making time for sustained reflection and dialogue is a primary challenge in building professional learning cultures.

Sivated learning theory is the theoretical framework that informs communities of practice. O'Sullivan's work on the development of communities of practice within physical education involves teachers "...coming together over time to interrogate their own teaching and work practices as well as the appropriateness of expectations for physical education and physical education teachers" (p. 3). She has described Wenger's (1998) ideas in terms of the five stages of development that are involved in establishing communities of practice and related them to a physical education context. The result of this exercise is the establishment of a framework for communities of learners for physical education. The framework is under review currently by Tannehill, O'Sullivan and Ní Chróinín (2006) with a view to finding out how teachers change their beliefs and practices as a result of participating in a community of practice. In his work on assessment for learning (AfL), Wiliam (2007) concluded that communities of practice or professional learning teams were most effective when they were composed of six to ten people, meeting for two hours per month with an additional two hours spent on collaboration between meetings, and working over a two-year period. The concepts of collaborative learning and communities of practice will be debated further when the issue of professional development of teachers is discussed in chapter 3.

## Designing Training to Promote Change

As a consequence of the view of teachers as passive consumers of research described above, transfer of training became an aim of in-service programmes. Joyce and Showers (1980) for example, noted that the 'theory, demonstration, and practice' training design had dominated staff development programmes during the 1970s. However, researchers such as McLaughlin (1991) proposed a new approach. She argued that it was necessary to recognise the value of the teaching and learning process, the differing contexts of teaching and the skill level of the teacher as important components of programmes. These three issues constitute central elements in the context of the tutor programme for physical education. Detailed consideration of the

process of learning discussed earlier in this review, the teaching contexts in which tutors' experience has been situated, and their varying needs linked especially to their skill levels will be required in the design of the programme.

Coaching also became a critical component in the design of many staff development programs (Joyce and Showers, 1988) because it was seen to assist practitioners in applying specific innovations appropriately. Coaching is generally used to describe the process by which a colleague who is a critical listener makes observations and offers suggestions that help a teacher grow and reflect and produce different decisions (Harwell-Kee, 1999). Pasch and Harberts (1992) assessed the impact on a staff development programme over a two-year period and researchers found that increases in teachers' levels of reflective thinking occurred only after the teachers were observed and coached in the classroom. It appeared that the teachers who had been supported by coaching gained a fresh understanding of the theory that underpinned the strategy that they were using. Sparks (1986) found that peer observation training activities appeared to be more powerful than coaching or workshop sessions alone. This evidence underlines the importance of sustaining support for the teacher throughout efforts to innovate as part of implementation. While the tutor programme is designed to offer support to tutors by prompting them to adapt and innovate, support will need to be offered to teachers subsequently to prompt them to adapt and innovate to suit their particular teaching context. It may be more realistic, however, to expect that teachers will need to experience a phase where they may be "passive consumers of research" as they imitate practice initially before advancing to the next stage of applying innovative practices. This issue of supporting teachers will be explored further in chapter 3 when the background and context in which primary teachers teach physical education is discussed.

Discussion of the concepts of critical reflection, transformative learning, adaptation and change as well as the provision of opportunities for collaborative learning within communities of practice to promote critical reflection, transformative learning, adaptation and change present the context for examination of continuing professional development.

# Continuing Professional Development

Professional development as a continuing, lifelong learning experience has received considerable attention worldwide in recent years. One of the key aims of continuing professional development (CPD) can be identified as satisfying the entitlement of children to education of the highest quality. The importance of professional development for teachers is well described by Darling Hammond (2000) who concluded that well prepared teachers can have a greater impact on student achievement than poverty, language background and minority status. The findings of her study indicate investments in teacher quality need to be considered in the debate on improving student outcomes. Her large scale study involving qualitative and quantitative analyses suggest that policy investments in the quality of teachers may be related to improvements in student performance. Sandholtz (2002) placed teacher professional development on a par with students' learning in terms of their importance: "The quality of teacher learning experiences is no less important than the quality of student learning experiences" (Sandholtz, 2002, para. 51).

In the area of Physical Education, the 2<sup>nd</sup> World Summit on Physical Education identified the need to promote professional development especially for those working in primary schools (ICSSPE, 2005). Studies conducted by The Review Body on Primary Education (Government of Ireland, 1990), McGuinness and Shelly (1995), the Irish National Teachers' Organisation (1996) and Deenihan (2005) recommended increased emphasis on provision of professional development opportunities for teachers. These studies will be discussed in some detail in chapter 3.

For the purposes of this thesis, discussion is focused on CPD in two main areas: the challenges of CPD for providers of professional learning and examination of some models of CPD. Investigation of the challenges of CPD for providers is undertaken to inform development of the tutor programme outlined in chapter 4 by providing a sense of the nature of the task for which the tutor programme is preparing tutors. It is inextricably linked with the literature on the work of facilitation of adult learning discussed above (p. 25). While various models of CPD exist, the discussion of particular models is focused on the model that is being adopted by the DES for mediating the curriculum to teachers on a national basis. It is within this model that the

tutors who are the focus of this study will be working. The questions raised in the discussion of this model relate to the issues raised earlier in this chapter about how adults learn and how teachers change. This work is discussed more fully in chapter 3. Firstly, however, it is important to examine different definitions of CPD.

Defining Continuing Professional Development (CPD)

Teacher development is increasingly known as 'continuing professional development' (CPD) rather than 'in-service training' in the European context. This generally implies a larger range of possibilities for professional development. Earlier definitions of professional development focused on the acquisition of subject or content knowledge and teaching skills. Craft's definition of professional development cited in chapter 1 proposed a wider interpretation. Day (1999) also defines professional development in wider terms:

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 review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practices with children, young people and colleagues through each phase of their teaching lives. (p. 4)

Day (1999) contends that his definition of professional development "reflects the complexity of the process." While the practice of CPD is complex, Day (1999) argues that

the aim of continuing professional development is deceptively simple. It is to act as a means of reviewing and, where appropriate, improving teachers' commitment to teaching and their abilities to provide the best possible learning and achievement opportunities for students. (p. 205).

Definitions of CPD that encompass experiences other than merely the acquisition of subject knowledge and teaching skills offer the strongest chance of impacting on teachers' practice and on the learning and achievement opportunities for students. The tutor programme that is outlined in chapter 4 endeavours to provide the best possible grounding in subject knowledge and teaching skills relevant to physical education but significantly also aims to prompt tutors to reflect, adapt and innovate as part of the process of good professional thinking and planning.

# Challenges for Professional Development Providers

The challenge for leaders of professional development has been described as leading teachers towards the kind of learning that may require wholesale changes in deeply held beliefs, knowledge, and habits of practice involving "...very deep changeseven a transformation-in teachers' ideas about and understanding of subject matter, teaching, and learning" (Thompson & Zeuli, 1999, p. 350). Thompson and Zeuli described the onus on professional developers in prompting this kind of transformative learning by teachers as: creating cognitive dissonance to disturb the equilibrium between teachers' existing beliefs and practices and their experience with subject matter, students' learning, and teaching; providing the time for teachers to revise their thinking; to connect professional development with teachers' and students' contexts; to support teachers in developing practices that are consistent with their new understandings and to provide continuing help in identifying issues, developing new understanding, changing practice and recycling new learning into practice. Day (1999) outlined the varying needs that should be met in order for CPD to be effective: "The nature of teaching demands that teachers engage in continuing career-long professional development, but particular needs and the ways in which they may be met will vary according to circumstance, personal and professional histories and current disposition" (p. 1).

Stein, Schwan Smith and Silver (1999) called attention to the fact that experienced professional developers need to "relearn their craft" which traditionally has been defined as providing courses, workshops, and seminars in the same way as teachers have to change their practice. The cases that they studied in a mathematics teaching context illustrate the challenges that professional developers may encounter in supporting the transformation of teachers. They suggest that this may include learning how to work with groups of teachers in school settings, moving beyond workshops and courses, and balancing professional relationships with the need to challenge existing practices and beliefs. They identify the 'journey' that practicing professional developers can expect to travel

Not only will professional developers need to build their repertoires beyond workshops and courses, they will also need to learn how to manage these repertoires in relation to their goals and the context within which they are working. Not only will professional developers need to develop teachers as individuals, they will also need to learn how to develop whole communities of practice. And, finally, not only will professional developers be held accountable for adding new techniques or skills to teachers' repertoires, but also for teachers' successful enactments of valid practices that raise student achievement. (p. 28)

The tutor programme developed by the author attempts to prepare the tutors for the 'journey' referred to above. While workshops are the focus of the first phase of their journey, involving initial in-service seminars with teachers (this provision is described in more detail in chapter 3), the DES has initiated a support programme that involves other modes of delivery. Hence, it is likely that their repertoire will indeed need to be managed particularly with reference to the context within which they will be working.

While the challenges for providers of professional development have been discussed above, the nature and extent of professional development continues to engender much debate. Traditionally, programmes of professional development in an Irish context were based on providing short courses or workshops, which would equate with the 'training model' described by Kennedy (2005) in addressing the spectrum of CPD models in a comparative manner. She outlined nine key models: training; award-bearing; deficit; cascade; standards-based; coaching/mentoring; community of practice; action research and transformative. She identified the training model as an effective means of introducing new knowledge albeit in a setting that didn't take account of the teaching context and fails to impact on how the new knowledge is used in practice.

The review of early professional development commissioned by the General Teaching Council in Scotland (2006) reports that researchers (Castle et al., 1998; Harland and Kinder, 1997; Ling and McKenzie, 2001) proposed a variety of different models of CPD including partnerships, apprenticeships, technocratic, competence-based, input/output, linear, collegiate/community of learners and interactive/interconnected approaches. The review stated that "No one model of CPD was shown to be the most effective. However, researchers favour partnerships between individual teachers, schools and HEI's [Higher Education Institutes] based upon negotiated needs" (p. 7). They also indicated that many teachers define CPD conservatively to mean courses, seminars and workshops. In addition they pointed out that no research "…has gone so far as to suggest that the professional development of teachers should emulate medicine and become predominantly workplace-based and delivered by practising members of the same profession" (p. 7). In an Irish context, Hanafin and Hyland (1995) concurred with the opinion that no single model "is appropriate for all training and development needs" (p. 132-143).

The concept of school-university or college partnerships referred to above merits further discussion with reference to literature on physical education. It was supported by O'Sullivan, Tannehill, Knop, Pope and Henninger (1999) and by McKenzie (1999) to promote the development of quality health and physical education for children. Fullan (2001) cautions, however, that this approach is sometimes

ineffective because it is decontextualised. Ha, Lee, Chan & Sum (2004) examined the effectiveness of an in-service programme for primary teachers and sought to understand teachers' receptivity to curriculum change in physical education. The in-service programme was deemed to be practical and effective and one of its key features was its engagement of educational experts to support teachers.

Hustler et al. (2003) provide a recent picture of CPD from a large sample of teachers in schools in England. Respondents were generally satisfied with CPD but they too were critical of 'one size fits all' standardisation of CPD. Significantly, given the emphasis of the programme described in this thesis on content being relevant to needs of learners, key features of worthwhile CPD were perceived to be relevance and applicability to school settings. Most CPD focused on teaching skills and subject knowledge and most teachers operated within a traditional model of CPD as course, conferences or in-service days.

For most teachers in the United States, CPD took two broad forms: mandated district-sponsored staff development and elective participation in courses, workshops, and summer institutes. District-sponsored staff development typically consisted of a menu of training options (workshops, special courses, or in-service days) designed to transmit a specific set of ideas, techniques, or materials to teachers (Little, 1993). Elective participation in courses, often given by university-based teacher educators generally had an academic focus. One drawback of such courses was that they rarely related to the context of the school to which the teacher was returning (Fullan's risk of decontextualisation referred to above).

Further criticisms of this more traditional model of professional development have focused on their failure to meet the long-term needs of teachers. Day argued that "Many 'short-burst' training opportunities do not fulfil the longer term motivational and intellectual needs of teachers themselves", failing to meet the needs of teachers seeking to improve the quality of pupils' learning (Day, p. 48). Darling Hammond (2000) criticised the short workshops presented by content area specialists for failing to have lasting effects. Hawley and Valli (1999) concluded that significant change in teaching methodologies does not result from conventional approaches to professional development such as one-time workshops.

Sandholtz, (2002) claimed that "...many traditional inservice models incorporate strategies that oppose research on adult learning—and that led teachers to sit 'silent as stones' at inservice sessions" (p. 817). She contended that "adults want learning opportunities that are meaningful and practical to them, offer an immediate pay-off, involve reflection on their many experiences, and include social, active learning". Stein et al. (1999) argued that while these professional development courses provided opportunities for the addition of new skills it was highly unlikely "...that teachers' practices will be *transformed* by these experiences" (p. 3). Their arguments were based on a study of 'resource partners' or experts introduced to support the introduction of a mathematics initiative in two schools. They found that lack of transfer between workshops and instructional practice can be traced to

...limitations in the framework underlying the resource partners' initial plan. The most salient of these was the expectation that teachers would be able to recognize the usefulness of knowledge and skills learned in workshops and be able to access and use this knowledge at appropriate moments during the planning and delivery of lessons. The interactivity and competing goals that characterize classroom settings, however, made this transfer of knowledge a learning experience in and of itself. The resource partners were not prepared to scaffold this kind of teacher learning. Indeed, they had never had to do this in the past. (p. 21, 22)

Smylie (1995) argued a case for professional development based on reviewing adult learning that would provide adults with opportunities for individuals to work with and learn from others on an ongoing basis. Hence, learning communities (as discussed on p. 38 are proposed as important ways of supporting individuals in their learning. The rationale for learning communities or communities of practice within a teaching context is based on research which indicates that professional development is more effective when it is school embedded, non-threatening, focused on the day-to-day realities of classrooms, sustained, developmental and when it involves collective participation (Lyon, Wylie & Goe, 2006; Thompson & Goe, 2006). Garet, Porter, Desimone, Birman

and Yoon (2001) identified collective participation by teachers from the same school as an important factor in effective professional development. Kennedy's (2005) analysis of models of professional development suggests that communities of enquiry who take enquiry as their uniting characteristic assert a more proactive approach allowing embracing of new knowledge rather than communities of practice whose focus is on practice.

Such insights into the shortcomings of the training model, the particular model of in-service that is based on the provision of workshops, prompt questioning of why this model is adopted by the DES as the model for initial dissemination of the Primary School Curriculum (1999). The positive aspect outlined by Kennedy (2005) above, however, must be used as a starting point: that it is an effective model as a means of introducing new knowledge. As familiarisation with the Physical Education Curriculum (Government of Ireland, 1999b) will involve emphasising the new content knowledge and methodologies concerned, what is imperative, however, in the context of the tutor programme presented in chapter 4 is that tutors are fully prepared to work within this model to ensure that this outcome is achieved. A review of teacher professional development by Villegas-Reimars (2003) reported on the experience of a project in New Zealand (Zeegers, 1995) where three one-day workshops were offered to teachers as a first phase of a professional-development programme designed to prepare teachers to teach under the new national science curriculum. These workshops were followed up by supplementary visits from support personnel, the results of which were positive. Such follow-up support is likely to be most effective where subject knowledge has been at the core of teacher development. Garet et al. (2001) argued that content and subject knowledge was an essential emphasis in professional development. The training model can at least initiate that process of increasing subject knowledge. Hence, while aspects of the training model could be interpreted in a positive way, it would appear that to overcome its limitations sustained support will be required by teachers after the initial workshops focusing on the "social, active learning" described by Sandholtz (2002) and involve reflection as a central theme. Within the tutor programme it should be possible to provide the kind of learning that prompts reflection as Sandholtz envisaged.

The model adopted by the Primary Curriculum Support Programme for mediating the curriculum nationally is based on the secondment of teachers as leaders of professional development. This will be discussed further in chapter 3 but the selection of this model merits discussion here in the context of professional development generally. This image of the teacher as leader, or 'teachers teaching teachers', can be justified on many accounts: their background experience and awareness of the dynamics of teaching and learning in the context of classrooms are two obvious attributes. Sandholtz (2002) recommended this practice believing that

A primary focus of professional development activities should be teachers teaching teachers. Teachers hold fellow teachers' expertise in high regard—more so than outside experts whom they often see as removed from the day-to-day realities of classroom teaching. Veteran teachers are key in preparing new teachers and helping with classroom discipline and management. Simply having time to collaborate with colleagues in one's school is an important form of professional growth. Visitations to other schools is another valuable way of acquiring new ideas from teachers. Peer coaching and teacher research are also viewed as meaningful activities where teachers learn from each other. (para, 72)

The view that an expert teacher will make an expert teacher leader, however, needs to be examined. This assumption may not be borne out in practice where teacher leaders need to be skilled in facilitating workshops for adults, for example, and where the onus on them as providers of professional development might be to prompt teachers to change. Preparing highly skilled classroom teachers to be effective teacher leaders requires training (Loucks-Horsley et al., 1998; Moller and Katzenmeyer, 1996) and a system of support as they undertake the task of leading professional development initiatives. This represents a further challenge for policy makers as they endeavour to provide quality professional development for teachers.

We must turn our attention to the final aim of the chapter i.e. to examine how professional development programmes are designed. The programme for tutors in this study is designed to support learning by tutors (leaders of professional development) and, in turn, to enable them to support learning by teachers in physical education. The underpinning aim of this work is to enhance the provision of programmes of physical education to Irish primary school children.

## Programme Design for Professional Development

Numerous models of programme planning for adult learners exist consisting of ideas of how programmes should be put together to ensure successful outcomes. The review of models of programme planning was an important element of the work of the author in designing a tutor programme which involved selecting a model that will support tutors in the important work of facilitating a national in-service programme. Models may be simple, based on following a series of steps or programme planning may constitute "a process that consists of a set of interacting and dynamic elements or components and decision points" (Caffarella, 2002, p. 15).

Whichever model of programme planning is selected, the importance of its applicability to the reality of the situation of the adult learner was emphasised by Brookfield (1986): "One of the most frequently offered criticisms of programs of professional preparation by graduates who subsequently inhabit the 'real world' of practice is that such programs are strong on theory but weak on practical application" (p. 201). He believed that nowhere is this gap between theory and practice more evident than in programmes for adult learners.

In light of this significant statement by one of the leading writers in adult education, it is imperative to begin an examination of the design of programmes for adults by examining some definitions of training programmes for adults. Niemi and Nagle (1979) cited in Brookfield (1986) described programme planning as making explicit the outcomes, processes and inputs required for the educational programme. Simpson (1982), cited in Brookfield (1986) outlined an interactive model of programme development. His model stressed the importance of consulting learners during planning and incorporating aspects of formative evaluation. Kolb (1984)

although mainly recognised for his work on experiential learning, has provided a practical model for programme design when he outlined four steps as a framework for designing learning experiences for adults. These steps have been discussed in section two in the context of experiential learning but can also be considered as foundations for programme design.

Houle (1972) proposed a fundamental system of educational design resting on a set of assumptions such as that education is both a practical and cooperative art, that any episode of learning occurs in a specific situation that is profoundly influenced by that fact and that the planning of an educational activity must be based on the realities of human experience and upon their constant change (pp. 32-39). He then identified components that would be useful for those involved in programme design: a possible educational activity is identified; a decision is made to proceed; objectives are identified and refined; a suitable format is designed; the format is fitted into larger patterns of life; the programme is carried out; the results of the activity are measured and appraised; the situation is examined in terms of the possibility of a new educational activity (pp.48-56). Houle's seven steps of programme design "fit cleanly" (Brookfield, 1986) into the institutional mode that dominated programme design during the 1940s and 1950s.

Brookfield (1986) questioned the institutional mode of programme development while recognising that for certain purposes this model is effective and appropriate. The model focused largely on predetermined learning objectives. A central feature of the institutional model of programme development is the organising of identified learning activities into planned sequences. Students are taken through tasks of increasing complexity following a pre-determined plan. This model, though logical in its progression does not allow for the individual differences of adult learners (discussed on pp.21-23) and that adult learning groups are generally of mixed-ability. In addition, adult groups tend to diverge from the predetermined objectives making it difficult to follow the sequence outlined. Contextual influences can limit the extent to which models of practice can be implemented; events, budgetary constraints or personalities can impinge on programme implementation.

Brookfield's criticisms of the institutional mode described above were built on the analyses of Pennington and Green (1976), Apps (1979) and Day and Baskett (1982). He questioned the acceptance of this theory as the only realistic and available guide for practice

The most fundamental flaw with this predetermined objectives approach, then, is its tendency to equate one form of adult learning –instrumental learning (how to perform technical or psychomotor operations more effectively) with the sum total of adult learning. It neglects completely the domain of the most significant personal learning-the kind that results from reflection on experiences and from trying to make sense of one's life by exploring the meanings others have assigned to similar experiences (Brookfield, 1986, p. 213).

Another potentially serious flaw with the specified objectives approach is that those objectives become "carved in stone, unchanging and unchallengeable" (Brookfield, 1986, p. 215). This may, in turn, lead to the constraint of the development of autonomous critical awareness--referred to as 'critical reflection' in the previous section of this work--among adult learners. By insisting on a close specification of objectives prior to the educational experience, Brookfield (1986) argued that we are overly constraining. In addition, we are relegating incidental outcomes of learning to a secondary place of importance. We consider such learning as having no real value.

Brookfield (1986) referred to the work of Jones (1982) who declared that the unintended consequences of a learning situation are often more important than the original goals that may have assumed an instrumental role for learning. He warned of the 'arrogance' of assuming that the only valid learning that occurs is that which adult educators define as objectives for the particular course and reminds us that frequently learners take various skills, insights and information that have nothing to do with the activities and outcomes initially intended by the educator. Indeed, he argued, "a facilitator who can make unexpected connections between participants' contributions or

encourage them...to explore themes that were unanticipated but that engage and excite is the most valuable (and perhaps the rarest) of educators" (p. 220).

Brookfield (1986) posited that there may well be an optimal balance that can be attained where facilitators' purposes, participants' expectations, flexibility of format, and sense of overall direction are all taken into account in the design of a programme. He stressed that this does not advocate an abandonment of purpose on the part of the facilitator expressed either as broad aims or specific behavioural objectives. Instead, acknowledging that most learners will not wish to spend more than a small part of their time engaged in an initial negotiation of purpose, he recommended that they "...will probably benefit from a regular formative evaluation session, in which progress is discussed and fundamental purposes reiterated, but the majority of participants' time will be spent in purposeful learning" (p. 219).

Another tenet of the institutional model is its foundation on the identification and satisfaction of student needs. Many education programmes are based on the felt needs of the learner and while the needs of learners are of paramount importance, it becomes the answer to any questions about the programme. Brookfield (1986) recommends that educators need to encourage adults to look beyond their needs and that educators have a duty to present alternative ways of thinking, feeling, and behaving as part of a course programme.

Programmes too can present models of perfection (Brookfield referred to these as 'the chimera of perfectability') that bear little resemblance to the real world of education and training programme development. Educators must point to the departures from reality evident in these models. To fail to do so in the context of this study could result in a very disenchanted group of tutors attempting to cope with the contextual variables that are altering practice and priorities on a continuous basis. Having advised against excessive reliance on the institutional mode of programme development, Brookfield (1986) proposed an alternative model for design of programmes for adult education and outlined four themes for consideration. The first theme suggests that programmes that are based on learners' characteristics and engage learners in a dialogue about content, aims, and methods are likely to lead to meaningful learning. Secondly, those designing programmes should be aware of the contextual distortion of

the planned programmes and realise that context is crucial in affecting practice to save practitioners from experiencing despair when carefully planned programmes have to be altered. A third theme of programme development is devised from the work of Argyris and Schon (1978) who prompted practitioners to engage in improvisational activities and recognise that they are legitimate aspects of professional performance and indeed are crucial to successful practice. Fourth, programme developers should recognise the multiplicity of methods and techniques that might appropriately be used in programme development. In conclusion, Brookfield (1986) proposed that "...a diversity of methods will be required to meet the multiplicity of purposes that will inevitably arise" (p. 259) while at the same time pointing out that more research is needed into how practitioners devise programmes for adult learners.

In reviewing the early years of adult education extending up through the 1970s much of the writing focused on the development of models of practices all calling for some kind of needs assessment, planning and delivery and then evaluation.

Brookfield's assertion (referred to above), that few of the steps proposed in theories of programme planning were followed because of their failure to take issues such as the context of the learner into account, was elaborated on by Rose (1997) who, in reviewing developments in adult education reported the shift in emphasis from establishing a preconceived ideal of what adult learners should be doing to analysing what administrators and planners actually do. She reported a trend towards adoption of a more contextualised approach to research and planning in general where writers such as Mills, Cervero, Langone and Wilson (1995) state that not only is context important, but that context itself may define how decisions are made during the programme development process. The importance of context is one of the key considerations highlighted in the model proposed by Caffarella (1998).

Caffarella (1998) believed that linear programmes of learning involving following steps in sequential order did not represent the everyday experience of most programme planners. She explored the development of programmes of learning and built the Interactive Model of Programme Planning for adults, acknowledging that she drew ideas from a number of previously proposed models of programme planning, for example Knowles (1980), Sork and Caffarella (1989) and Houle (1996). Knowles (1980) had emphasised the setting of a climate for learning and the establishment of a

mutual structure of planning as additional factors for consideration in addition to the diagnosis of needs, formulation of objectives, design and management of learning and evaluation. Houle's system is described above. Caffarella was informed by how adults learn and change and claimed that her programme model was influenced too by the voices of experience of herself and her colleagues. Her non-sequential model allows programme planners to address a number of the components simultaneously, to rearrange the components to suit the demands of different planning situations, and/or to delete unneeded parts of the process. She also raises the issue of how "this type of model allows planners to address the essence of the process of working with people, which often involves negotiations between and among planning parties" (Caffarella, 2002, p. 16).

The Interactive Model has twelve major components and is presented as "a guide for practice versus a step-by-step process for action" (Caffarella, 1998, p. 27). Caffarella's model is based on four major assumptions: that the programme should focus on what the participants actually learn and how this learning results in changes in participants or organisations; that programme development is a complex interaction of priorities, tasks, people, events and the underlying 'politics' of a specific planning situation; that people responsible for planning may need to use all or only selected components of the interactive model and that programme planners need to be ethical in their practice.

This model appears to provide the necessary guidance for a tutor programme of physical education as it provides a framework that allows for integration of adult learning principles, with its focus on what the participants actually learn and how this learning results in changes in participants. The model acknowledges that planning is usually a nonsequential process involving complex interactions among people, tasks, and events and recognises the importance of planning as a negotiated process where the onus is on the planner to discern the importance of context and negotiation. The model became a viable resource for the author due to its usefulness as a technical description of the planning process, its emphasis on people being the focus of the process and the importance of the context of the programme. "In essence, the key to using the Interactive Model of Programme Planning is *flexibility*" (Caffarella, 2002, p. 25). The

twelve components of programme planning underpinning the model are outlined in chapter 4 when the design of the tutor programme is discussed.

### Summary and Conclusion

This literature review has attempted to explore some of the issues that are central to shaping a programme for adult learners, which can inform the tutor programme for physical education. Four major themes were explored: adult learning, teacher change, professional development and the design of programmes for adult learners. In conclusion, based on the review of learning and teaching in the adult context, how teachers change their practice, advances in continuing professional development and how programmes of learning for adults are designed elements deemed to be some of the most essential in the design and facilitation of a tutor programme of physical education have been identified. The application of these elements will be combined with elements that will be identified in chapter 3 from previous experience of curriculum implementation and professional development to inform the design of the tutor programme outlined in chapter 4.

### CHAPTER THREE

Curriculum Change and Professional Development in Physical Education

Introduction

While one of the purposes of this study is to describe a programme of professional development for tutors who were allocated responsibility for supporting Irish primary teachers in implementing the revised Physical Education Curriculum (Government of Ireland, 1999b), the focus in this chapter is on placing the tutor programme for physical education that follows in chapter 4 in the context of current and previous initiatives of curriculum development and implementation in Ireland. The aims of this chapter are to critically evaluate the development and implementation of the 1971 curriculum for primary schools (Curaclam na Bunscoile, Government of Ireland, 1971) with specific reference to physical education, to review the background to the Revised Primary Curriculum (1999) with specific reference to physical education and to provide an outline of the 1999 Physical Education Curriculum (Government of Ireland, 1999b). The chapter also examines briefly the initial stages of the implementation of some aspects of the 1999 Curriculum (Government of Ireland, 1999a) for primary schools in Ireland and compares implementation of physical education curricula in other countries. Some detail is provided on continuing professional development support related to implementation in the Irish context and internationally. Conclusions reached in this chapter allied to those outlined in chapter 2 will provide the rationale for the programme designed by the author to support the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) by providing continuing professional development for tutors. (For the purposes of clarity, the programme will be referred to as the tutor programme within this thesis).

The Development and Implementation of the 1971 Curriculum with Specific Reference to Physical Education

Major curriculum modifications have taken place on four occasions (1878, 1900, 1924 and 1971) since the Irish national school system was established in 1831. In 1954 the Council of Education reporting on the curriculum in national schools stated that "general opinion favours the view that the present curriculum is too narrow" (p. 299). While the Report did not call for any fundamental or radical changes it did urge

the inclusion of drawing, nature study and physical education as compulsory subjects. At the beginning of 1967 a request for a White Paper on Primary Education was made by the Minister for Education, Mr. Donagh O'Malley. This led to the decision to draw up a new Primary School Curriculum and the Department's Primary Inspectorate designed a Draft Curriculum, which formed the basis for the publication of Curaclam na Bunscoile in 1971.

#### Curaclam na Bunscoile 1971

The 'New Curriculum' for national schools was introduced in 1971 with the publication of Curaclam na Bunscoile that became the official curriculum for primary schools. It involved a radical shift of ideological position and methodological approach to primary education in Ireland underpinned by a child-centred focus. There were five defining features of this new curriculum.

Emphasis was placed on the principles of *individual difference*. Children were to be provided with a variety of opportunities to develop at their own rate and to reach their full potential. Activity and discovery methods were the key to the teaching and learning process and the teacher was viewed as one who provides suitable learning situations. Curaclam na Bunscoile (Government of Ireland, 1971) was an integrated curriculum, in spite of its layout as discrete subjects, the teacher had the responsibility for laying out teaching time that will "best cater for the developmental and functional aspects of the work in question and at the same time permit its integration with other areas of the curriculum" (1971, 1, p. 22). The Irish National Teachers' Organisation (1998, p. 2) reflecting on the 1971 curriculum commented that the principle of full and harmonious development "perhaps more than any other provided an indication of the substantive change that Curaclam na Bunscoile introduced". The teacher was expected to cater not just for the cognitive development of the child but also his/her social, emotional, creative, aesthetic and physical development. The use of the child's environment to help integrate the curriculum was presented as a further principle of the curriculum that could be seen as a method of implementing the first four principles. Curaclam na Bunscoile was presented in two volumes and the second volume contained the 'syllabus' for physical education including a section on health education.

The aims of physical education, as outlined in Curaclam na Bunscoile, were "to promote the organic well being of the child, to develop a suitable range of motor skills, to help him to adapt himself to his immediate environment and to cultivate desirable social attitudes" (1971, 2, p. 289). The contribution of physical education, "...towards the aesthetic, emotional and moral development of the child" (p. 289) was noted. A further statement defining the contribution of physical education to the development of the child was outlined: "to deny a pupil the opportunity of expressing himself in movement and general physical activity is to neglect an essential aspect of the growth of his personality and character" (1971, 2, p. 289).

The curriculum (Government of Ireland, 1971) suggested an approach that allowed each child to develop, working at his/her own particular rate, according to his/her own ability and aptitude. This child-centred approach was the key to learning advocated in all subject areas of the 1971 curriculum. It emphasised that there should be a move from class instruction to child activity and involvement. This approach was particularly suited to physical education, it argued, since stimulus and environment are so important in the teaching of physical education.

In infant classes play was seen as the means to promote learning where the emphasis in senior classes was on "...combining skills in fluent sequences...as children gradually grow in competence and confidence" (1971, 2, p. 289). The activities were divided into four class groupings: infants, first and second classes, third and fourth classes and fifth and sixth classes. The curriculum acknowledged, however, that there was room for flexibility within this approach. Work for infants remained at play level, but for the other 'groupings' the activities were to be divided as follows: Movement, games, athletics, other activities.

#### Movement.

Movement was subdivided into educational gymnastics and dance. Gymnastics aimed at "...developing a variety of physical skills and an understanding of what the body can do and how it reacts in meeting progressively demanding challenges and

problems" (1971, 2, p. 290). It was based on combinations of themes involving use of gymnastic apparatus at a simple level for infants and more challenging work should follow for senior classes on the floor and on apparatus.

#### Dance.

Dance was presented as an activity which develops skills and body awareness and where the creative movements are stimulated by "...rhythm, sensitivity and emotional involvement" (1971, 2, p. 291). Dance at infant level was defined as "the playful reaction of Infants in hopping, bouncing, skipping, etc. to rhythm and music..." (1971, 2, p. 291). The child was encouraged to communicate ideas and emotions through dance and to use dance to help him [sic] explore historical themes, legends and poetry. The tendency of girls to use "...light, delicate movement and retain longer a love of fantasy" (1971, 2, p. 292) while boys move with "strength and tend to be more realistic" was noted (1971, 2, p. 292). This reference to providing different types of experiences for boys and girls was a significant characteristic of the suggested programme.

#### Games.

The curriculum recommended an approach to games that allowed children to be helped to discover the fundamental principles underlying a variety of games through experience and 'trial'. At infant level, children were given appropriate equipment and time to play, first as an individual and leading to group play. Once basic skills were mastered they were to be encouraged to apply these skills in a variety of games. In the senior classes it was suggested that the children may be ready for organised games but without over-emphasising rules and competitiveness. 'National' and 'traditional' games were recommended for the children in senior classes. The importance of the teacher in the teaching of games was highlighted especially regarding the development of positive attitudes to winning and losing.

#### Athletics.

Athletics was seen as an area that offered a wide variety of activities that cater for the different aptitudes and preferences of children. The inclusion of some running, jumping and throwing activities was suggested for first to sixth classes. Significantly, it was an area of the programme that was not outlined for infant classes.

#### Other activities.

Activities that generally form parts of programmes in outdoor and adventure activities and aquatics were outlined under the title 'other activities'. The curriculum regarded "outdoor activities of an adventurous nature...as an opportunity to promote a love of nature and qualities of leadership, courage and self-reliance" (1971, 2, p. 293). The merits of exposing urban children, in particular, to these experiences of 'life in the open' were stated. Reference was made to the inclusion of life-saving and combat sports for boys again proposing the concept of different activities for boys and girls. Swimming was recommended as an important life skill and as an activity that can be enjoyed by children, particularly those who may lack confidence when engaging in other activities in the programme.

The explanation of the content of the curriculum, outlined above, leads into the presentation of a syllabus for infant to sixth classes that was supported by some suggestions on how to develop lessons based on this syllabus. The infant syllabus was not subdivided – the activities were categorised as 'infant movement' based on what the body is doing, where it is going and how it is moving. The syllabus for first to sixth classes was divided into educational gymnastics, dance, games, athletics and other activities. Some guidance was offered too on organisation and preparation under the headings of the teacher, discipline, integration, remote preparation, immediate preparation, facilities and equipment and the use of the Irish language.

The physical education element of Curaclam na Bunscoile (1971) was a document that appeared to point in the direction of a broad and comprehensive programme of physical education. Although lacking in detail and containing some gender-biased statements particularly in relation to dance activities, it provided some

much needed direction for the class teacher. It was rooted in the child-centred philosophy of the time with a strong emphasis on the needs of the child. Educational gymnastics and dance were emphasised and much of the support material was devoted to these areas. Further guidance on appropriate teaching methodologies and on specific content for each class level within the curriculum itself would have been helpful for teachers in implementing such a broad programme of physical education. While the emphasis on the full and harmonious development of the child was generally welcomed, it did provide major challenges to the primary school teacher. This development was described by Duffy (1997)

...in proposing such a radical departure from the previously drill-oriented system the Department of Education was presenting a strong challenge to the primary school teaching profession. Significant changes in the core philosophy of the curriculum were being proposed. As well as this, the skills of the teacher in delivering the varied and specialist syllabus were immediately brought into focus (p. 190).

The implementation of the physical education element of Curaclam na Bunscoile (Government of Ireland, 1971) will be described below but firstly the dissemination of the whole curriculum and its implementation will be discussed. For the purposes of this discussion Curaclam na Bunscoile (1971) will be referred to as the 1971 Curriculum while the physical education element of the curriculum will be referred to as the 1971 Physical Education Curriculum.

#### Curriculum Implementation

Early efforts were made to disseminate knowledge of the 1971 Curriculum by setting up curriculum centres in approximately 200 primary schools. This pilot scheme was expanded to a further 200 schools in 1969. Their function was to operate certain areas of the curriculum as outlined in the draft document. The Department of Education inspectors gave extra help and advice in the pilot schools and teachers from other schools within reasonable distance were invited to come and see whichever aspect of the curriculum work was in progress. Courses for Principal teachers were organised on a residential basis with the emphasis on presenting the new principles, content and methodology of the draft curriculum. Over this period of time every Principal in the

country attended a one-week course organised by the Inspectorate. In 1972 and 1973 residential courses of three weeks' duration were held for 250 teachers on the various subject areas of the 1971 Curriculum, 50 teachers per area. The weeklong courses for Principals as the model for training seemed inadequate in many respects. It represented a very short time to devote to a study of all aspects of the curriculum and the focus on Principals alone fell far short of meeting the needs of the class teacher whose responsibility it was to implement the changes. In addition, many teachers attended one of the 5-day summer courses organized by the Irish National Teachers' Organisation (INTO), other educational groups or individuals. These were attended on a voluntary basis and so could not be seen as representing an accurate picture of the training experience of the majority of teachers. In-service courses were discontinued in 1974 due to the world oil crisis of the time.

Implementation of the 1971 Curriculum: Research findings (1974-1979)

Between 1974 and 1976 four major evaluations of the implementation of the Curaclam na Bunscoile (Government of Ireland, 1971) were carried out. The first of these was conducted by the Department of Education in 1974. The Conference of Convent Primary Schools conducted a survey in 1975 and the Irish National Teachers Organisation undertook a study of teachers' opinions and experiences of implementation of the Curriculum in 1976. A survey of Principals of primary schools to evaluate the extent to which the 1971 Curriculum was being implemented was published also in 1976 by the Department of Education. A further study undertaken by Walsh (1980) on implementation of the 1971 Curriculum supplemented the evidence provided by these studies. While the 1971 Curriculum was generally reported to have had considerable impact (Dept. of Education, 1976) on teaching in primary schools, obstacles to implementation identified by these studies were: large classes, inadequate supplies of resources, lack of classroom space and lack of in-service training. Walsh reported, however, that while lack of in-service training militated against implementation, it did not emerge as a significant factor in her study. She argued that this could have been because it was not supported by adequate resourcing and perhaps the 'form' or type of training offered did not meet the needs of teachers. Hence, it wasn't perceived to be a more significant factor than class size or provision of resources for example.

Implementation of Physical Education as an Element of the 1971 Curriculum: Summary of Findings (1974-1979)

A consistent finding from the surveys identified above was that implementation was lowest for physical education. Significantly, there was dissatisfaction expressed in all the evaluations with the teaching of physical education. The Inspectorate Report in 1974 reported that achievement of objectives was low for physical education. The INTO survey (1976) found that while 64% of teachers taught physical education only 34% were satisfied with the way they were teaching it. This figure represented the lowest figure compared to other subjects. The greatest difficulties in subject implementation were reported for physical education in the Department of Education Survey (1977). In another study, Cotter (1977) contributed to the body of research on physical education with a report of a survey of a sample of primary school teachers. A majority of teachers sought in-service training and better preparation at pre-service level. He found that 70% of schools had no indoor facilities while 50% of the respondents felt that pre-service college courses were of little help. Significantly 90% of those surveyed recommended improved facilities while 82% recommended the publication of a suitable textbook.

In 1979 the Department of Education produced a separate report on physical education (Government of Ireland, 1979). The information on which the report is based was gleaned from inspectors. The report revealed that only 35% of inspectors surveyed were satisfied with the standard of work in physical education. Although a majority of the respondents felt that the syllabus was suitable, they stated that lack of suitable indoor facilities and apparatus contributed to the unsatisfactory state of physical education in the school. The report recommended improved inservice training, the provision of better facilities and a greater degree of integration with other aspects of the curriculum.

Research Findings (1980-) on the Implementation of the 1971 Curriculum with Particular Reference to Physical Education

Although much information on curriculum implementation was published in the research of the 1970s discussed above it was difficult to ascertain whether the positive

response to the curriculum shown through the surveys undertaken was translated into classroom practice. A similar limitation applies to the findings of the study that is the focus of this thesis. Further research involving, for example, observation of teachers' teaching will be necessary to validate the evidence. Nevertheless, research carried out during the 1980s and 1990s provides us with an insight into the status of physical education during this time, the period preceding the publication of the Physical Education Curriculum (Government of Ireland, 1999b) which is the focus of this thesis. The findings and implications of research studies undertaken by Keating (1982), the INTO (1986), Deenihan (1990), McGuinness and Shelly (1995), the INTO (1996) and O'Sullivan (1997) will be examined below.

A study of provision for physical education in senior classes in Dublin primary schools (Keating, 1982).

Keating (1982) examined the physical education provision amongst 6th class primary schools teachers in the Dublin area. A majority of teachers reported that they taught only 33% of the stated objectives during the previous school year and perceived themselves as receiving totally inadequate in-service training. While considering indoor and outdoor facilities to be less than adequate, they did not consider facilities to be as important a reason for not achieving a greater percentage of objectives as guidance and training from the Department of Education and Teacher Education Colleges.

Irish National Teachers' Organisation Primary Curriculum Survey (1986).

The Irish National Teachers' Organisation survey of 1986 asked questions on teachers' commitment to the five principles of the curriculum but built into the questionnaire were other questions covering areas such as classroom organisation, teaching methods and textbooks. It was considered that the questionnaire might show any disparity that exists between teachers' belief in the philosophy of the curriculum and the actual classroom practice. The results showed some major discrepancies between the teachers' professed thinking and actual practice. For example, findings indicate there was a low level of implementation of the art and crafts, music and physical education programmes which indicated that a discrepancy existed between the teachers' professed commitment to the principle of full and harmonious development of

the child and his/her actual practice. This underlines the importance of research that will examine the actual practice of teachers as well as their thinking. Only in more obvious correlations such as maths and physical education did teachers indicate that any degree of integration was taking place.

The findings of this INTO survey were supported to a great extent by a Department of Education report (Government of Ireland, 1987) on the implementation of the principles of the 1971 Curriculum. In their summing up they pointed to the need for a major injection of resources, for in-service education and for further studies to ensure fuller implementation would occur. The studies undertaken by Deenihan (1990) and McGuinness and Shelly (1995), in particular, point towards the poor status of physical education in Irish primary schools. Issues such as provision of resources and facilities were addressed in both studies and significantly these studies also provide information on teacher attitudes towards teaching physical education.

A study of provision for physical education in Irish primary schools (Deenihan, 1990).

Deenihan (1990) examined physical education provision in 1,456 primary schools. His findings are represented in Table 1 below

Table 1 A Study of Provision for Physical Education in Irish Primary Schools (Deenihan, 1990)

### Findings

- 30% of primary schools had no indoor facilities
- 50% identified large classes with inadequate space and facilities as a major difficulty
- 50% identified fear of litigation and insurance issues as the biggest problem for them.
- · PE classes varied between 12 and 60 minutes per week
- 75% of classes had less than 30 minutes physical education per week
- · 66% of teachers did not feel confident to teach the subject
- 60% favoured employment of a specialist teacher in physical education

The McGuinness and Shelly evaluation of the implementation of the 1971 Physical Education Curriculum in Irish primary schools (1995).

McGuinness and Shelly's study (1995) sought to evaluate the degree of implementation of the physical education programme in primary schools. It focused on a selected number of key variables that can support or impede the implementation of programmes in the primary school. A questionnaire was designed for distribution to a sample of teachers in selected schools. The main areas of investigation included the

- teachers' views of pre-service and in-service training
- availability of facilities and equipment
- organisation and teaching of physical education in the schools
- main activities engaged in by the pupils
- time allotted to the teaching of physical education
- teachers' levels of satisfaction with their teaching of physical education.

The teachers were requested to identify the areas of training in physical education covered in their pre-service course, their assessment of the adequacy of that preparation and subsequent patterns of attendance at in-service courses over the three years prior to the time of the survey. Training in team games was the most frequently reported activity for the majority of the respondents during their pre-service courses. Dance and gymnastics were experienced by half of the respondents while outdoor activities, athletics and swimming received considerably less attention. Respondents were divided in their opinions on the adequacy of the training they received during their initial courses in Colleges of Education, with one half describing it as adequate or better. Some commented that physical education suffered from low status in comparison with other subjects and was given a limited time allocation while others commented that the preparation they received was not practical enough. Only one quarter of the respondents had attended in-service courses in physical education in the three years prior to the survey and 79% found the courses both practical and very useful to them in their own teaching.

The most frequently reported facilities were outdoor hard surface areas (78%), outdoor grass areas (59%) and indoor multi-purpose halls (50%). Yet 43% were satisfied with the quality of facilities available to them. Over two fifths of the respondents reported that a sports hall and a swimming pool were available in the community and a large proportion of these (72%) used the swimming pool while less that half (43%) availed of the sports hall. Fifty six percent of respondents reported that they were dissatisfied with the equipment available to them and expressed criticism of the lack of funding provided by the Department of Education. Smaller schools were reported to be most disadvantaged in the areas of facilities and equipment.

Of the 135 respondents, 83% taught their classes physical education, others had the services of a specialist physical education teacher or exchanged classes with another teacher in the school who gave lessons in physical education, leaving less than 2% whose classes did not receive any physical education. The programme taught was games dominated and presented a very limited range of experiences and activities for the pupils. However, 82% of the respondents reported that they teach physical education at least once per week while 55% of these claimed they do so just once per week. The length of lesson most frequently reported was 30-39 minutes. Investigation into satisfaction levels with their teaching of physical education indicated that 51% of the respondents were satisfied with the way they taught the subject. Inadequate facilities and equipment, organisational problems related to the teaching of multi-grade classes, large classes, fear of accidents and possible claims and feelings of incompetence were the main reasons cited for dissatisfaction.

The findings of McGuinness and Shelly's study suggest that the successful implementation of a programme of physical education is largely dependent on the availability of suitable facilities and equipment and the provision of adequate training for the teachers. While the lack of facilities and equipment represents a very serious constraint on provision of broad programmes of physical education, the possibility of adequate training for teachers compensating for the large proportion of the teaching population that has not had a significant initiation or sustained involvement in physical education, sport or physical activity to take the lead in delivering a multi-strand, broad programme of physical education will be discussed further in chapter 8. This discussion will be informed by the reports of later studies by Broderick and Shiel (2000), a

National Study of Involvement in Sport and Physical Activity (1996) and studies commissioned by the ESRI (Fahey et al., 2005) which provide information on the involvement of Irish people in sport and, in the case of the research of Broderick and Shiel, on the background of teachers in particular.

INTO Education Committee Survey (1996): Primary School Curriculum-An Evolutionary Process.

The survey of teachers' attitudes to the primary curriculum conducted in late 1995 found that again overall support for the principles that underpin the 1971 Curriculum remained very high among teachers. It did, however, find discrepancies between the support for the principles and classroom practice. In its examination of the principle of 'full and harmonious development of the child' it found that the vast majority (97%) of teachers supported it. However, as physical education and the arts make an enormous contribution to children's full and harmonious development, the survey examined the extent to which pupils encounter these areas of experience.

It found that 82% of pupils were taught physical education at least once a week, and the numbers of children who encounter little or no physical education had fallen from 20% in 1985 to 14% in 1995. Games were taught to 87% of pupils, 'free movement' (71%), dance (42%) and educational gymnastics (40%). With regard to resources and facilities 60% of schools had a PE hall, 72% had a suitably surfaced school yard, 60% had access to a playing field, 21% had a general purpose room, and 51% of teachers were satisfied that there was adequate equipment in their schools for the teaching of PE. Just 6% of teachers taught PE to classes other than their own. An option that some schools have adopted is to employ 'specialist' teachers to teach particular aspects of the curriculum. Twenty-two percent of schools employed a 'specialist' teacher to teach physical education which had increased from 9% in 1985. The survey rightly pointed out that this raises the question of how they are to be paid, who is responsible for children who do not wish to avail of these lessons and/or cannot afford to pay? Social equity is a question raised because it may be that only in an advantaged area can parents then afford to pay for specialist expertise. It suggested too that it was difficult to ascertain whether the increase in the number of specialist teachers can be ascribed to a lack of expertise within schools or is a reflection of an

increasingly litigious society where teachers fear that their competence could be queried in a court of law in the event of an accident occurring to a pupil.

While 93% of teachers agreed with the principle that due allowance should be made for individual differences, in the actual teaching of physical education only 20% grouped children. If there is a commitment to full and harmonious development then pupil records should be kept in all areas of the curriculum, reflecting the contribution of each area to the full development of the child. Yet only 15% of teachers stated that they kept individual pupil records of progress in physical education. This represents a slight increase on the 1985 figure of 13%. It emerged that in terms of the principle of integration, physical education was most frequently integrated with Irish, music, English and mathematics. In its final area of investigation it was found that only 15% of teachers responded that change was needed in physical education. This was a surprisingly low figure and perhaps is best interpreted as a sign of teachers' poor understanding of physical education and the place of dance and gymnastics, in particular, in a programme of physical education given the low recorded levels of implementation in these areas.

O'Sullivan's study of the socialisation of children into active lifestyles including the role of physical education (1997).

O'Sullivan (1997) undertook a study of children in fifth and sixth classes of Irish primary schools to increase understanding of physical activity behaviour and its social context in the lives of young people. This study included an examination of primary physical education and its impact on physical activity levels of children and this aspect of the study provided significant data on the implementation of physical education in schools prior to the publication of the Physical Education Curriculum (Government of Ireland, 1999b) in 1999.

O'Sullivan's study provided data on physical education with regard to facilities, the teaching of the subject and attitudes of children towards physical education. She found that the physical education programme offered in schools was affected by facilities available to schools, with 77% of children having access to an indoor area suitable for physical education. An examination of the frequency of teaching physical

education revealed that 81% of children had been taught physical education on a regular, weekly basis (the INTO study, 1996, reported above had reported a similar figure of 82%) while 12% had no experience of physical education. The teaching of physical education was undertaken by the class teacher for 72% of children, 14% were taught by games coaches and 4% taught by specialists. With reference to the content of the curriculum taught the results were neither "unexpected nor disappointing" (O'Sullivan, 1997, p. 40). Large numbers of children had been introduced to a variety of team games, swimming and individual activities in their primary years. For example, 64% of children had some or lots of experience of playing soccer, 71% played basketball, 54% played Gaelic Football and 50% had experienced swimming as part of their programme. Results were less favourable, however, for gymnastics (60% of children had no experience of gymnastics) and dance (80% had no experience of creative/structured dance). Only 25% of children had experienced Irish dance as part of their programme. An overview of major skill acquisition showed an emphasis on striking skills and kicking skills and poor exposure to movement skills.

Combining the record of scores for experience of the 1971 Physical Education Curriculum the frequency of physical education lessons, extra-curricular physical activity and reported evaluation of school physical education revealed that 10% of children were in the higher range while 29% of children were considerably disadvantaged relative to their peers. More than 11% of children had extremely limited levels of physical education. Overall examination of children's attitudes to physical education revealed that 85% of children had a positive attitude to physical education with only 2% revealing negative attitudes to the subject. The findings of this study attest to the importance and to the centrality of the primary school in the socialisation of children into active lifestyles, and in their education for lifetime health.

While there is evidence to suggest that some aspects of physical education received considerable treatment, the main difficulties that emerged from the research are outlined below in Table 2.

Table 2

Summary of Findings (1971-1997) Related to Difficulties with Implementation of Physical Education

### Main difficulties with implementation of PE

Lack of resources and facilities

Poor time allocation to physical education at pre-service level

Low levels of confidence and competence to teach physical education

Lack of ongoing in-service (professional development) support for teachers

Time for physical education within the curriculum

Lack of breadth in the content taught

## Towards Change in Physical Education

In the early 1990s much attention was paid to the examination of the primary school curriculum and indeed primary education in general. This period saw the publication of the reports of the Primary Education Review Body (1990) and the Review Body on the Primary Curriculum (1990). A Green Paper on Education (1992), a National Convention (1994) devoted to discussion of Education and a White Paper on Education (1995) each had an impact on policy for physical education.

The Primary Education Review Body and the Review Body on the Primary Curriculum

The Primary Education Review Body (Government of Ireland, 1990a) was established to review all aspects of primary education and the Review Body on the Primary Curriculum (Government of Ireland, 1990b) had specific responsibility for reviewing the primary curriculum. In each curricular area detailed recommendations were made. The Report of the Review Body on the Primary Curriculum concluded that the vast majority of inspectors regarded the 1971 Physical Education Curriculum as being suitable, while the majority of teachers regarded it as unrealistic and demanding excessive expertise.

The Review Body made the following recommendations for physical education

- there should be a major revision of the physical education chapter in the Curriculum so as to provide a detailed specification of aims and objectives
- such a revision should detail the (i) skills, (ii) knowledge, and (iii) attitudes that should be expected in the various age groups in primary schools
- this specification should be accompanied by practical guidelines as to how such objectives will be achieved. The Review Body further recommends that appropriate facilities and resources should be made available
- in view of lack of confidence of teachers in approaching PE, the Review Body recommends that there should be an appropriate programme of teacher education (pre-service and in-service)
- the Review Body recommends that the time devoted to PE in Colleges of Education be increased
- the Review Body recommends that some degree of specialisation among teachers should be encouraged so that each school might have at least one teacher with a particular interest and expertise in this area
- However, for safety reasons and because of the nature of the skills that are
  required in specialised forms of PE, the Review Body recommends the
  employment of specially qualified teachers who could service a number of
  schools.

This review became the basis for the revision of the 1971 Curriculum that culminated in the Primary School Curriculum (Government of Ireland, 1999a). The recommendations that a revised physical education curriculum should contain detailed specification of aims and objectives will be discussed below when the development of the revised curriculum is described (p. 71). Other issues raised above that merit particular attention were the appropriateness of the programme of pre-service teacher education and the time allocation for physical education in Colleges of Education as well as provision of specialist support. These issues will be discussed later in this chapter.

The National Council for Curriculum and Assessment (NCCA) was established to advise the Minister on the curriculum for early childhood, primary and post primary schools and on assessment. The Report of the Review Body (Government of Ireland, 1990b) became the basis for curriculum design and reform undertaken by the NCCA providing the context for the revision of the primary school curriculum. Following the publication of the Report of the Review Body in 1990 the NCCA developed internal structures to undertake the work of curriculum reform. During the course of this work a Green Paper on Education (Government of Ireland, 1992) was followed by the National Education Convention (Coolahan, 1994) that eventually led to the publication of the White Paper on Education (Government of Ireland, 1995).

# The Green Paper

The Green Paper (Government of Ireland, 1992) presented a future for physical education that was very positive. In its chapter on primary school curriculum it indicated that physical education was to be presented in a new light

A new momentum in physical education, linked to diet and hygiene, will be an important element in a programme to enhance the health and physical well-being of children. The emphasis will be on health-related fitness and the development of an interest in physical activity as an essential component of an active and healthy lifestyle. It will seek to involve parents and communities in promoting and developing the health and fitness of children (pp. 89-90).

The Green Paper went on to suggest that a new syllabus taking limited facilities into account would be necessary. Significantly, it proposed a daily period of 30 minutes devoted to activities addressing questions of diet, hygiene, posture, flexibility and a healthy lifestyle. Such daily periods of physical education should address motor skills and aerobic fitness also. It recommended that specialist teachers should be made

available to provide guidance to primary teachers and that special attention should be paid to physical education during pre-service training, together with in-career training for teachers. It emphasised the necessity for continuity between programmes at first and second level and the production of materials to suit the specific needs of Irish schoolchildren. The recommendations of the Green Paper represented a radical review of the theory and practice of physical education. It was the source of lively and enthusiastic debate among those involved in physical education especially because of the proposed increase of time devoted to the subject. Indeed, the idea of daily physical education was one that was in keeping with the practice in other countries – Australia had just developed such a programme for its primary schools. The concept of daily physical education has again been recommended by the National Task Force on Obesity (Government of Ireland, 2005b). While the practice of daily physical education is one that would do much to enhance the provision of programmes in schools and the physical activity levels of children, the difficulty of overcoming the constraints presented by facilities and resources as well as the professional development requirements of teachers may have been responsible for the absence of this recommendation in the subsequent policies on physical education.

The National Education Convention (1994) and the White Paper (1995)

The National Education Convention held in 1994 brought together representatives from 42 organisations covering a wide spectrum of educational bodies. It was considered a significant influence on shaping the structures of Irish education. Physical education was discussed and the Report of the Convention (Coolahan, 1994) noted that physical education received inadequate attention in schools because of a lack of facilities, teachers' perceived lack of confidence and fear of litigation. The Report also argued that consideration should be given to the development of specialisms in primary education, the use of peripatetic teachers and the use of facilities in post-primary schools and community resources.

The White Paper (Government of Ireland, 1995) Charting our Education Future outlined a number of general principles including pluralism, accountability, quality and equality that have informed the Primary School Curriculum (Government of Ireland, 1999a). In the area of promotion of health and well being, each school would

implement a broad programme of physical and health education promoting the well-being of its students and incorporating a new emphasis on diet, hygiene, safety and relationships and sexuality education. However, it failed to develop many of the ideas proposed in the Green Paper and so left physical education without any firm recommendations. Nevertheless, all of these publications influenced curriculum development as part of overall education policy. The White Paper was the last policy paper prior to the publication of the Primary School Curriculum in 1999.

## The Development of the Primary School Curriculum (1999)

The work of curriculum revision began in 1991 undertaken by the NCCA who had devised structures based on the formation of curriculum committees, constructed on a representative basis, with a particular emphasis on practising teachers. Committees also included representatives of the DES, the National Parents Council, Boards of Management and religious bodies. Education Officers were appointed to work with the subject committee in writing the curriculum (the author acted as Education Officer for physical education). The revised curriculum at primary level was developed initially as a curriculum for junior and senior levels but these committees merged in 1994 and consequently a curriculum was outlined for infant to sixth classes. The Draft Physical Education Curriculum was published in 1997 and was circulated for review among professionals in physical education including teachers before publication in 1999. The publication of the Physical Education Curriculum (Government of Ireland, 1999a) will be described below.

### The Physical Education Curriculum 1999

The Primary School Curriculum (Government of Ireland, 1999a) is regarded as a development of the 1971 Curriculum, embracing the same ideological position but seeking to clarify some specific aims and general objectives recommended by the Primary Education Review Body (Government of Ireland, 1990a). The Physical Education Curriculum (Government of Ireland, 1999b) presents a detailed statement of what might be expected of children as they take part in physical activities. The curriculum statement begins with a definition of physical education: "Physical

education provides children with learning opportunities through the medium of movement and contributes to their overall development by helping them to lead full, active and healthy lives" (Government of Ireland, 1999b, p. 2). A rationale for its inclusion in the curriculum and an explanation of the six strands of the Physical Education Curriculum (Government of Ireland, 1999b) (described below) is provided.

Issues such as physical education and sport, competition, extra-curricular activities, gender and special needs are discussed in the introduction. Physical education is presented as emphasising individual achievement as opposed to sport where the emphasis is on winning. Competition is recognised as contributing to the holistic development of the child "if the opportunities presented are such that the child is progressing towards the achievement of his/her potential" (Government of Ireland, 1999b, p. 7). A balanced approach to competition provides fun, enjoyment and satisfaction for the child. The curriculum recommends that extracurricular activity should be linked to the physical education programme and that the needs and interests of both girls and boys should be considered in planning a programme. Provision for the child with special needs is advised to allow him/her to enjoy physical activity and to progress appropriately.

Some guidance is offered on how to plan for physical education. An important aim of the curriculum is to provide a wide variety of activities and this may entail exploring options to overcome limitations where facilities and resources are restricted. This requires careful planning. The curriculum places an emphasis on the role of the class teacher in implementing the programme of physical education: "Given that the programme is to be integrated with the other curricular areas, a class teacher is the most appropriate teacher to teach the physical education programme" (p. 8). This assertion merits comment in light of the strong recommendations on teacher confidence, support and specialist teachers that had emerged from the research on implementation of the previous curriculum. While the class teacher has the best understanding of the needs of the child and is undoubtedly in a better position to integrate physical education with other aspects of the curriculum it is imperative that the teacher is supported in the task of planning and implementing a programme of physical education. Research on implementation of the 1971 Curriculum discussed above indicated that lack of support

for its implementation was a key constraint. The issue of support for the primary teacher will constitute a key recommendation in chapter 8 of this thesis.

Assessment is highlighted as an integral part of teaching and learning in physical education and some guidance is offered on what to assess and how to assess learning in physical education. It is envisaged that a wide range of attitudes as well as skills and knowledge can be assessed with an emphasis on teacher observation, teacherdesigned tasks and curriculum profiles as possible means of assessment. The importance of integrating learning in physical education with learning in other areas is stressed and examples of opportunities for integration are outlined as the content for each class level is presented. Information and communication technologies are presented as a medium to stimulate the interest of children in physical activities. The development of language through physical education is emphasised as the teacher uses language to stimulate children to think, for example and in turn is used by the children as they respond through physical activity. While the emphasis on assessment may appear quite onerous on the class teacher it should be remembered that common approaches to assessment have been proposed that are applicable to many subjects in the curriculum and hence teachers will be able to apply learning about assessment to a number of different subject areas.

The aims and broad objectives for physical education are outlined and are concerned with the social and personal development and the physical development of the child. The development of fundamental movement is embraced in the objectives related to physical and motor development. These include reference to aspects of the child's development such as strength, speed, balance and co-ordination. They encompass the development of the knowledge and understanding of the child and his/her creative and aesthetic development. The experience of the child in physical education should contribute to development of health-related fitness and prepare the child to lead an active life and to use leisure time purposefully.

#### The Content of the Physical Education Curriculum

The content of the curriculum for each class level is divided into strands in common with the other subjects of the primary curriculum. The objectives for each of

the strands are supplemented by examples of activities and suggestions appropriate for each level. Athletics, dance, gymnastics, games, outdoor and adventure activities and aquatics are the six strands of the Physical Education Curriculum (Government of Ireland, 1999b). The strands are outlined for each class level with the exception of aquatics. Aquatics is presented as one complete unit to allow for adaptation by schools related to their access to a local facility. The programme can be implemented progressively at whatever stage the child has an opportunity to begin water-based activities.

The athletics strand contains objectives to be achieved related to running, jumping and throwing activities. Running activities are divided into running over distance, sprinting, relays and hurdling. Jumping activities focus on jumping for height and distance while throwing activities introduce children to the discus, javelin and shot put.

The dance strand focuses on providing opportunities for the child to engage in a range of creative and folk dance. Creative dance encourages the child to dance in response to different stimuli and accompaniment and to view dance performance. Folk dance "...is presented with an emphasis on being fully involved and enjoying the dance rather than on the movements involved in the dance. It provides the child with experience of dance of Irish and other cultures" (Government of Ireland, 1999b, p. 3).

The gymnastics strand "...is concerned with the use of movement in a creative way in response to set tasks, both individually and with others" (p. 4). It presents the child with opportunities to engage in challenging but realistically achievable tasks appropriate to his/her stage of development. The games strand seeks to provide children with a broad range of games skills that will lead into the playing of 'small-sided' or mini-games. Throughout the games activities there is an emphasis on developing understanding of concepts such as possession, use of space and teamwork. In this strand children are encouraged to invent new games and to play playground and co-operative games.

Outdoor and adventure activities are concerned with walking, cycling, camping and water-based activities, orienteering and outdoor challenge activities. These

activities "...offer alternative avenues for pupil achievement and encouragement to adopt a healthy life-style..." (Government of Ireland, 1999b, p. 5)

The aquatics programme focuses on gaining competence and confidence in water. The term 'aquatics' is used to embrace not only the teaching of swimming strokes but enjoyment of water play and development of skills such as treading water and gliding.

A key strand unit that is concerned with developing an understanding and appreciation of activities is common to all of the strands. This strand unit aims to promote the intellectual development of the child. Within the games strand, for instance, it may involve the development of the child's ability to identify or apply appropriate tactics or extending the child's knowledge of rules of games. This strand unit is not intended to form lessons but to be developed as children engage in activities related to the objectives for each strand.

## The Development of Teacher Guidelines

Teacher Guidelines (Government of Ireland, 1999c) were designed as an aid and resource in school and class planning for physical education. The guidelines provide information on the content of the programme and offer advice on school curriculum and organisational planning as well as classroom planning. Emphasis is placed on outlining a range of approaches and methodologies suitable for teaching physical education while exemplar lessons and units of work illustrate the proposed approaches. The Teacher Guidelines have provided the first resource directly related to the curriculum that is designed to support its implementation.

## Time Allocation for Physical Education

The issue of time allocated for the teaching of physical education has been the subject of much public debate and discussion among those concerned with physical education, physical activity, sport and health. Numerous reports and studies have called for an increase in the time allocated to physical education (Deenihan, 1990; Green Paper, 1992; McGuinness and Shelly, 1995; National Taskforce on Obesity, 2005). The

recommended time allocation for physical education is one hour per week with the possibility of extending this time by using a period of discretionary time (two hours for senior classes, one hour for infant classes) which has been recommended to allow flexibility for schools to accommodate different school needs and circumstances (Government of Ireland, 1999a, pp.67-70). It is essential that teachers recognise the importance of allocating the minimum time each week for physical education and increasing the time allocation for physical education by using discretionary time regularly. This may prove a contentious issue for schools as it can be argued that each subjet will merit an increase in time allocation. Given the recent concerns ahout low levels of physical activity and high levels of obesity among children (Government of Ireland, 2005b), however, it would seem imperative that Physical Education merits serious consideration in terms of time allocation.

The 1971 Physical Education Curriculum and the 1999 Physical Education Curriculum: a Comparison

While the main principles, aims and objectives of the Physical Education Curriculum (Government of Ireland, 1999b) have remained consistent from the 1971 curriculum to the revised curriculum of 1999 some features of the latter are significantly different. For the purposes of this comparison physical education in Curaclam na Bunscoile (1971) and physical education in the Primary Curriculum (1999) will be referred to as the 1971 Curriculum and the 1999 Curriculum respectively. The 1999 Curriculum has attempted to provide a very clear sense of purpose as illustrated in its broad objectives (Government of Ireland, 1999, p. 11,12). These are further developed at each class level where specific objectives are outlined related to each strand.

While the breadth of activities proposed in 1971 was particularly noteworthy the 1999 Curriculum builds on those proposals and seeks to provide more guidance on each area of activity. The specific objectives for each strand at each class level are supplemented by exemplars that seek to provide examples of an activity that would match each objective. This emphasis should ensure that a clear progression is apparent from infant to sixth classes. This is an important point for illustration throughout programmes of continuing professional development for tutors and teachers. Another

notable feature of the 1999 Curriculum is the emphasis on the issues relating to the teaching of physical education. Issues such as the relationship and difference between physical education and sport, the role of competition and the provision for children with special needs are clearly outlined and should form the basis for discussion by teachers in schools as they plan to implement the programme. The infant level, representing a critical time in the physical development of the child, was paid scant attention in the 1971 Curriculum with very little indication of what should be achieved. The 1999 Curriculum seeks to rectify this with a broad and clear programme of activities proposed.

The 1999 Curriculum addresses the role of assessment and provides guidance on what might be assessed and how assessment might be undertaken. This is a new development in the area of primary physical education. Another issue that is treated quite differently in the 1999 Curriculum is the issue of gender. While the 1971 Curriculum proposed some activities that were more suitable for girls and others that might be more appropriate for boys the 1999 Curriculum offers activities that are equally suitable for girls and boys and urges that teachers give attention to the provision of equal access to activities.

Within strands there are some significant differences too. The athletics strand, for example, is developed from infant classes to sixth classes in the 1999 Curriculum whereas in 1971 it wasn't included as part of the programme for infant classes. Aquatics, too, is presented with quite a different emphasis. The teaching of strokes as outlined in the 1971 curriculum is supplemented by a greater emphasis on gaining confidence in water and activities are suggested as part of the programme that should enhance the confidence and competence of the child with a particular emphasis on water play. The outdoor and adventure activities programme that is part of the 1999 Curriculum contains a detailed sequence of activities and as a strand in itself appears to have a much greater emphasis than its inclusion as part of 'other activities' in the 1971 Curriculum.

A significant addition to the 1999 Curriculum is the publication of the Teacher Guidelines as an aid and resource for school and class planning. While the 1971 Curriculum did initiate the provision of some guidance on approaches and

methodologies as part of the curriculum itself the 1999 Teacher Guidelines develop this process to a greater degree. More extensive exemplars of lessons and units of work are also available in the 1999 Teacher Guidelines building on what was available in the 1971 document. A significant emphasis is placed in the 1999 Curriculum on the development of an understanding and appreciation of activities and this has implications for the teaching approaches used that are illustrated in the Teacher Guidelines. Finally, the health aspect of physical education that was outlined as part of the 1971 Curriculum does not appear as part of the 1999 Curriculum. It is now represented in the social, personal and health education (SPHE) Curriculum. The emphasis on integration between subjects (highlighted at all stages of the curriculum documents) should ensure that this is not a retrograde step but rather a positive acknowledgment of its importance for the child. The main changes found in the Physical Education Curriculum (Government of Ireland, 1999b) and the challenges posed by these developments are illustrated in Table 3.

Table 3
Main Changes in the Physical Education Curriculum (1999) and Challenges for Implementation

| Changes   | Challenges  |  |
|---|---|--|
| Specific objectives outlined for each strand and each class level beginning with infant classes | Provision of a detailed programme related to each strand Provision of a programme that emphasises progression from class to class |  |
| Emphasis on assessment  | Planning an infant programme  Need to examine what to assess, how to assess and how to record outcomes of process                 |  |
| Examination of issues such as PE and sport, competition, special needs, gender                  | Importance of debating issues and recording outcomes as part of school plan for PE  |  |
| Inclusion of athletics in infant programme  | Provision of an athletics programme for infant classes  |  |
| Greater emphasis on gaining confidence in water   | Plan programmes that emphasise water play   |  |
| Detailed programme of outdoor and adventure activities  | Plan programmes of outdoor and adventure that encompass each of the strand units  |  |
| Emphasis on development of understanding and appreciation of activities                         | Adopt methodologies that promote understanding and appreciation   |  |
| Emphasis on integration between subjects  | Use guidance provided on elements of curriculum where possible areas for integration are signalled                                |  |
| Publication of Teacher Guidelines for PE  | Use Teacher Guidelines as reference when planning units of work in PE   |  |

The Context for Implementation of the Physical Education Curriculum (1999)

Five studies are discussed in this section of the chapter that are primarily focused on physical education, sport or physical activity prior to the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) although they were published after the publication of the curriculum. It is important to note that the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) commenced in September 2006. Discussion of these studies is undertaken to describe

the context of teaching of physical education in Irish primary schools as tutors engaged with the tutor programme (described in chapter 4) and embarked on facilitation of the in-service programme to teachers.

The first study discussed is the study of Broderick and Shiel (2000), this is followed by a discussion of a study of participation by children in primary and post-primary schools in sport (Fahey, Delaney and Gannon 2005), a study of provision for physical education in primary schools (Deenihan, 2005) and a study of teaching physical education in infant classes (Cosgrave, 2006). The recommendations of the National Taskforce on Obesity (Government of Ireland, 2005) related to physical education, published before the implementation of the Physical Education Curriculum (Government of Ireland, 1999b), are discussed. Finally, two issues that permeate the research studies are discussed: pre-service education and the issue of specialist teachers of physical education in primary schools.

Diet and Activity Patterns of Children in Primary Schools in Ireland (Broderick and Shiel, 2000)

Broderick and Shiel's study (2000) of diet and activity patterns focused on children in fifth class of Irish primary schools and provided further data on physical education gathered from children and their teachers. Teachers and children in a sample of 65 schools returned completed questionnaires resulting in a response from over 1,700 children and 74 teachers. Findings suggest that children were extremely positive about their enjoyment of physical education with over 80% of boys and over 60% of girls reporting that it was their favourite subject. This finding supports that of O'Sullivan (1997), reported earlier, who found that 85% of children had a positive attitude to physical education. Broderick and Shiel found general satisfaction among teachers with facilities available for teaching physical education and over half of children had classes once a week, while over a third had classes twice a week. As in the previous studies, they found that games dominated programmes of physical education using 55% of instructional time with 13% allocated to teaching of swimming, 10% to gymnastics and 9% to dance. These findings were consistent with those of the studies described above. Just 23% of pupils were taught by teachers who felt prepared to teach gymnastics, while 21% felt prepared to teach athletics, 9% water safety and just 13%

felt prepared to teach outdoor activities. Broderick and Shiel reported that "clearly, these elements will need considerable emphasis in the preparation of teachers for the implementation of the revised PE curriculum" (2000, p. 20). Another cause for concern was that only 65% of pupils attended a school in which there was a school plan for physical education. A possible indicator of positive predisposition to sport and physical education among teachers was the finding that almost 50% of pupils were taught by teachers who themselves participated in sporting activities while 30% were taught by teachers who were involved in coaching sports outside of school.

An obvious message to be gleaned from examination of this study is the dominance of games in the teaching of physical education with little attention being devoted to gymnastics, dance and outdoor and adventure activities. The challenge for providers of in-service education who are emphasising provision of balanced programmes of physical education is clear. However, the engagement of so many teachers (50%) in sport and sports coaching (30%) should be a positive factor for tutors as they work with teachers.

School Children and Sport in Ireland (Fahey et al., 2005)

The second study discussed is the Economic and Social Research Institute (ESRI) commissioned study of children in primary and post-primary schools (Fahey et al., 2005). It investigated children's participation in sport in general and provided data related to physical education as part of its investigation into activity levels of children. Examination of provision for physical education revealed that 62% of schools offered children physical education classes once per week, 31% offered classes two or more times per week. Soccer was the most common activity (72% of children played soccer within the physical education class) with Gaelic football representing the second most common activity (played by 69% of children). Basketball was most common among girls with 71% of girls having played basketball as part of their programme. A higher proportion of children in primary school were taught swimming (53%) than in second level. The survey also provided information on facilities for physical education. Two-thirds of Principals felt that facilities were 'not at all adequate' while comments provided suggested they were more concerned by indoor than outdoor facilities and only 23% had their own multi-purpose indoor floor. A major investment in sports

facilities was sought by two thirds of Principals. The overall conclusion reached was that there was "low overall provision and the high share of that provision accounted for by offsite access" (p. 62). The issue of just 31% of schools offering physical education more than once a week provides a clear indication for tutors of the challenge they face in supporting teachers in the teaching of physical education. It will be necessary for them to devote considerable attention to the issue of the frequency of teaching physical education to ensure that teachers are motivated to teach at least the minimum amount of physical education recommended (one hour per week) and to explore the option of using some of the discretionary curriculum time for the teaching of physical education.

A Study of Provision for Physical Education (Deenihan, 2005)

Deenihan (2005) surveyed over three thousand Principals in primary schools as the national programme of in-service (discussed below p. 96) was commencing. They identified the main barriers to the teaching of physical education as inadequate facilities (59%), time constraints (19%), and lack of training (professional development) (14%). Just 51.4% of Principals claimed that they had adequate indoor facilities for teaching physical education. Findings from a survey in Kerry (2001) revealed that just 27% of schools have an indoor area, while an INTO survey of provision in Donegal and Clare found that 80% and 63% of schools respectively do not have an indoor facility suitable for teaching physical education (INTO, 2004). On a positive note, however, 74% of the Principals in Deenihan's survey felt that the status of physical education had improved in the last five years. Yet, the findings of Fahey et al., (2005) and of Deenihan raise serious questions about facilities for teaching physical education for the design of the tutor programme and the implementation of the in-service programme. Throughout the design of the tutor programme it was important to consider the contextual factors related to provision of facilities that would be relevant to the contexts of many tutors and teachers.

A Study of Practices and Perspectives of Teachers of Junior and Senior Infants in Relation to Physical Education (Cosgrave, 2005)

Cosgrave's study of infant teachers' perspectives on teaching physical education found that physical education was being taught for one hour per week but teachers were divided in their opinions as to whether there should be more time allocated for the subject in infant classes. They identified demands from other curricular areas as a constraining factor. Cosgrave found that four of the six strands were regularly taught with the exception of outdoor and adventure activities for some teachers and aquatics. The importance of continuing professional development was highlighted by teachers in this study who reported that infant teachers found that the DES national programme of in-service (described below) was relevant to their needs and influential in terms of their practices. In contrast to the findings of other studies reported above (Deenihan, 2005; Fahey et al., 2005) the infant teachers were satisfied with both facilities and equipment for the teaching of infant physical education. As this study was undertaken immediately prior to implementation of the Physical Education Curriculum (Government of Ireland, 1999b) it presents a more positive picture of physical education at infant level particularly with reference to the breadth of content taught.

# National Taskforce on Obesity (2005)

The National Taskforce on Obesity (Government of Ireland, 2005b) made special reference in its recommendations for the education sector on issues related to physical activity and physical education. Firstly, it recommended that emphasis in all schools should be on increased physical activity including participation in sports. Secondly, it recommended that all schools should meet the minimum requirement of two hours of physical education per week delivered by appropriately qualified staff. This report received widespread media attention on publication and focused public attention on the status of physical education in schools.

### Pre-service Teacher Education

The issue of pre-service teacher education has been raised by many of the research studies already discussed (McGuinness and Shelly, 1995; Deenihan, 1990). Duffy (1997) suggested that "the source of the difficulties relating to perceived competence in teaching physical education would appear to derive their origin, in part at least, from the low level of time devoted to the subject during primary school teacher training courses" (p. 209). An examination of the time allocation in each of the colleges based on data gathered during 2006 is presented in the table below.

Table 4
Time Allocation for Physical Education at Pre-Service Level

| College                   | Hours for B.Ed | Hours for *Postgrad_ |
|---------------------------|----------------|----------------------|
| St. Patrick's College     | 48             | 26                   |
| Mary Immaculate College   | 40             | 30                   |
| Colaiste Mhuire, Marino   | 50             | 30                   |
| Froebel College           | 44             | 44                   |
| Church of Ireland College | 48             | 48                   |

<sup>\*</sup>denotes graduate students who enter College of Education with a degree and complete an eighteen month course before graduating as primary teachers

While these figures may be reasonable in the context of a teacher education course that is designed to prepare students to teach a programme of twelve different subjects it falls far short of the approximately 1,200 hours which is required for specialists at second-level. It should be acknowledged, however, that many of the methodologies and approaches that primary undergraduates study are applicable across the curriculum and hence are presented to students through courses that compliment the courses offered in physical education. Although no formal evaluation of the courses that are offered has been carried out, a positive factor would appear to be the new focus on implementation of courses that are based on the Physical Education Curriculum (Government of Ireland, 1999b) described below. In one of the largest Colleges of Education for example, St. Patrick's College, the undergraduate students have modules related to each of the strands of the curriculum with the additional option of pursuing courses outside of formal time offered by National Governing Bodies and others (such as a course offered by a dance specialist). The involvement of students in these courses on a voluntary basis should be interpreted as a very positive sign of student interest in the subject. Hence, a certain onus is placed on these providers to plan and implement quality courses to supplement the courses offered directly by the college.

Another factor merits consideration with reference to initial teacher education.

As students enter the Colleges of Education they are already in deficit in physical education compared to other subjects. The cumulative effect of poor physical education provision needs to be considered as their experience of primary physical education and

second level physical education (which may not have been offered to them particularly at senior cycle) has often left them with a poor understanding of many areas of physical education. This situation provides a strong rationale for increasing the time allocation for physical education in all colleges of education. An increase in time alone, however, is not sufficient. Provision of courses must continue to be examined to ensure that they offer students a broad programme and illustrate the key methodologies and approaches recommended in the Physical Education Curriculum (Government of Ireland, 1999b) with an emphasis on active learning in small groups. This provision has staffing implications that need to be addressed urgently.

### Provision of specialist support

The provision of specialist support at primary level has been a contentious issue with bodies such as the Physical Education Association of Ireland (the subject association at second level) in its submission to the NCCA in 1993 calling for specialist teachers to teach physical education in primary schools. The Primary Curriculum Review Body (1990) as described above sought the employment of specially qualified teachers who could service a number of schools. The NCCA submission to the DES (NCCA, 2002) recommended a support system of more 'specialist' primary teachers to support teachers in the implementation of the curriculum. A recent report to the Joint Committee of the Houses of the Oireachtas (Government of Ireland, 2005a) lent support to the employment of specialist teachers to teach physical education in primary schools. Tutors and teachers raise the need for specialist support again in the context of this study reported in chapters six and seven, and the issue underpins one of the recommendations presented in chapter 8.

While findings of each of the studies reported above indicated that some major constraints on implementation of physical education exist, the studies have succeeded in raising the issues related to physical education for public debate including issues of pre-service education and the employment of specialist teachers. Another major issue raised has been CPD for primary teachers in physical education. This issue will be the focus of the next section below as it is a significant factor in relation to the tutor programme described in chapter 4 and the in-service programme for teachers.

The importance of continuing professional development (CPD) for teachers as well as models of professional development and challenges for professional development were discussed in chapter 2. The provision for professional development for primary teachers in Ireland prior to the introduction of the Primary Curriculum in 1999, including programmes that focused on physical education, is described in this section. The most recent developments are discussed before some examples of professional development initiatives for primary teachers in physical education in other countries are described including the most recent National CPD-PE initiative in England. This discussion of professional development in an Irish context is undertaken so that existing support for primary teachers is identified and compared with some examples from other countries.

# Continuing Professional Development in Ireland 1970-1999

Hanafin and Hyland (1995, p. 56) report of the increasing awareness of teachers' professional needs in the Irish context in the 1970s. Curaclam na Bunscoile (Government of Ireland, 1971) provided momentum for many summer courses (discussed on pp. 62-63) following its implementation. Throughout the 1980s Boards of Management had designated annual staff days for in-service training but provision was uncoordinated with numerous different providers working independently of each other. However, Sugrue et al. (2001) suggest that "the seeds of a new professional culture were unwittingly being sown" as these professional development opportunities served to create awareness among teachers of their professional needs. The OECD (1991) reported that as many as 9,000 teachers per annum had attended in-service courses.

In the mid-1990s a national In-career Development Unit (ICDU) was established within the Department of Education and almost £40 million was allocated for in-career development in the period 1994-1999 (Hanafin and Hyland, 1995, p. 127). This resulted in the development of programmes such as the Second Level Support System (SLSS), the School Development Planning Service (SDPS) and the Primary Curriculum Support Programme (PCSP) offered on a national basis that are being

funded by the Teacher Education Section (TES) of the DES, which replaced the ICDU in 2004.

Continuing Professional Development for Primary Physical Education in Ireland: 1974-1999

As stated in chapter 2, the 2<sup>nd</sup> World Summit on Physical Education highlighted the need to promote professional development especially for those working in primary schools (ICSSPE, 2005). In an Irish context the need for continuing professional development in physical education in Ireland has been well documented. "At primary level, the revision of the physical education syllabus, backed up by a phased programme of in-service education is an essential step [in the provision of quality physical education]," (Duffy, 1997, p. 288). Studies conducted by The Review Body on Primary Education (1990), McGuinness and Shelly (1995), the Irish National Teachers' Organisation (1996) and Deenihan (2005) discussed above recommended increased emphasis on provision of professional development opportunities for teachers.

In Ireland, in-service education for physical education had not been offered to teachers on a national basis prior to the publication of the Physical Education Curriculum (Government of Ireland, 1999b) in 1999, although some teachers did attend summer in-service courses referred to above on a voluntary basis. Courses in physical education were generally provided by National Governing Bodies of Sport, Education Centres or individuals. An intensive 160 hour in-service course was offered in 1982 to practising primary school teachers and a total of twenty-two teachers completed the course organised by a Principal and a Teachers' Centre (now the Drumcondra Education Centre). This was a once-off course and was unique in that its focus was on development of expertise in primary physical education.

Broderick and Shiel (2000) found that less than 30% of teachers had attended in-service courses in physical education in the three-year period prior to their survey. Nevertheless, almost 40% of teachers had attended more than 30 hours in-service training in physical education since initial training. It is difficult to ascertain, however, to what extent in-service courses provided guidance related to a broad programme of

physical education as many courses focused on one element of the physical education programme such as a specific sport.

Prior to the commencement of the in-service programme designed to help mediate the Physical Education Curriculum (Government of Ireland, 1999b), a DES initiative, the Primary School Sports Initiative (PSSI) designed to promote physical education and sport in primary schools was introduced on a pilot basis to a selection of thirty primary schools. Its primary purpose was to inform the national in-service of physical education and, hence, the main focus of the initiative was to support teachers in the pilot schools in their teaching of physical education by developing and by providing a pupil-centred skill development approach to teaching physical education in primary schools. The model they used for professional development consisted of a total of three and a half days in-service support using a workshop format over the two-year duration of the initiative. They then offered a form of sustained support as teachers implemented the curriculum with a focus on offering further practical advice, clarifying aspects of the support materials that they were piloting at the time and advising on best use of the grant for physical education that was provided to all schools during this period. This support took the form of incidental school visits. A legacy of their work exists in the form of detailed support materials designed by the team of three national co-ordinators and launched by the DES in 2006 (PSSI, 2006). While the tutor programme of the researcher was designed when phase one of the project was implemented, hence limiting the potential impact of the pilot project on the design of the programme, nevertheless some important factors did emerge even at this early stage of the project. These factors, although most applicable in the context of professional development or in-service programmes for teachers, informed the tutor programme by offering insights for consideration early in the process of professional development for tutors who would have responsibility for designing programmes for teachers subsequently.

The support for teachers provided by the co-ordinators commenced with an introductory presentation focusing on the Physical Education Curriculum (Government of Ireland, 1999b) and provided an overview of aims, content and key messages that emphasised the 'spirit' of the curriculum. They then offered a programme designed to support the teaching of games and athletics. Their focus in

supporting these strands was on an approach that was underpinned by a pupil-centred philosophy and centred on skill development. "The methodology used in the model presented was experiential learning and the focus was heavily weighted to the practical application of the skills described in the curriculum documents" (PSSI, 2003, p. 28).

Early feedback to the co-ordinators indicated that this focus, using predominantly a direct teaching methodology, was very successful in illustrating the content of the curriculum with its emphasis on progression and continuity to teachers. It is important to note that background evidence provided to the co-ordinators by the Principals who were consulted in each school indicated that the majority of the teachers were not familiar with the content or methodologies illustrated. Hence, it was important that provision of support was based on prioritising subject knowledge. The hands-on practical experience appeared to be a key issue for teachers in enhancing their competence and confidence to teach physical education. Morgan's (2003) evaluation based on observation of the programme on specific occasions and on a questionnaire to all teachers, presented at the completion of the programme highlighted the success of the initiative in supporting teachers in the implementation of the Physical Education Curriculum (Government of Ireland, 1999b). High levels of satisfaction were reported by teachers in relation to aspects such as helping teachers to plan their work and integrating physical education with other subjects. Significantly, 98% of the teachers surveyed claimed that they "could be better at teaching PE than they had previously thought" while all teachers surveyed reported that there was a need for physical education programmes for children. It would appear that this pilot project was extremely valuable as an example of a successful intervention in enhancing provision for physical education prior to implementation of a programme at national level. The secondment by the Primary Curriculum Support Programme (PCSP) of the three coordinators who had led this pilot project as part of the team of tutors to provide inservice support at national level was significant in promoting the link between the pilot project and the PCSP. The work on development of a professional development programme that was implemented on a national basis is described below.

Continuing Professional Development and the Implementation of the Primary School Curriculum (1999)

Current provision for continuing professional development by the DES at primary level is focused primarily, although not exclusively, on curricular initiatives since the introduction of the Primary Curriculum (1999). A support service, the Primary Curriculum Support Programme (PCSP) was established in 1998, a year before the curriculum was published. The focus on curriculum commenced in 1999 when programmes of in-service beginning with an overview of the Primary Curriculum and then focussing on individual subjects were introduced. A rationale for the structure of the support being subject-based is linked to the phased implementation of the subjects of the curriculum in primary schools. As indicated in chapter 1, the aim of the inservice programmes for each subject (due for completion in the current school year 2006/2007) is to ensure that the Primary School Curriculum is mediated to teachers (PCSP, 2007, para.1). The phasing in of the curriculum was decided with the aim of offering a balanced, phased approach to schools.

Modes of delivery were selected and targets set by the DES for implementation of the curriculum. The mode of delivery chosen for the initial in-career development programmes was the national model. Two-day seminars focused on a particular subject in the curriculum were planned ('seminar days') and delivered at national level to individual schools or clusters of schools. Two further days were allocated for individual schools to focus on planning for implementation of the subject. This generally entailed facilitation of two subjects to all schools within a particular academic year.

Implementation of a curriculum subject was to take place in the year following the inservice programme. The focus has been on the class teacher implementing each of the subject areas. Initial in-service seminars have been offered to all teachers in English, Gaeilge, visual art, mathematics, social, personal and health education (SPHE) and social, environmental and scientific education (SESE) including history, geography and science. Some variations on the model described above were implemented in the case of science and visual art when school-based days were implemented. An outline of the approach to in-service of physical education is described in chapter 7.

Forty-seven teachers were seconded initially to the Primary Curriculum Support Programme (PCSP). The dominant practice employed by the PCSP to date has been the secondment of primary teachers as 'trainers' to support the implementation of the Primary Curriculum. The trainers or tutors with responsibility for the delivery of the programmes of in-career development were trained in facilitation and examined the skill development and methodologies of the Primary School Curriculum. They, in turn, were required to design and present a subject-based programme of in-service for teachers. "The direct involvement of teachers in the design, delivery and management of support services has been a very positive feature of the activities and there now exists a cadre of high quality trainers with generic skills in the system" (Egan, 2004). The merits of such 'teacher leadership' and its limitations for continuing professional development have been discussed in chapter 2 (pp. 47-48).

Sugrue et al. (2001) undertook an inquiry into the policy and practice of teacher professional development funded by the DES just one year after the in-service programme had begun. A review of the Primary School Curriculum was carried out by the NCCA (2005) and the DES (2005). Findings from these studies have emerged that should inform development of further continuing professional development initiatives. Further reviews are planned on a phased basis as particular subjects are being implemented.

Early Evaluations of Implementation of the Primary School Curriculum (1999) with Specific Reference to CPD

The NCCA report (2005) recommended that teachers needed more support with assessment of children's learning and with application of the integrated nature of the curriculum. The report also suggested that more direction and guidance should be provided for teachers to enable them to include greater use of collaborative learning, including group work and pair work. Both the reports of the NCCA and the DES recommended providing more support for teachers to enable them to cater for the range of learning needs and abilities represented by individual children. In addition, the DES report (2005) recommended that schools respond to the need to contextualise the curriculum for the school's requirements during the process of school planning. Findings from the DES study support the use of a collaborative and consultative

planning process which influences significantly individual teacher's classroom planning.

As part of their investigation into policy and practice related to professional development, Sugrue et al. (2001) sought views of primary and post-primary teachers on their experiences of professional development. Some of their findings are particularly relevant to the discussion of in-service provision that is at the centre of this study. Teachers generally welcomed the increased provision and need for continuous and sustained learning and felt that learning should be context specific. There was evidence of a growing pattern of more active participation in professional learning by teachers while teachers reported that professional learning provision has been more successful in communicating information and knowledge than impacting positively on competencies and skills. This report highlighted the increasing challenge to create and maintain a balance between system needs and the needs of individual teachers and school communities.

Current Provision for Continuing Professional Development in Primary Physical Education in Ireland

Physical education was introduced to teachers on a national basis as part of their in-career development programme in the academic year 2004-2005. Each subject was allocated two seminar days and two planning days over the course of two years. The tutors were not available to support schools during the days allocated to planning programmes. The introduction of physical education was delayed by one year as the DES opted to assign the previous year as a year for consolidation of work undertaken in the first phase of in-service in response to pressure from Principals and teachers regarding overload. The second year of in-service in physical education was undertaken in 2005-2006. A case study (Seoighe, 2005) that examined primary teachers' experience of and views on the initial phase of the in-service programme indicated that there were high levels of satisfaction with the physical education seminar day and that teachers reported that they subsequently implemented many of the activities treated within the programme in their own classes. Tutors' and teachers' responses to the in-service programme are described in this thesis (chapter 7). No other evaluation of the

effectiveness of the programme has been published to date. The implementation of physical education in schools began in September 2006.

The DES is providing a support service (Cuiditheoireacht) to support the implementation of the Physical Education Curriculum (Government of Ireland, 1999b). A small group of tutors, fourteen in total, are working on a nationwide basis supporting primary teachers and are sharing responsibility for supporting implementation of social, personal and health education (SPHE) also. Ten of this group are drawn from the group of twenty-six tutors who were selected initially to provide the in-service programme. Their selection and initial professional development is described in chapter 4. The nature of their support varies from provision of one-off visits to a form of more sustained support where they assist teachers on an on-going basis demonstrating how aspects of the curriculum might be organised and taught. In addition, web-based materials are provided as further support. Relating this development to the review of literature on models of professional development it would appear that the sustained support is more likely to meet the needs of teachers as adult learners. One-off visits offering support to teachers may, however, meet teacher needs in instances where teachers have already built up expertise in physical education. There is no strong evidence that this expertise exists to any great extent at primary level currently.

While the in-service programmes provided by the DES since 1999 (and related to physical education since 2004) were being implemented, other providers (discussed above) such as Education Centres and individual teachers have continued to provide courses for teachers, particularly in the form of summer courses. In addition, there is a growing demand from teachers for post-graduate university qualifications with increasing numbers of teachers enrolling in part-time programmes at Masters' level, for example. Efforts have been made by some groups to link courses with the in-service programmes provided by the DES. The physical education subject association at primary level, the Irish Primary Physical Education Association, is an example of a group that closely linked their summer courses with the programme experienced by teachers facilitated by the DES and consulted with St. Patrick's College of Education who co-operated in the design and facilitation of the courses. Nevertheless, this practice is not common. Sugrue et al. (2001) conclude that "...the primary policy agenda appears to have been extending provision" (p. 78) with little emphasis on collaboration

between providers. It would appear that collaboration between providers is desirable to ensure that CPD meets the needs of teachers and that duplication is avoided. The work of the physical education subject association at primary level with one College of Education in building on the in-service provision provided by the DES is just one example of how collaboration between providers could be beneficial. Other providers such as Colleges of Education, the INTO and Education Centres could benefit from such collaboration.

Examples of Continuing Professional Development Initiatives Internationally

As in-service provision is the focus of considerable attention in the Irish context it is useful to examine some of the approaches internationally to the education of primary teachers in physical education. There are some earlier examples of practices for supporting implementation of physical education programmes in Scotland and Northern Ireland that offer possible avenues of exploration within the Irish context. They were representative of programmes offered by Local Education Authorities (LEAs) prior to the most recent initiative the National PE-CPD Programme in England which merits particular scrutiny. These will be described below.

Approaches to Continuing Professional Development (CPD-PE) in Scotland and in Northern Ireland

When the current curriculum in Scotland was introduced, one day's in-service for all teachers in physical education was provided. This was delivered by their curriculum support teachers in physical education while the Assistant Advisers worked with infant staff. The Assistant Advisers have worked on producing a comprehensive set of Physical Education Guidelines for teachers to help promote progression. As well as prioritising support for infant teachers they also worked closely with 'probationer teachers' and provided help for teaching children with motor difficulties. Assessment was identified as an area for particular treatment as the curriculum was implemented. Individual local centres then adopted different ways of supporting teachers.

The in-service programme for the East Lothian area of Scotland, for example, was offered according to the annual staff development calendar in which certain days

were reserved for authority courses. The remaining development time was left to schools to organise. The groups targeted were primary cluster teachers and primary specialist teachers who met and identified their needs. Courses offered included assessment and progression in the primary programme, teaching gymnastics and teaching games skills. Sports Development Officers linked very closely with physical education specialist teachers.

In Scotland also the Dumfries and Galloway Council area employed 24 parttime physical education specialists who taught in all of their 120 primary schools. The
in-service programme that was offered was targeted at all specialist teachers although
some primary class teachers would attend courses in physical education. However, as
they have a specialist in the primary school the class teacher sees less need to attend
staff development activities related to physical education. Four in-service days were
organised throughout the school year. Topics covered range from curriculum content to
planning the programme to assessment. Significantly, the Council Department of
Education expected the primary teacher to be present at all teaching sessions presented
by the specialist. It was expected that joint planning took place and that the class
teacher taught another physical education lesson during each week. Guidelines were
issued containing model programmes of study within the area of expressive arts. This
resource included content and structure of the programme (games, gymnastics and
dance), aspects of learning and teaching, aspects of planning and recording and
assessment.

Scottish Border Council was another example of the application of a structured support for the teaching of physical education. It provided for a rural area with 72 primary schools and 9 secondary schools. A team of Curriculum Support Teachers in physical education (CSTs) and two Assistant Advisers worked in the area of physical education. The CSTs worked in all of the primary schools every week and were responsible along with the class teacher for the planning, teaching, assessing and recording of the physical education programme. The CST taught one lesson a week with the class teacher helping and the class teacher taught a follow up lesson each week. The joint planning aspect was seen as very important as it recognised that the class teacher had responsibility for the physical education curriculum and that their strengths in areas of physical education were being recognised. The class teacher

delivered the complete programme to nursery and infant children but worked very closely with the Advisers in physical education.

The approach adopted by the Council for the Curriculum Examinations and Assessment (CCEA) in Northern Ireland was adapted by individual library boards. In the North Eastern Education and Library Board, for example, they targeted the physical education co-ordinators in schools. The initial training dealt with the planning aspect of physical education, the programmes of study for key stages 1 and 2, the activity planner for a school, a scheme for each key stage and units for each programme of study. The second phase was the actual content of the programmes of study and teachers were offered courses in dance, gymnastics, games and athletics. A physical education primary liaison officer and a curriculum support teacher worked with teachers and their classes. They also ran a course per term based on the needs of teachers and a course for physical education co-ordinators.

## Early Implementation of the National Curriculum in England

In England research has been undertaken to monitor and critically analyse the revision and initial implementation of the National Curriculum for Physical Education. The revision of the National Curriculum was concerned with providing stability, greater clarification, further reducing prescription and extending the flexibility of the statutory requirements for all curriculum subjects. Penney (2001) reported on the initial stage of curriculum implementation and while the focus of her report on school sites was on secondary schools she explored the issues arising in primary school settings through the context of national and Local Education Authority contexts. The key concerns focused on the 'aspects' of the curriculum: acquiring and developing skills, selecting and applying skills, tactics and compositional ideas, evaluating and improving performance and knowledge and understanding of fitness and health. While acknowledging that the aspects had provided some commonality in focus "across a still very clearly divided subject" (Penney, p. 97) it appeared that they were only considered after, and in the specific context of individual areas or activities. At this early stage of implementation, there were ongoing difficulties relating units of work in specific areas to generic statements about learning in physical education. Furthermore, the demand to cover multiple areas remained a problematic issue for schools and training institutions. In

reducing the prescriptive element in implementation at key Stages 1 and 2 and thus allowing greater flexibility in what teachers covered, the problem of diversity of pupil experience as they progress to key stage 3 was accentuated. Although there had been more teacher involvement in the revised changes the revisions to the curriculum continued to be perceived as being rushed and imposed on teachers. An examination of the most recent assistance provided to support teachers in implementation of physical education in the National Curriculum in England is described below.

Current Support for Physical Education in England: The National PE-CPD Programme

"The physical education landscape in England has changed dramatically in recent years" (Armour and Makopoulou, 2006). For schools, the change stemmed from a commitment by the government to invest £1½ billion in delivering a national PE, School Sport and Club Links strategy (PESSCL), launched in October 2002. The focus for schools was on providing additional facilities for physical education and school sport. The target identified for the PESSCL was to increase the percentage of school children who spend a minimum of two hours a week on high-quality PE and school sport to 85% by 2008. Armour and Makopoulou regarded the target to increase the time to a minimum of four hours per week before 2010 as "ambitious". Among the eight strands identified as part of the plan, a new national PE-CPD programme was included. The Programme for teachers is funded by the Department for Education and Skills (DfES) and a consortium of professional organizations develop and manage it. Free access to a range of modules is provided for teachers in primary, secondary and special schools. While the modules are designed at national level, they are delivered by 150 Local Delivery Agencies. The aims of the programme are centred on improving the quality of teaching and learning in physical education and school sport, increasing the understanding of the use of high quality physical education and school sport in whole school improvement, enhancing the links between high quality physical education and school sport and the promotion of physical activity and health, encouraging innovative interpretation of the National Curriculum for Physical Education to ensure it closely meets pupils' needs and ensures their maximum achievement, and enhancing crossphase continuity to ensure pupil progress.

In an examination of what constitutes effective continuing professional development in physical education, Armour (2005) concluded that CPD for physical education should be continuous in the sense of being sustained, should involve professionals working closely with professional colleagues and should result in development that involves progressive changes to schools, teachers and curricula. One year later Armour and Makopoulou (2006) reported that early indications from the evaluation of case study schools involved as partners in the strategy "point to clear evidence that the National PE-CPD Programme has had a substantial impact upon teachers' learning and pupil learning". They report on two positive factors that have contributed to the programme's effectiveness as well as one major constraint on their professional learning experiences. Active professional learning appeared to give teachers ownership of their learning by supporting teachers in building on their own needs and making ideas work in their particular schools while collective participation in a CPD activity "seems to lead to positive and sustained changes in teachers' knowledge and practice"(p. 3). On the other hand, teachers were critical of the 'one-shot' nature of the modules and sought follow-up support to deepen their understanding. Armour and Makopoulou argued that teachers' vision of follow-up support would be embedded in principles of situated and progressive learning, involving follow-up meetings providing teachers with opportunities to move the learning process forward. The second recommendation emanating from the research focuses on engaging teachers in ongoing and collaborative forms of learning enabling teachers to engage in sustained and ongoing professional development and "take an analytic stance toward their personal and school's improvement plans" (p. 5). Resourcing opportunities for follow-up support that builds upon and expands teachers' knowledge and practice is another consideration recommended for the national programme. A comparison can be made with the findings of a study in the US. Faucette, Nugent, Sallis and McKenzie's study (2002) of a two year programme of support for elementary school teachers in the US supported the assertion that an ongoing, supportive programme of professional development can substantially improve classroom teachers' physical education programmes. Teachers in their study became both willing and able to implement new rigorous curricula across the two years of the study.

The examination of implementation in Ireland, Northern Ireland, Scotland and England provides evidence that practices related to provision of continuing professional development vary considerably. As no early studies of implementation of physical education in an Irish context have been undertaken, it is not possible to compare experiences. Nevertheless, some of the issues related to implementation of the Physical Education Curriculum (Government of Ireland, 1999b) will be examined below.

#### Conclusion

Following on the research findings related to implementation of the 1971 Curriculum as well as the study of CPD reported in this chapter, some issues emerge and some lessons to be learned from previous experiences of implementation relevant to the tutor programme, which is the focus of this study, can be identified. While some general difficulties with the implementation of the 1971 curriculum appear to have been overcome on examination of the early stages of the implementation of the 1999 curriculum, some issues remain as areas for concern. A key issue, which was raised in the discussion of implementation of the 1971 Curriculum, was the ongoing support for teachers in the form of professional development. The limitations of the model implemented in 1971, where the focus was on the Principal and where the duration of the courses proved inadequate to support teachers, have been described (p. 62-63). While the issue of time devoted to the in-service of physical education alone is unlikely to be adequate to enable teachers to implement the 1999 Curriculum (just two days inservice training has been allocated to physical education with a further two days allowed for planning purposes) the focus has been on the class teacher.

In terms of building on this initial support for teachers, the focus in the research outlined earlier on the importance of sustained professional development is an issue that needs to be addressed possibly by teachers working within communities of practice. There is evidence that some provision is being made for sustained support on a national basis as part of teachers' working hours. (The provision of summer courses offered by various providers, as happened with the previous initiative after 1971, continues to provide options for teachers to voluntarily engage with further professional development in physical education). An option that is currently being adopted by the DES for 2006-2007 is the retention of some of the tutors for the in-service programme

as support for the implementation, described on p. 98. This development is in line with the needs of teachers for sustained support as outlined in the research (Smylie, 1995; Armour, 2005) and indeed with the report of the Review Body on Primary Curriculum (Government of Ireland, 1990) and has the potential to significantly influence how physical education is taught. The possibility of this sustained support having an important effect on the teaching of quality physical education would seem to be weakened by three factors (a) the deployment of insufficient numbers of support personnel (the allocation for the school year 2006/2007 was a total of fourteen tutors who were required to meet the needs of approximately 26,000 teachers throughout all areas of the country), (b) the policy for on-going training of the support personnel (while most of these tutors have engaged in substantial training having undertaken the tutor programme for physical education since its initiation, others have not been exposed to such comprehensive training), and (c) the necessity for the support personnel to divide their time with support for SPHE (social, personal and health education).

Another consideration, raised earlier in discussion of teachers as innovators of change and in discussion of models of CPD, is the desirability of collaboration between the tutors and others working in the field of physical education, such as subject specialists in Colleges of Education and Universities, to ensure that expertise is shared and extended. This collaboration can promote sharing and development of expertise. While there was some evidence of collaboration, particularly with the Junior Cycle Support Team at second level during the initial training of tutors there is a need for ongoing collaboration of this kind both with subject specialists at second level and those at third level.

A major constraint on the potential impact of support for teachers in implementation of the Physical Education Curriculum (Government of Ireland, 1999b) is the under funding of the subject. The lack of facilities and small equipment, poor school design and large class size documented in the research outlined above (INTO, 1985; Deenihan, 1990; McGuinness and Shelly, 1995; Broderick and Shiel, 2000; Fahey et al., 2005) were identified as significant constraints on the successful introduction and implementation of the 1971 Curriculum. These findings point to the need for the DES to fund improved facilities in many Irish primary schools. The indoor

facilities in particular merit special attention. Where they do exist many are poorly designed and so are incompatible with the teaching of physical education.

Other factors identified in the research indicate that guidance needs to be provided too on the teaching of physical education to multi-grade classes and on safety factors concerned with children engaging in physical activity. In addition, many of the research studies have pointed to the importance of the initial education of teachers. It must be regarded as an area of particular concern especially as the 1999 Physical Education Curriculum contains some significant changes from the previous curriculum as discussed above. The input of newly qualified teachers who have a comprehensive training based on the Curriculum could be a significant factor in improving provision in schools.

A positive factor related to DES policy based on the 1999 Curriculum is that review of the implementation of each subject has taken place as subjects are implemented. A review of physical education should inform further policy in the area and is likely to be undertaken as part of a policy of reviewing all subjects. Finally, the delivery of in-service programmes guided primarily by tutors with a background in teaching at primary level can be a positive factor that will be discussed in chapter 7 in the context of this study. The concluding section of this chapter will focus on the lessons learned from implementation of curriculum in Ireland and internationally that should inform the design of the tutor programme described in chapter 4.

Lessons Learned from Implementation and the Tutor Programme for Physical Education

Three considerations for the design of the tutor programme described in chapter 4 that had already emerged from the review of literature in chapter 2 surfaced again in the context of implementation of curricula.

1. The promotion of active professional learning and of collective participation in a CPD activity were factors identified as important in informing the tutor programme that emerged from chapter 2. These factors also emerged as

positive indicators of the success of programmes of CPD in the study of the PE-CPD programme in England.

- 2. Consideration of the constraints of facilities and equipment for teaching physical education has already been proposed in chapter 2 as an issue that needs to be borne in mind when designing a tutor programme in the Irish context. Findings of the research of Deenihan, Fahey et al., McGuinness and Shelly and others described in this chapter provide further support for the importance of considering these constraints in the design of a tutor programme for tutors. These tutors will be working with teachers who implement programmes of physical education under these constraints. In light of this, the necessity for examining the contextual factors involved in any programme for teachers and designing programmes to facilitate individual contexts as far as possible is again highlighted.
- 3. The importance of working collaboratively with specialists who have particular expertise in physical education was raised already in the context of research on innovative practice described in chapter 2. This factor was emphasised again in the discussion on working with specialists from the post-primary sector as well as third level.

Other factors that should be borne in mind when planning the tutor programme emerged from the review of the implementation of the National Curriculum in Britain. Firstly, it will be important to link together the strands of the curriculum as closely as possible while exploring each strand individually to facilitate an understanding of the generic areas of learning that contribute to a profile of learning in physical education. Secondly, it will be necessary to emphasise the importance of tutors engaging more fully with those areas of learning that they are least familiar with to facilitate the implementation of the breadth of curriculum proposed. In this way teachers will receive support in areas that they might not treat adequately because of their own perceived lack of knowledge or competence. Given the strong tradition of emphasis on certain aspects of the curriculum and the neglect of others this will be an important consideration in designing the programme for tutors if any real change is to happen in redressing this imbalance.

Many of the issues discussed in this chapter were concerned with the design and implementation of Curaclam na Bunscoile (1971) and how lessons learned from this experience and experience of implementation in a small selection of international contexts described in the research might inform implementation of the Physical Education Curriculum (Government of Ireland, 1999b). These will be discussed further in chapter 8 in light of recommendations to support the implementation of the 1999 Curriculum. However, the main concern of the author is with the training of tutors to implement the in-service programme (the focus of this study), which forms one of these supports. An effective tutor programme could provide the key to effective teaching of physical education by primary teachers. The proposed tutor programme that follows in chapter 4 is based on what the author considers to be best practice as derived from the theory and practice of learning, teaching and change in the context of curriculum and professional development as discussed in chapter 2 and informed by past experiences of implementation described in the research as portrayed in this chapter.

#### CHAPTER FOUR

# The Tutor Programme for Physical Education Introduction

One of the aims of this study, as described in chapter 1, was to investigate if a programme of professional development can be effective in preparing tutors to facilitate programmes of in-service to teachers. The programme of in-service was designed and facilitated on a national basis by a team of tutors whose task was to support Irish primary teachers in the implementation of the Primary Physical Education Curriculum (Government of Ireland, 1999b). Their preparation for the task of facilitating the inservice programme involved undertaking professional development. An aspect of this professional development was their engagement with the programme of professional development or tutor programme for physical education described in this chapter. Firstly, the background and aim of the tutor programme is described. This is followed by a description of the design of the programme informed by the considerations that emerged from the reviews of literature undertaken in the previous two chapters of the study. The framework used in the design of the programme is then described. Due to the volume of material involved, the outline of the detail of the tutor programme is provided in Appendix A. The final section describes the implementation of the tutor programme.

## The Aim and Focus of the Programme

The tutor programme outlined in this study was designed to provide a strong, theoretical, conceptual basis for the professional development of tutors that would prepare them to design and facilitate a programme of in-service education based on the Physical Education Curriculum (Government of Ireland, 1999b). The tutor programme represented a major module of a complete professional development programme for tutors who subsequently facilitated a national programme of in-service in physical education for primary teachers. Its focus is specifically on the elements of content of the Physical Education Curriculum (Government of Ireland, 1999b), the teaching methodologies proposed in the curriculum (outlined in the Physical Education Teacher Guidelines, Government of Ireland, 1999c) and the issues directly related to the curriculum such as assessment of physical education. It is beyond the scope of this

programme to outline content for other aspects of a programme for tutors such as development of health-related fitness, for example that will complement the programme outlined here. Further elaboration of the scope of the programme will be provided on p. 120 below.

#### The Design of the Programme

Previous attempts by primary teachers to plan and implement quality programmes of physical education for the children in their care have been described in chapter 3. The provision of a professional development programme that would prepare tutors to support teachers in this task demanded careful consideration. Firstly, the reviews of literature on adult learning, teacher change, professional development and programme design as well as the review of experiences of curriculum implementation provided a theoretical basis for the design of the professional development programme for tutors. A summary of the considerations pertinent to the design of the tutor programme that emerged from the reviews of literature in chapter 2 and chapter 3 is presented in Table 5. In order to facilitate ease of reference when working on the design of the programme itself, the considerations were organised into three categories: core principles, content elements and process elements. The core principles represented key considerations that informed the design throughout; the content issues guided the selection and organisation of content while the process issues underlined the importance of *how* the tutors were learning.

Table 5

Considerations Informing the Design of the Tutor Programme

## Considerations The tutor programme should

#### Core Principles

- be flexible allowing for negotiations between and among planning parties
- be contextual always recognising the perspective of the learners and their learning situations
- recognise the strengths and weaknesses of the model where teachers are designated as leaders of professional development and work within it
- recognise that adults can be self-directed in their learning
- recognise the richness of experience of the adult learner
- · identify the state of readiness of the adult learner
- engage learners in dialogue about the programme itself
- involve linking with specialists in the area of physical education
- be evaluated to ensure that it is meeting the needs presented by the contextual situations of the learners and is achieving its aims

#### Content Elements

- be informed by the PSSI pilot project emphasising tutors' need to focus on
  - pupil-centred aspects of children's learning in physical education
  - programmes emphasising skill development in a progressive, continuous way
  - direct teaching driving experiential learning during the initial learning stages for teachers
  - o knowledge of resources and equipment
- begin with the content most familiar to tutors
- emphasise areas of learning that tutors are least familiar with
- link strands and identify generic areas of learning
- relate content to real-life setting of learners ensuring that it is relevant
- ensure content is adaptable

## Table 5 (continued)

# Considerations The tutor programme should

#### Process Elements

- · encourage discovery learning
- foster critical reflection leading learners to question beliefs about practice and perspectives on practice leading to 'transformative' learning
- prompt learners to work collaboratively
- accommodate learning preferences so that individual needs are met
- provide concrete experiences, based on active, experiential learning
- prompt learners to adapt and innovate
- ensure that learners are exposed to good models of facilitation.

Caffarella's Interactive Model of Programme Planning (1998; 2002) discussed in chapter 2 provided the researcher with a framework that allowed for the considerations outlined above. The key components of the model and how they were used by the researcher to design the programme are outlined although not all of the twelve components of programme planning were deemed relevant to this study. Issues of budgeting and marketing, for example, as well as co-ordination of facilities and onsite events and communicating the value of the programme were deemed by the researcher to be the sole responsibility of stakeholders such as the DES and the PCSP. The process of programme design adapting the framework provided by the Interactive Model of Programme Design and illustrating the components relevant to the design of the tutor programme is outlined in Table 6 and is discussed below.

Table 6
Caffarella's (1998) Model of Programme Planning Applied to the Tutor Programme for Physical Education

| Stages of<br>Programme Planning | Description  |
|---------------------------------|--|
| Stage 1                         | Becoming Knowledgeable About the Programme Context     |
| Stage 2                         | Using Negotiating Skills Effectively                   |
| Stage 3                         | Identifying, Sorting, and Prioritising Programme Ideas |
| Stage 4                         | Developing the Programme Objectives                    |
| Stage 5                         | Designing Instructional Plans                          |
| Stage 6                         | Designing Transfer of Learning                         |
| Stage 7                         | Formulating Evaluation Plans                           |

Adapted from Caffarella's Interactive Model of Program Planning (Caffarella, 1998)

The first component of the Interactive Model that helped form the tutor programme was concerned with becoming knowledgeable about the programme context. This component drew to a large extent on the experience of the researcher as a teacher of primary physical education and as a designer and facilitator of pre-service and of in-service programmes for teachers. This experience provided knowledge of the context in which teachers worked in physical education in primary schools, on their responses to different models of in-service support and on the background of the non-specialist tutor. Further knowledge of the context of the programme was gained from early discussions with colleagues, with representatives of the DES (both formally and informally) and with the co-ordinator of the Primary Curriculum Support Programme (PCSP) and these discussions re-affirmed the need for a tutor programme.

Caffarella (1998) referred to the importance of knowing the "culture" of the organizations that would be linked to a programme. Part of the culture of this tutor programme was that it was being introduced as a follow-up to the development of the Primary Physical Education Curriculum (Government of Ireland, 1999b) by the DES, described in chapter 3. The curriculum represented a most significant development by providing schools and teachers with a clear set of aims and a rationale for teaching the subject and a detailed outline of content in physical education. Some guidance for teachers on how to plan to implement this body of content and how to evaluate their

own teaching and assess the achievements of the child was also provided. The inservice programme initiated in 2000 (described in chapter 3) involved the selection of a group of tutors by the DES who were drawn from the body of primary teachers. Each group was selected almost immediately prior to the commencement of the module related to a particular subject in the curriculum. Generally, teachers who were considered experts in the particular curriculum area to be facilitated were selected and followed a programme in preparation for provision of in-service. This programme was usually undertaken during June and September prior to implementation. They then facilitated a programme of in-service in schools throughout the country. The preparation for tutors who had responsibility for music represented the exception to this norm; they were accorded the same treatment as physical education as it was running concurrently with physical education.

During the initial stages of designing the tutor programme the cohort of tutors had not been identified. Due to the status of physical education in schools and the lack of provision for professional development in physical education it was not difficult to make the assumption at the time, however, that only a small number of appropriately qualified people could be found within the primary teaching profession. While some teachers could be identified as 'specialists' within some strand of the physical education programme, experience in a broad range of strands was uncommon. At the outset, therefore, it was not unreasonable to conclude that the teachers selected would benefit from an extended tutor programme provided on a phased basis. Knowledge of these contextual factors was central for planning of the programme. The profiles of the tutors selected eventually are described in chapter 6 in the context of outlining their background.

Component two of the Interactive Model is described as Using Negotiating Skills Effectively. The initial discussion that took place between the researcher and the PCSP focused on the researcher's proposal that a programme for the professional development of tutors of physical education should commence at least one year in advance of the provision of in-service in physical education. Two main reasons for this approach were outlined: the likelihood of tutors requiring an extended tutor programme provided on a phased basis in order to engage with a broad programme of physical education and to provide opportunities for them to teach this programme in their own

school setting prior to facilitating an in-service programme to teachers. It was considered very important that tutors should have a considerable period of time available to allow them to apply what they had explored as they engaged with a tutor programme to their own teaching context. This experience should, in turn, prove very valuable to them as they embarked on delivery of the in-service programme. However, there was no evidence that selecting a group of teachers with a subject specialisation would ensure the provision of a quality programme of in-service. An important principle for consideration was the programme of preparation that they would undertake and how it might prepare them to facilitate a quality programme of inservice. The proposed tutor programme of physical education recognising the importance of the principles of adult learning and the principles of programme design represented a practical programme of physical education designed on a theoretical basis.

The DES considered these proposals and selected the tutors almost sixteen months in advance of the proposed date for provision of in-service. This constituted a significant shift in policy by the DES. As a consequence of this decision, the tutor programme commenced in June 2002. The decision to facilitate the phased preparation of the tutors allowed for more extensive treatment of issues and activities and also provided the tutors with valuable opportunities for returning to their own teaching situations and transferring their learning to their own teaching context.

The second phase of negotiation was focused on the development of the tutor programme. While the DES accepted the need for a tutor programme extending for a considerably longer duration, its policy on the development of the programme itself did not change significantly. The representatives of the DES and the PCSP declined to accept the tutor programme outlined by this researcher as the basis for the education of the tutors. In explaining this reluctance it could be argued that adoption of the programme would have constituted an inappropriate deviation from their practice to date. When planning to implement a programme in other subject areas the practice was that a Design Team decided on the content of the programme and invited personnel to facilitate the various aspects of the programme. The Design Team consisted of two representatives of the PCSP, a representative from the Inspectorate of the DES, a

Education Section) and a representative of the National Council for Curriculum and Assessment (NCCA) with particular expertise in the subject area. It would appear that a formal, detailed programme of content was not designed for other subject areas.

While the programme to be described in this chapter was not accepted initially as the programme that would form the basis for the professional development of the physical education tutors, the DES did facilitate liaising with individual presenters and facilitators of the programme and, in practice, the programme has been used as the basis for many of them. Facilitators generally responded with enthusiasm to the guidance provided by a detailed programme outline as presented by the author with most of them agreeing to facilitate content and use methods proposed in the programme. In order to promote adoption of the elements of the programme it was necessary for the researcher to make contact with the facilitators in advance of their planning and implementation of the programme. The focus of the discussion with each facilitator was on the content of the programme and on the methods that might be used to promote learning. Facilitators who were concerned with the teaching of athletics, gymnastics, outdoor and adventure activities, games and dance used the tutor programme described in the study as the basis for their work. Some minor inputs on gymnastics, outdoor and adventure activities (camping and compass work) and folk dance (further dances explored) were offered, designed by facilitators themselves on the invitation of the Design Team. The tutors for aquatics were members of the Irish Water Safety Association and chose to design their own programme. In summary, five of the six major components of the tutor programme designed by the author were implemented as part of the programme of professional development for tutors. Minor modules as outlined above (totalling approximately five hours of contact) were offered in addition related to some of the five components that were implemented, and the sixth component of my programme (aquatics) was not implemented.

The connection of the research work outlined in this thesis with the programme has been strengthened by the fact that the researcher acted as the NCCA representative on the Design Team (as explained in chapter 1). As a member of the Design Team an opportunity was provided to work very closely with other members of the team to ensure a quality programme of professional development in physical education was provided. No alternative detailed programme has been designed to guide the process.

Planning by the Design Team focused on the scheduling of sessions related to each of the strands, scheduling sessions providing background theory to the tutors (such as sessions focussing on physical activity of children or developments in physical education at second level) and responding to needs of tutors that had been identified in course evaluations at different stages of their preparation. Responding to the needs of tutors frequently pointed the Design Team towards consolidation of content that had been introduced to tutors during earlier stages of the process and on some occasions highlighted the need for specific treatment of areas that underpinned all strands such as inclusion. Other significant aspects of the programme were agreed upon by the Design Team as the programme progressed, such as the involvement of tutors in presenting aspects of the content (plans for this peer-guided learning had formed part of the tutor programme designed by the author) and so providing opportunities for tutors to facilitate sessions and to present formally to the group of tutors. In doing this, the Design Team was facilitating the adoption of many of the principles of adult learning related to using the experience of adults and providing opportunities for peer-guided learning that had been outlined in the tutor programme of the researcher.

The third component of programme design focused on Identifying, Sorting and Prioritising Program Ideas. This was linked to the fourth component, which involved Developing Program Objectives. Caffarella's description of these stages would have included broader issues such as determining whether an educational programme is an appropriate way to achieve certain results. In the case of this study, this broader focus was not relevant as the nature of the programme of in-service itself was already determined. In this study it involved reviewing the literature on how adults learn (as discussed in chapter 2) and reviewing the content of the Physical Education Curriculum (Government of Ireland, 1999b) and the methodologies proposed within it (as outlined in chapter 3) to (a) identify appropriate content and methodologies that would enhance learning by the tutors and (b) identify literature related to each of the strands of the Physical Education Curriculum (Government of Ireland, 1999b). Discussions with colleagues, and in particular, with teachers also helped sort and prioritise key components that should be emphasised during a tutor programme for physical education. A key group identified for consultation was the personnel from the Primary Schools Sports Initiative (PSSI) (pp. 92-93) who had embarked on a pilot project for physical education immediately prior to the selection of tutors and who had been selected as tutors for this programme. An example of the process of identifying and

prioritising ideas was deciding how a broad range of content representing the breadth of activities proposed in the Physical Education Curriculum (Government of Ireland, 1999b) could be presented while at the same time allowing scope for engaging fully with those aspects that tutors had least experience with. This phase of programme design was important also in determining the scope of the programme that was feasible for the author to design. It was at this stage that a decision had to be made to focus the programme specifically on the elements of content of the Physical Education Curriculum (Government of Ireland, 1999b) including aspects directly related to the curriculum such as assessment of learning in physical education and planning for physical education at school and class level. As indicated earlier, it was beyond the scope of the programme to treat other related issues in detail such as inclusion, development of health-related fitness or roles of different agencies in supporting physical education.

Having identified, sorted and prioritised ideas as described above, the fourth component of planning the programme concerned Developing the Programme Objectives. While the broad aim of the programme was concerned with providing the tutors with an experience of learning that would enable them to become confident and competent as trainers delivering an in-service programme to primary teachers in physical education, it was necessary to set out objectives related to this aim. These objectives are outlined within the tutor programme (Appendix A).

The fifth component involved Designing Instructional Plans. This was approached by the researcher by creating an outline of the content with an emphasis on (a) providing a clear definition and description of the content related to the Physical Education Curriculum (Government of Ireland, 1999b), and (b) exploring methodologies that might be appropriate to promote learning by the tutors. These two steps in the process of planning were linked to the objectives outlined as part of the previous phase of the planning process. When presenting content, a factor that strongly influenced the selection of particular content was the previous experience of the group of tutors. Although in the early stages of programme design the tutors had not been identified, it was possible to allow some flexibility so that the programme could be modified to meet the needs of the particular group. Throughout the programme, the

Design Team also addressed the modifications necessary for implementation of the programme.

Transfer of Learning was identified as the sixth component of programme design and Caffarella defined it as the effective application of what has been learned as a result of the training programme (Caffarella, 2002, p. 30). As discussed above, the settings for this application of tutors' learning were their own teaching context and the locations of the in-service programme that followed their engagement with the tutor programme. The opportunity to transfer their learning into their own teaching context was provided by the DES and represented a significant time for tutors in terms of implementing content with children that they had not previously treated or modifying content that they had previously taught. New teaching approaches and methodologies could be implemented or others could be modified. The provision for sessions which allowed time for tutors to reflect on their ongoing practice of teaching physical education and for sharing of materials that facilitated their planning for teaching which were scheduled by the PCSP helped in this process of transfer of learning. The scheduling by the PCSP of considerable time for planning at a later stage of the programme, prior to facilitation of the in-service programme, allowed tutors to consider how they could best transfer their learning in the context of the programme for teachers. Within the tutor programme itself opportunities were provided for tutors to begin the process of transfer of learning as they were encouraged to plan and facilitate particular content as they engaged in some peer learning activities. Hence, frequent opportunities were provided for tutors to transfer learning throughout the programme. It is arguable, however, that the most significant transfer of learning happened when the tutors commenced teaching aspects of content of the Physical Education Curriculum (Government of Ireland, 1999b) applying varying methodologies in their own teaching context during engagement with the tutor programme.

The seventh component of Caffarella's model was concerned with the Formulation of Evaluation Plans. Caffarella (2002) defined programme evaluation as a process used to determine whether the design and delivery of a programme were effective and whether the proposed outcomes were met (p. 225). She stressed the importance of evaluation becoming a continuous process throughout the life of the programme. Evaluation of the programme in this study was carried out by the

researcher by using interviews with the tutors, by observing the implementation of the tutor programme and its application in the teaching contexts of the tutors, and by using questionnaires. The use of these methods is described in chapter 5. Caffarella cautioned that the outcomes of some educational programmes are difficult to evaluate due to the number of variables affecting those outcomes and that evaluation procedures may not be able to provide hard evidence that the more subtle aspects of the programmes have been achieved. In the case of this study both of these factors are relevant. However, the triangulation of methods described in chapter 5 provides a sound basis for evaluation of the programme. The next section of this chapter describes how the tutor programme for physical education was structured.

## The Content and Scope of the Programme

Informed by the considerations identified as relevant to designing a programme of physical education for tutors (see Table 5, p. 111) the programme was presented not merely as a statement of *what* should be treated but also of *how* it should be facilitated. Hence, in designing the programme a framework was provided which models best practice in terms of programme design. An important part of programme design was the careful selection of content related to the Physical Education Curriculum (Government of Ireland, 1999b). The process involved in facilitating the programme, however, was equally important in that it allowed flexibility to adapt to the needs of individual learners and the context in which the programme was delivered, discussed above under component one of the design of programmes.

The programme outlined detailed content and methodologies that are appropriate for enhancing tutors' learning. The content was related to the treatment of each strand and to general issues that apply across all of the strands such as use of particular methodologies, assessment, planning for implementation of the curriculum and evaluation of programmes of physical education. This emphasis was selected for two main reasons: as non-specialists, a basic subject knowledge founded on gaining an understanding of the curriculum was important and secondly, knowledge of the time allocation for the programme was not available in advance of implementation. The time allocated for the programme was generally decided when budget allocations were agreed. Hence, confining the scope of the programme to curriculum and curriculum-

related issues seemed to be the most appropriate approach. It was beyond the scope of this thesis to design modules that were related more broadly to the curriculum as described earlier. Examples of such issues were the motivation of children to take part in Physical Education and physical activity, children's physical activity levels, detail of providing for children with special needs and knowledge of First Aid. Part of the work of the PCSP Design Team was to identify people with expertise in these areas and to present content that they themselves deemed appropriate for a group of tutors when opportunities arose.

Another area that was beyond the scope of this thesis was the treatment of presentation and facilitation skills required as the tutors delivered the programme of inservice education. This aspect of tutor development – the provision of modules related to facilitation skills that were considered to be applicable across all subject areas - was presented by the PCSP to groups of tutors from different subject areas. This could be regarded as a limitation of the study: where much emphasis was placed on application of the principles of adult learning in the facilitation of the tutor programme, treatment of facilitation was accorded a relatively low priority in the preparation of tutors for facilitation of the in-service programme for teachers. This issue will be discussed further in chapter 6.

## The Specific Aims and Structure of the Programme

Refining further the broad aim identified related to preparing tutors to facilitate a programme of in-service in physical education, a number of specific aims related to the Physical Education Curriculum (Government of Ireland, 1999b) were identified. The tutor programme was designed to enable tutors to

- develop an understanding of the aims, rationale and key considerations of the
   Physical Education Curriculum (Government of Ireland, 1999b)
- develop knowledge of the broad range of content of the Physical Education
   Curriculum (Government of Ireland, 1999b)
- develop understanding of the methodologies recommended for implementation of the curriculum

- critically reflect on, plan and teach better programmes of physical education based on the curriculum in their own teaching contexts
- design and implement a programme of in-service in physical education based on the curriculum for teachers.

The programme was divided into three sections, one section focused on The Physical Education Curriculum (Government of Ireland, 1999b), the second on the six strands of the Curriculum while the third focused on issues pertaining to implementation of the Curriculum.

Table 7
Structure of the Tutor Programme

| Sections  | Title   |
|-----------|---|
| Section A | The Physical Education Curriculum: Structure and Overview   |
| Section B | The Strands of the Curriculum: Athletics, Games, Gymnastics, Outdoor and Adventure Activities, Aquatics and Dance |
| Section C | Issues Related to Implementation: Planning, Assessment, Evaluation  |

Application of Content Elements and Process Elements for Promoting Learning
As the sections outlined above were treated, guidelines were provided for facilitators on
methodologies that might enhance the learning by tutors informed by the reviews of
literature discussed in chapter 2 and chapter 3. A summary of these considerations was
provided on p. 111-112. The core principles identified informed the selection of content
and facilitation of the tutor programme throughout. Examples of the application of the
content elements and the application of the process elements to the programme are
highlighted in Table 8 and Table 9 respectively while the detail of their application is
contained in the outline of the tutor programme (Appendix A).

Table 8
Application of the Content Elements to the Tutor Programme

#### Content elements Examples of application to the tutor programme be informed by the PSSI pilot project emphasising the emphasise pupil centred learning throughout importance of pupil-centred by focussing on guided-discovery learning aspects methods, questioning, maximum participation by children in lessons focus on illustrating skill development from designing programmes with infant to sixth class in each strand in a an emphasis on skill development in a progressive, spiral way progressive, continuous way using direct teaching during facilitator guides structured warm-up activities, playground games initial stages developing knowledge of highlight issues related to purchasing, resources and equipment provision, access, storage of physical education resources and equipment begin with the content most ensure that the learners are engaged with familiar to tutors content familiar to them during the initial stages of the programme emphasise areas of learning that ensure that the areas of dance and tutors are least familiar with gymnastics are allocated considerable time within the programme link strands and identify generic identify common areas for treatment such as warm-up activities that incorporate aspects areas of learning of athletics and gymnastics treat principles of movement that inform both dance and gymnastics in an inter-related way relate content to real-life setting plan activities that take into account the limited facilities and equipment that some of of learners and ensure it is the learners will have in their schools to adaptable ensure that as much material as possible will be relevant to all learners design resource materials that will support tutors as teachers who are generally working in individual settings with little opportunity for collaborative work or peer-guided learning

Table 9
Application of the Process Elements to the Tutor Programme

| Р | Process elements   |   | Examples of application to the tutor programme   |  |
|---|--|---|--|--|
|   | encourage discovery learning   |   | design activities that prompt tutors to create their own games and dances for example  |  |
| • | foster critical reflection leading<br>learners to question beliefs about<br>practice and perspectives on<br>practice leading to<br>'transformative' learning | • | allow scope for brainstorming, group discussion, reading and examination of materials on general issues such as physical education and sport, balance in curriculum provision, gender equity, importance of enjoyment and play                                       |  |
| • | prompt learners to work collaboratively  | • | set tasks for groups to work on together such<br>as planning in groups to implement follow-up<br>activities or plan activities undertaken in<br>pairs/groups such as orienteering, games or<br>creating dances, design sessions that promote<br>peer-guided learning |  |
| ٠ | accommodate learning preferences so that individual needs are met  | • | attempt to differentiate tasks and ensure that facilitators prompt tutors with experience to support the learning of others within the group   |  |
| • | provide concrete experiences,<br>based on active, experiential<br>learning   | • | ensure that learners are actively engaged in tasks that promote learning   |  |
| • | prompt learners to adapt and innovate  | • | challenge learners to adapt content initially to suit their own teaching contexts and to attempt to innovate by exploring new material   |  |
| ٠ | ensure that learners are exposed to good models of facilitation  | • | work with the Design Team to identify quality facilitators for each module   |  |

An example of how these content and process elements were applied in practice may be useful to illustrate the development of the tutor programme. For example, the introduction to a strand might begin with a presentation by the facilitator based on the content related to aspects of the strand, followed by the group engaging in a series of practical activities that might involve undertaking a group task, and completing their engagement with the strand by identifying and recording the planning elements that will be involved in implementing the strand.

Given the nature of physical education, many of the suggested activities concerned active learning by tutors involving physical activity. However, it was proposed within the programme that a variety of methods should be used to promote consolidation of content and methodology and so the programme was punctuated by many group tasks, group discussions and groups taking time to brainstorm aspects of the strands. There were suggestions that peer-guided learning should take place, and facilitation of aspects of the strand by tutors themselves was recommended throughout. This was particularly appropriate given the particular expertise of some of the tutors related to certain aspects of the programme. Discussion of these methods by the researcher with individual facilitators was deemed important to ensure that this element of the programme was given due emphasis. This discussion took place side by side with discussion of planned content.

## The Implementation of the Tutor Programme

The implementation of the tutor programme will be discussed in this final section of the chapter. The recruitment by the PCSP of tutors to facilitate in-service programmes was discussed on p. 96. The physical education tutors were recruited in May 2002 having been interviewed for the post of trainer during the previous month (the title of their post was Trainer in Physical Education). All of the tutors selected were qualified primary teachers. The PCSP Design Team met during June 2002 to identify possible topics for inclusion in the first part of the tutor programme and to schedule sessions related to these topics. Arrangements were put in place for the venue selected as the location for the first section of the tutor programme and accommodation arranged for tutors who were located a distance from the venue.

It is important to note that the implementation of the tutor programme did not follow the exact sequence outlined in the tutor programme (Appendix A). Aspects of the programme were implemented on each of the occasions described in Table 10 below. This flexibility was essential due to the scheduling of the various sections of the tutor programme. While the schedule was loosely agreed to span a period of one year, it spanned a two year period due to a policy decision taken by the DES that consolidation of work in other subjects would be undertaken in place of introducing an in-service programme of physical education. Hence, the implementation of the physical education

in-service programme was postponed for one year. Other factors that impacted on implementation were the availability of personnel to facilitate aspects of the programme and availability of suitable venues. Some of the content of the outdoor and adventure activities strand, for example, needed to be scheduled where an appropriate facility could be made available to engage in orienteering activities and some of the outdoor challenges needed to be introduced at an outdoor activity centre. The availability of a suitable indoor facility for dance and gymnastics was also problematic at other times. The PCSP facilitated this aspect of the programme and ensured that facilities and equipment were appropriate for the activities planned but it was important that the programme could be adapted according to the facility available.

There were four sections of the tutor programme undertaken by tutors during the period of the study. A coding system is used to introduce the reader to a system that will be used more widely in chapter 5 to simplify nomenclature for the many data gathering instruments and periods discussed throughout that chapter. In this chapter, use is confined to labelling different administrations of the tutor programme sequentially using the code TP (tutor programme). Hence, the first section delivered as part of the tutor programme is referred to as TP<sub>1</sub>.

## Tutor Programme 1 (TP<sub>1</sub>)

Tutors participated in the first section of the tutor programme lasting one week in June 2002 and completed a second week in August 2002 (TP<sub>1</sub>). A significant factor in the implementation of the programme was the background of the tutors in physical education. While most tutors had expertise in some strands of the curriculum very few had experience of the broad areas of content described in the Physical Education Curriculum (Government of Ireland, 1999b) (detail of their background in physical education is provided in chapter 6). This factor required that content in the initial stage focused on at least some areas that tutors were confident to explore such as warm-up activities and playground games. The athletics strand was also selected for early treatment. Although a new approach to teaching was introduced and some practical work involved new content areas, the selection of the strand was made taking into account that it was an area that tutors could adjust to readily. Further work in the early stages focused on the dance strand – content that was almost totally new to the tutors.

At this point, however, it was necessary to begin to explore aspects that were very new to tutors to ensure that a balance was achieved over the entire programme. Games, an area that almost all tutors expressed a preference for, was treated extensively within the first phase of the programme combined with outdoor and adventure activities. The content of outdoor and adventure activities and the approaches used constituted a very new aspect of their overall education. The activities related to this strand engaged tutors in much group work exploring preliminary orienteering activities and culminating in undertaking an orienteering course suitable for senior classes. Gymnastics was treated comprehensively with tutors exploring many new areas of work. Aquatics was introduced with an emphasis on exploring the issues concerned and follow-up work was identified. Consequently, in the first phase of the programme all strands of the curriculum were explored to some degree. All but one of the facilitators engaged in discussion with the researcher about the proposed tutor programme, focussing on the content outlined and on the methodologies proposed to promote learning by the tutors. The facilitator of the aquatics module opted to design and present the aquatics module, without consultation with the researcher. In addition to the curriculum related content that formed the tutor programme additional background modules were presented on physical activity and young people, on warm-up exercises and flexibility and on physical education at second level.

## Tutor Programme 2 (TP<sub>2</sub>)

The second section of the tutor programme (TP<sub>2</sub>) was undertaken in November 2002 and focused on provision for special needs and assessment over the course of two days. The special needs content was facilitated by a specialist in the area and did not form part of the tutor programme of the researcher. The introductory session on assessment was based on the outline provided by the researcher after consultation with the facilitator.

## Tutor Programme 3 (TP<sub>3</sub>)

The third section of the tutor programme (TP<sub>3</sub>) was delayed for the reasons outlined above but plans were put in place by the PCSP to recommence the tutor

programme in August 2003 (TP<sub>3</sub>). The focus during this week was on aquatics, gymnastics, folk dance including Irish dance, creative dance, games, outdoor and adventure activities, and assessment. A panel presentation on developments in Irish sport for children was also scheduled. Facilitators consulted with the researcher on the creative and Irish dance elements, outdoor and adventure activities and gymnastics, and based work on the tutor programme of the researcher. Much of the games content involved peer-learning with individual tutors presenting on particular games in which they had expertise. The facilitator for aquatics and for the Irish dance element of the programme opted to design their own sessions.

## Tutor Programme 4 (TP<sub>4</sub>)

The final section of the tutor programme observed (TP<sub>4</sub>) began in March 2004. Presentations focused on games, with emphasis on the teaching approaches applicable to games, and on assessment of physical education. The games input was based on the games module outlined in the tutor programme of the researcher and consultation with the researcher on the facilitation of the assessment workshop resulted in the implementation of the work outlined in the tutor programme. Another area treated that was outside of the scope of this study was examination of activity levels of children and developmentally appropriate activity for children.

The focus in June 2004 was on outdoor and adventure activities, approaches to teaching games and aquatics. These sessions provided the tutors with their first experience of outdoor activities based at an Outdoor and Adventure Activities Centre and their first aquatics pool-based experience. Work in the outdoor and adventure activities strand focused largely on the experiences outlined in the tutor programme for outdoor and adventure activities. The presentation on approaches to games followed the outline contained in the tutor programme. The aquatics content was again based on an individual programme planned by the facilitators.

The work of tutors during September 2004 was largely focused on planning for implementation of the in-service programme and was dominated by lengthy sessions where tutors worked in groups. Their tasks were centred on planning a programme that would be presented to teachers that would provide an introduction to the Physical

Education Curriculum (Government of Ireland, 1999b) and focus on three strands of the curriculum (games, aquatics and outdoor and adventure activities). A three day course in First Aid was deemed necessary by the Design Team so that tutors would be skilled in First Aid as they embarked on their work as facilitators of the in-service programme. A presentation on facilitation skills was scheduled and involved discussion of skills identified by PCSP as applicable across all subjects. Towards the end of the programme the tutors presented a 'mock-up' of the in-service programme that they were about to present to teachers during 2003/2004. Feedback was provided by a panel of 'critical friends' selected by the PCSP.

The focus in October 2004 was on reviewing the implementation of the inservice programme for physical education. An opportunity was provided for discussion of tutors' experience of implementation of the in-service programme as well as identification of training needs for sustaining their own professional development. In addition, it allowed for treatment of aquatics in response to the needs of tutors determined by the PCSP Physical Education co-ordinator. As a result of the many issues raised by the facilitation of the aquatics module (with its emphasis on the teacher liaising with the swim teacher to prompt implementation of programmes that reflect the aquatics curriculum) some time was given to resolving these issues. A session on manual lifting was also provided by the PCSP.

TP<sub>4</sub> was completed in December 2004 and was largely based on provision for special needs, planned in response to expressed needs of tutors as they facilitated programmes of in-service. An opportunity was provided during this part of the programme for tutors to hear about on-going developments in in-service support of physical education at second level. Table 10 below presents an outline of the timeframe related to the implementation of the tutor programme.

Table 10
Outline of the Implementation of the Tutor Programme

| Date  | Details of Programme Implementation  |  |
|---|--|--|
| April 2002  | Interviews for post of trainer to provide in-service training for primary teachers in Physical Education   |  |
| May 2002  | Trainers informed of appointment as PCSP trainer: Physical Education   |  |
| June 2002   | First section (TP <sub>1</sub> ) of training programme delivered by team of presenters selected and agreed by PCSP Design Team: duration of one week   |  |
| August 2002   | First section (TP <sub>1</sub> ) of training programme completed by team of presenters selected and agreed by PCSP Design Team: duration of one week   |  |
| November 2002   | Second section of training (TP <sub>2</sub> ) delivered by team of presenters selected and agreed by PCSP Design Team: duration of two days  |  |
| January 2003  | Third section of training postponed due to withdrawal of commitment to deliver Physical Education in-service in 2003-2004 by DES   |  |
| May 2003  | Announcement by DES that tutor programme would re-commence with no commitment on starting date for delivery of Physical Education in-service   |  |
| August 2003   | Third phase of training (TP <sub>3</sub> ) delivered by team of presenters selected and agreed by PCSP Design Team: duration of five days  |  |
| March 2004<br>June 2004<br>September 2004,<br>October 2004<br>December 2004 | Fourth phase of training (TP <sub>4</sub> ) delivered by team of presenters selected and agreed by PCSP Design Team: duration of 23 days including 10 days for planning in-service programme and two days for reviewing implementation of in-service programme |  |

## Summary

In the first instance, this chapter has provided a description of the process of designing the tutor programme to prepare tutors for the task of supporting teachers to implement the primary Physical Education Curriculum (Government of Ireland, 1999b). The aim and focus of the programme were described as well as its scope and content. Following that, the structure of the programme was outlined. Finally, the phased implementation of the tutor programme was described. The research design of the study will be described in chapter 5.

## **CHAPTER FIVE**

# The Design of the Study

#### Introduction

This study is concerned with the effectiveness of a programme of professional development in preparing tutors to plan and implement a programme of in-service for primary teachers in physical education and subsequently the impact of the initial phase of the in-service programme on a sample of teachers. To evaluate the effectiveness of the programme related to both of these aspects a research design had to be identified that would provide the structure for a robust evaluation of the programme related to both of these aspects. The design of the research for this purpose is described in this chapter.

The chapter is divided into three sections, each section discussing a particular aspect of the design of the study. In the first section, a rationale for the research design of the study is proposed in light of the literature review undertaken in the previous chapters. The theoretical framework that underpinned the study is described as well as an evaluative framework that most closely resembles that used in my study. Good practice with respect to various research methodologies is considered in section two and details of the observational fieldwork, the questionnaires and the interviews and how they were used to generate data that answer the research questions are presented. The final section contains an explanation of how the data were analysed. The issues of the validity and reliability of the study as well as ethical considerations relating to the collection and presentation of data are discussed.

## Rationale and Aims of the Study

The overall aims of this thesis were outlined in chapter 1 as (1) to describe the development of the specific programme of professional development for the training of tutors with responsibility for supporting primary teachers in the implementation of the Primary Physical Education Curriculum (Government of Ireland, 1999b), (2) to evaluate its effectiveness in helping tutors to implement the national programme of inservice, and (c) to investigate teachers' views of the initial phase of the in-service

programme and their intentions to implement the curriculum. The reviews of literature undertaken in chapters two and three centred on adult learning, teacher change, professional development and the design of programmes of learning for adults helped to refine the aims of the thesis as outlined above. Thus the study was designed

- to provide a strong, theoretical, conceptual basis for the professional development of tutors beginning with the design of a practical programme of professional development with a theoretical basis that would prepare the tutors to facilitate and support a programme of in-service education based on the Physical Education Curriculum (Government of Ireland, 1999b)
- 2. to evaluate the effectiveness of the programme of professional development in preparing tutors to design and facilitate in-service education in physical education, determining the extent to which the factors identified in the literature as being important in the design of programmes of learning actually affected the tutors. Matters requiring investigation in this regard included
  - (a) the background of the tutors including their teaching experience, their views of the teaching of physical education at primary level, their own teaching of physical education prior to their engagement with the programme of professional development and their expectations for the programme
  - (b) the content of the programme of professional development with a particular emphasis on its relevance to their contextual situation and how it could be adapted, how content could be sequenced and how it could promote critical reflection, innovation and change
  - (c) the appropriateness of the process of learning that they were engaging in with particular reference to the methods employed such as active learning including group discussion and peer-guided learning, engaging in dialogue about the programme, the promotion of reading and examination of materials, recognising different learning styles to accommodate individual learning preferences and the role of discovery learning
  - (d) the impact of the programme of professional development on the practice of the tutors in teaching physical education in their own teaching contexts including an examination of the content taught, their planning of programmes, the teaching approaches used, the supports for their learning and how they supported colleagues in their teaching context

- 3. to evaluate the responses of primary teachers and tutors to the delivery of the first phase of the in-service programme by the tutors and to examine their intentions to implement the curriculum. This can be thought of as the initial stage of a process of evaluation of the more long-term effectiveness of the programme that is beyond the scope of this thesis. In this case, data were gathered on
  - (a) the background of the teachers particularly with reference to their teaching of physical education and their expectations for the in-service programme
  - (b) their confidence to teach physical education
  - (c) their responses to the facilitation of the content, methodologies and key considerations of the Physical Education Curriculum (Government of Ireland, 1999b)
  - (d) how their learning was facilitated, and
  - (e) their willingness to change in terms of their intention to allocate more time to physical education, to reflect more on their practice, to plan better programmes, to expand the range of content taught, to use a wider variety of methodologies and to attempt to apply principles of integration and differentiation.

In summary, therefore, the first aim of the study was concerned with the design of the programme of professional development, the second aim was concerned with the effectiveness of the programme of professional development in preparing the tutors for facilitation of the in-service programme while the third aim was concerned with the impact on primary teachers of the initial phase of the in-service programme delivered by the tutors.

## The Research Methodologies

Once the aims of the study were identified the following questions emerged:

- How will the effectiveness of the programme of professional development and its impact on the practice of the tutors be measured?
- How will the responses of tutors and teachers to the in-service programme be evaluated?

In relation to the first question it was clear that the tutors who had participated in the programme of professional development were in the best position to provide data on the effectiveness of the programme of professional development. These data could be generated by questionnaire survey of tutors and personal interviews with a sample of the tutors. The data that they might provide could be supplemented by observation undertaken by the researcher of (a) their engagement with the programme of professional development, (b) the teaching of physical education in their own schools by the tutors, and (c) the implementation of the first phase of the in-service programme for teachers by the tutors. In relation to the second question, the same methods of research were selected (survey questionnaire and interview) but in this instance the tutors, and the teachers receiving the in-service provided the data on the effectiveness of the in-service programme of physical education. These data were supplemented by observation undertaken by the researcher of the implementation of the in-service programme.

A mixed methods approach using qualitative and quantitative data collection procedures was, therefore, selected primarily as the research questions lent themselves to these approaches. Tashakkori & Teddlie (2003) outline some advantages of the mixed method approach. Firstly, mixed methods research provides better (stronger) inferences (p. 15). Secondly, different inferences can often reflect different perspectives and voices, a diversity of opinion that is welcome in mixed method research (p. 17). Thirdly, where research is both confirmatory and involves theory generation "a major advantage of mixed methods research is that it enables the researcher to simultaneously answer confirmatory and exploratory questions, and therefore verify and generate theory in the same study" (Tashakkori & Teddlie, 2003, p. 15). An example from my study that illustrates this advantage is where tutors' views on the effectiveness of an aspect of the programme of professional development such as its promotion of peerguided learning could be gathered using a questionnaire to answer the 'confirmatory' question and the interview could probe how this had occurred or why it had not occurred: the 'exploratory' question. It could be argued that the weakness of one method is offset by the strengths of the other: one method gives greater depth while the other gives greater breadth.

Johnson and Onwuegbuzie (2004) expressed the hope that the field of research "will move beyond quantitative versus qualitative research arguments because, as recognized by mixed methods research, both quantitative and qualitative research are important and useful" (p. 14). Robson (2002, p. 370) proposed that one important benefit of mixed methods is in the reduction of "inappropriate certainty". Using a single method and finding a clear result might lead to researchers believing that the right answer has been found. Using other methods may point to differing answers that remove certainty. A further value of mixed methods according to Robson is the possibility of divergent findings leading to a re-examination of the conceptual frameworks and the assumptions underlying each of the two components (qualitative and quantitative). Mixed methods, Robson argues, can also be used in complementary fashion to enhance interpretability, where, for example, a primarily quantitative study may be enhanced by a qualitative narrative account. This argument is echoed by Johnson and Onwuegbuzie (2004) who describe the goal of mixed methods research as "to draw from the strengths and minimize the weaknesses of both in single research studies and across studies" (pp. 14-15). The main advantage of employing mixed methods in this way in the data analysis phase of a study is commonly cited as facilitating triangulation (discussed on p. 165).

#### The Theoretical Framework

Most researchers agree that a mixed methods study involves the collection of both quantitative and qualitative data in a single study, in which the data are collected concurrently or sequentially. The analysis and integration of the data occur at one or more stages in the process of research. Historically, the qualitative and quantitative positions had epistemologies (postpositivism linked to quantitative methods and constructivism linked to qualitative methods) which supported the distinct positions. Hence, researchers using mixed methods sought a paradigm to support their methodology. Several scholars, such as Howe (1988) proposed a link between pragmatism and mixed methods. Robson (2002) defines pragmatism as "an approach which makes practical consequences the test of truth. It seeks solutions demanded by the problems presented by a particular situation" (p. 550). The concept of pragmatism as the best paradigm for justifying the use of mixed methods research has been supported by Patton (1990), Tashakkori & Teddlie (1998) and Burke Johnson and Onwuegbuzie (2004). Pragmatism can be traced from the early philosophers (e.g. William James, John

Dewey) to more contemporary writers such as Cherryholmes (1992, 1999). Tashakkori and Teddlie (2003) define the features of pragmatism

- Pragmatism supports the use of both qualitative and quantitative methods in the same study, rejecting the incompatibility thesis.
- Pragmatist researchers consider the research question to be more important then either the method they use or the paradigm that underlies the method. They refer to this as "the dictatorship of the research question".
- Pragmatists also reject the forced choice between postpositivism and constructivism with regard to logic, epistemology and so on. In each case, pragmatism embraces both points of view (or a position between the two opposing viewpoints).
- Specific decisions regarding the use of mixed methods or qualitative methods or quantitative methods depend on the research question as it is currently posed and the stage of the research cycle that is ongoing.
- Pragmatism avoids the use of metaphysical concepts, such as truth and reality that have proved controversial.
- Pragmatism presents a very practical and applied research philosophy.

Burke Johnson and Onwuegbuzie argue that the pragmatic method or system of philosophy is based on a logic of inquiry that includes the use of induction (or discovery of patterns), deduction (testing of theories and hypotheses), and abduction (uncovering and relying on the best of a set of explanations for understanding one's results). Reichardt and Rallis (1994) cited in Robson (p. 43) argue that this pragmatic approach is feasible because the "fundamental values of quantitative and qualitative researchers are compatible based on the value-ladenness of enquiry, the theory-ladenness of facts, that reality is multiple, constructed and stratified and that any particular set of data is explicable by more than a single theory". Tashakkori and Teddlie (1998, p. 30) suggest that study should be undertaken on what interests the researcher and is of value to him/her in different ways deemed appropriate by the researcher. The results should be utilized in ways that can bring about positive consequences within the value system of the researcher. These factors underpinned the research undertaken as part of this study.

### The Evaluative Framework

Allied to the theoretical framework is the reality that the research is being conducted for evaluative purposes. In that sense the framework associated with mixed methods needs to be connected to a theoretical framework associated with evaluation models. A review of the main models contained in Stufflebeam et al. (2000) allowed me to identify the CIPP model as being the one most closely aligned to the research framework. This CIPP model was developed by Stufflebeam more than 40 years ago and emphasised the need to evaluate process as well as product. Over the years the model underwent four different modifications and is widely used by evaluators in areas such as science and mathematics education, school improvement and community development. The main theme of the model is that evaluation's most important purpose is not to prove but to improve. Stufflebeam has developed a checklist for users of the current version of the model (comprising 10 components) that guide the evaluator from the commencement of the process right through to the formulation of the final report on a project. "The concept of evaluation underlying the CIPP Model...is that evaluations should assess and report an entity's merit, worth and significance and also present lessons learned" (CIPP Evaluation Model, p. 2).

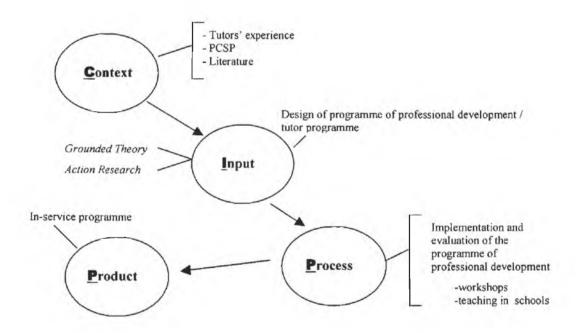
The CIPP model is concerned with four core parts strongly associated with the elements of this study. Figure 1 presents a visual diagram of the current model illustrating the relationship between the methodological framework and the evaluative framework. The four elements are defined as context, input, process, and product evaluation corresponding to the letters in the acronym CIPP. In general, these four parts of an evaluation ask: what needs to be done? how should it be done? is it being done? did it succeed?

The *context* element, as described above, was concerned with what needed to be done to change practice related to primary physical education. It involved working to investigate tutors' prior learning and experience related to physical education, examining the work of the PCSP and examining the literature related to contextual issues, such as the literature related to continuing professional development.

The *input* element was concerned with addressing the needs as identified and this involved examining design of programmes and designing the programme of professional development (described in chapter 4), the key intervention, for

implementation as a major part of the professional development programme for tutors. The bulk of the work undertaken in this study was the *process* element that involved the implementation of the programme of professional development or tutor programme and evaluating it (using questionnaire surveys, interviews and observation) and this also functioned as a way of changing the programme. It was this element that was most closely linked to the development of a grounded theory (a theory grounded in the data gathered during this phase) and to action research (described later in this chapter). It was at this point that the grounded theory began to emerge as the data were analysed. This was also the most significant part of this study. Stufflebeam (2002) described this phase as monitoring, documenting and assessing programme activities.

Fig. 1
The CIPP Model (Stufflebeam et al. 2002) Applied to the Programme of Professional Development



The *product* element was related to the teaching of the tutors and their facilitation of the in-service programme for teachers (described in chapter 7). This element was described by Stufflebeam as assessing a programme's reach and assessing the quality and significance of outcomes. In my study it related to how the programme was reaching its target 'audience': tutors and teachers. It was this product element that provided the basis for the recommendations that are outlined in chapter 8.

### The Action Research Element of the Study

While some of the elements of action research outlined in the literature (Denscombe, 2003; Cohen, Manion and Morrison, 2000) were consistent with this study, action research was not selected as a main strategy. The practitioners (in this case the tutors) were the subject of the study rather than the researcher. Nevertheless, during the 'process' phase of the evaluation framework described above the researcher could have been regarded as "a partner in the research" (described by Denscombe, p. 77 as one of the features of action research). During this phase I was actively involved with the Design Team who were responsible for implementation of the programme of professional development which implied that I had a role in the stage where "research feeds back directly into practice" (a feature of the cyclical process of action research described by Denscombe, p. 76) and practice was changed at some points, which is linked to the 'action' stage of the action research strategy. During implementation of the programme of professional development, I sometimes worked very closely with the group of tutors in a very practical way but "being practical would not be enough to set it apart from other approaches to research." (Denscombe, p. 74). However, I was not at any stage researching aspects of my own practice, referred to by Zuber-Skerritt (1996) when describing action research as "self-evaluating", which is a fundamental tenet of action research. My work was focussed on researching the behaviours and practices of the group of tutors who were at the core of the research.

### The sample.

It is important to note that the sample selected for the study comprised initially of 26 tutors who had responsibility for facilitating an in-service programme in physical education for primary teachers. While questionnaires were administered to all tutors and they were the focus of observation as they engaged with the programme of professional development, a sample of tutors was selected for closer investigation. The sample group of tutors, consisting of four males and two females, was selected to provide more depth to the data collected and was representative of the wider group of tutors. A number of factors were considered when selecting this sample group of tutors. Firstly, they were certain to be allocated in-service training duties in contrast with some of the tutors who were on a supply panel and only where gaps in provision emerged

would they be allocated duties. Secondly, they were all based in their schools during the period of the study, allowing for observation of their teaching. Another group of the trainers were seconded to other in-service duties and were making temporary arrangements to teach physical education in schools during the duration of the study so this would have presented timetabling difficulties in terms of observation of their teaching. Third, the tutors selected were located in a variety of rural and urban schools. Three of the sample group of tutors taught in rural schools, the remainder taught in urban schools; one of the group taught in a special school, while another was a Principal in a school. One respondent declined to join the group for personal reasons so one of the other tutors was invited to take part. In relation to the section of the study related to the in-service programme a sample group of teachers, 85 in total, was identified for investigation. The group was observed as they engaged with the inservice programme facilitated by three of the sample group of tutors described above at three different locations. A small sample of three of these teachers based in one urban school was selected for further study.

# Classification of the Phases of the Data Gathering and the Instruments Used

Due to the fact that many data gathering instruments and periods are discussed throughout the chapter, a coding system is used to simplify the identification of each of them in the text. The nomenclature related to the different administrations of the programme of professional development was applied earlier in chapter 4 to facilitate reading of that chapter.

- Different administrations of the tutor programme are labelled sequentially
  using the code TP. Hence, the first course delivered as part of the tutor
  programme is referred to as TP<sub>I</sub>.
- Questionnaires administered to tutors are identified by using the code QST; the
  first questionnaire is then labelled QST<sub>I</sub>, the second QST<sub>2</sub> and so on. As two of
  the six questionnaires were administered to teachers, they have an added
  element in the code to distinguish them e.g. QST<sub>6TEA</sub>.

- Observation of the tutor programme is referred to as OBS<sub>TP</sub> and observation of
  the tutors as they taught their own classes in schools is referred to as OBS<sub>TT</sub>.
  Again, these are numbered sequentially to distinguish the different data
  gathering periods. Observation of the tutors facilitating the in-service
  programme to teachers is referred to as OBS<sub>TF</sub>.
- Interviews conducted with the tutors and teachers are referred to as *INT* and *INT*<sub>TEA</sub> respectively. The interviews with tutors are numbered sequentially.
- Interview participants and questionnaire respondents are identified by using a number placed after their contribution to ensure confidentiality. Tutors' responses appear as TUTS for example while teachers' responses are identified as TEA9 for example. Individual facilitators are referred to by use of a pseudonym.

A timeline for the tutor programme and related data gathering phases is included in the table that follows.

Table 11
Timeline for the Tutor Programme and Related Data Gathering Phases

| Data Gathering<br>Phases             | Dates           | Instruments  | Code             |
|--------------------------------------|-----------------|--|------------------|
| Phase 1                              |                 |  |                  |
| Pre Tutor Programme                  |                 |  |                  |
| TTV Tutor TTOgramme                  | June 2002       | Questionnaire 1  | $QST_1$          |
|                                      | 34.10 2002      | Quadramana 1   | 2517             |
| Phase 2                              |                 |  |                  |
| Tutor Programme 1 (TP <sub>I</sub> ) |                 |  |                  |
| Tutor Programme 2 (TP2)              |                 |  |                  |
|                                      | June/Aug 2002   | Observation of $TP_I$  | $OBS_{TPI}$      |
|                                      | Oct 2002        | Questionnaire 2  | $QST_2$          |
|                                      | Nov 2002        | Observation of TP <sub>2</sub>   | $OBS_{TP2}$      |
|                                      | January 2003    | Tutor Interviews 1   | $INT_I$          |
|                                      | January 2003    | Observation of tutors teaching   | OBS ITI          |
| Phase 3                              |                 |  |                  |
| Tutor Programme 3 (TP <sub>3</sub> ) |                 |  |                  |
| - , , ,                              | August 2003     | Observation of TP <sub>3</sub>   | $OBS_{TP3}$      |
|                                      | September 2003  | Questionnaire 3  | $QST_3$          |
|                                      | March 2004      | Tutor Interviews 2   | $INT_2$          |
| Phase 4                              |                 |  |                  |
| Tutor Programme 4 (TP <sub>4</sub> ) | March-Dec 2004  | Observation of TP <sub>4</sub>   | $OBS_{TP4}$      |
|                                      | Mar-June 2004   | Observation of tutors teaching   | OBS TT2          |
| Tutor Facilitation of PE             | September 2004- |  |                  |
| Inservice (PCSP)                     | June 2005       |  |                  |
|                                      | Dec 2004        | Questionnaire 4 (teachers)   | $QST_{4TEA}$     |
|                                      | January 2005    | Questionnaire 5  | $QST_5$          |
|                                      | January 2005    | Questionnaire 6 (teachers)   | $QST_{6TEA}$     |
|                                      | January 2005    | Observation of tutors facilitating the PCSP in-service programme to teachers | $OBS_{TF}$       |
|                                      | April 2005      | Teacher Interview  | $INT_{TEA}$      |
|                                      | June-July 2005  | Tutor Interviews 3   | INT <sub>3</sub> |

Firstly, this section describes some of the literature on observation as a research method. This is followed by a description of the observations undertaken as part of this study. Secondly, the design and administration of questionnaires are discussed with reference to some of the literature, followed by an outline of the design and administration of questionnaires as well as the purposes of each questionnaire and the response rates related to this study. Finally, some of the literature on interviews is discussed with specific reference to the interviews undertaken with tutors and teachers as part of this study.

### Observation as a Research Method

Observation was one means of data collection undertaken for the purposes of this study. "Observational data are attractive as they afford the researcher the opportunity to gather 'live' data from 'live' situations," (Cohen et al. 2000, p. 305). Observations of the tutor programme and of the tutors in the teaching context as well as observation of the implementation of the in-service programme by tutors allowed data to be gathered on the various settings described by Morrison (1993, p. 80): the physical setting, the human setting, the interactional setting and the programme setting. Such data enabled the researcher to "enter into and understand the situation that is being described" (Quinn Patton, 2002, p. 262).

While further data were collected within personal interviews and by the use of questionnaire surveys, writers such as Quinn Patton (2002) outlined the advantages of direct, personal contact with and observations of a setting. Firstly, through observation, "the inquirer is better able to understand and capture the context within which people interact" (p. 262). Second, "firsthand experience with a setting allows an inquirer to be open, discovery oriented, and inductive" (p. 262) rather than relying on prior conceptualisations of the setting. He identified a third strength of observational fieldwork as providing the opportunity to see things that the participant who will be providing information in an interview may not be aware of. A fourth value of direct observation is "the chance to learn things that people would be unwilling to talk about in an interview" (p. 263). A fifth advantage of observational fieldwork is the

opportunity it presents "to move beyond the selective perceptions of others" (p. 264). A sixth advantage is that getting close to people in a setting permits the inquirer to draw on personal knowledge during the formal interpretation stage of analysis. In Quinn Patton (2002) it is argued that the observer is provided with a wealth of information that forces him/her to raise questions and attempt to answer them in subsequent observations. The settings, the duration and the focus of the observational fieldwork will be described below.

# Observations Informing the Study

Throughout the observational fieldwork undertaken as part of this study, the settings, the duration of observations and the focus of observations varied to meet the aims of the study. The role of the researcher within each of the settings will be discussed on p. 140. Observation undertaken in three different contexts described below provided the researcher with the wealth of data (referred to by Quinn Patton, 2002) and a better understanding of the context within which tutors and teachers were learning. The duration of the fieldwork was determined by the belief that "fieldwork should last long enough to get the job done-to answer the research questions being asked and fulfill the purpose of the study" (Quinn Patton, p. 275). In selecting the kind of observations to be used an important factor was the need to focus on identifiable factors: these are outlined in Table 12. Semi-structured observations were undertaken where the factors outlined were determined but in a less systematic manner than in a structured observation. Semi-structured observations "will have an agenda of issues but will gather data to illuminate these issues in a far less pre-determined or systematic manner" than in a highly structured observation (Cohen et al., p. 305).

Observational fieldwork was centred on three settings. One setting was the location of the implementation of the tutor programme and this varied according to the phase of the programme. A second setting was the school base of the sample of six tutors while a third setting was the location of their delivery of in-service education. In each setting the focus of the observation was on elements selected from the review of literature and from initial analysis of the questionnaire and interview data as these methods of collection were used (see Table 12). The identification of these elements enabled the researcher to focus on gathering data that were most closely related to the

research questions of the study, hence providing evidence of the impact of the tutor programme on the tutors and its subsequent impact on the sample of teachers surveyed.

In the context of the first setting outlined above, the location of the implementation of the tutor programme, facilitation of the tutor programme was observed almost in its entirety, with sessions taking place periodically between 2002 and 2004 (OBS<sub>TP1</sub>, OBS<sub>TP2</sub>, OBS<sub>TP3</sub>, OBS<sub>TP4</sub>). This involved almost 150 hours of observation spanning three years. It was immediately prior to implementation of the inservice programme when much time was spent planning for implementation that the researcher felt that observation of the ongoing work to the same intensity was less important. Some other sessions scheduled at this time (for example, a course on first aid) were also omitted from the observation schedule. Observation at regular intervals was maintained, however, hence ensuring that significant progress was tracked or awareness of issues related to planning was preserved. This phase of observation provided the researcher with an understanding of how the tutors were learning as well as how the content of the Physical Education Curriculum (Government of Ireland, 1999b) was treated within the tutor programme.

The second setting for the observational fieldwork was the school setting of a sample of six tutors. Their work as they taught in their own schools was observed on two different occasions (OBS<sub>TT1</sub>, OBS<sub>TT2</sub>) during the time of their engagement with the tutor programme. On the first occasion (OBS<sub>TT1</sub>) six tutors were observed teaching their classes and on the second occasion (OBS<sub>TT2</sub>) four tutors were observed. Initially, it was planned to observe the six tutors on both occasions but due to the lapse of time between commencing the tutor programme and facilitating the in-service programme two tutors of the focus group of six tutors had undertaken different posts and were no longer working as tutors. Observation was undertaken in Galway, Limerick, Westmeath, Kildare, Dublin and Meath. A range of different classes from infants to sixth class was observed. The observation of tutors teaching sought to find out to what extent transfer of learning related to the content, methodologies and key considerations of the Physical Education Curriculum (Government of Ireland, 1999b) treated in the tutor programme occurred.

Table 12
The Focus of Observational Fieldwork

# Setting Focus of data gathering Observation of the tutor (a) Content-related issues programme Treatment of breadth of content Illustration of methodologies of curriculum Illustration of key considerations Illustration of integration and differentiation (b) Process-related issues Application of some of the principles of adult learning o recognition of the experience of the adult learner o recognition of the state of readiness of the o relating the programme directly to the reallife situations of the learners o evidence of active learning: engagement in tasks, group discussion, peer-guided learning o evidence of collaborative learning: engagement in group tasks (c) Implementation issues Levels of confidence in planning for implementation Readiness to facilitate the in-service programme Observation of the tutors in the Transfer of learning in relation to school context Content of the Physical Education Curriculum Methodologies and approaches suggested in the Curriculum Key considerations of the Curriculum Observation of the in-service Tutors: programme Content highlighted Methodologies illustrated Focus on key considerations Teachers: How teachers were learning Willingness to engage in tasks set Questioning Understanding of tasks set

The facilitation of the in-service programme for teachers was the third setting observed on one occasion for each of three tutors from the sample group of tutors (OBS<sub>TF</sub>). (At this point, one other tutor had resigned from the post leaving just three tutors from this group delivering the in-service programme). Observation was undertaken at three different venues: Clare, Dublin and Meath. In one case, all of the teachers were teaching in the same school, on another occasion the tutor was dealing with teachers from two different schools while the third tutor was concerned with teachers from a cluster of small schools. The focus of this observation was to gather information on (a) how the content, methodologies and key considerations of the Physical Education Curriculum (Government of Ireland, 1999b) had been mediated to teachers, and on (b) the responses of teachers to the first phase of the in-service programme.

The data gathered from observation of the tutor programme and from observation of the tutors teaching in their own school settings were related to the question concerning the effectiveness of the tutor programme while the data from observation of the in-service programme were gathered to provide answers to the question concerning the impact of the tutor programme

#### The role of the researcher.

As the collection of observational data in a semi-structured manner was considered appropriate to help fulfil the aims of the study, some other aspects of collecting data by observation needed to be considered. The role of the researcher and, in particular, her level of involvement was another important aspect of observation. Initially, as the tutor programme was being facilitated, it was decided to adopt the role of onlooker but as the programme progressed the role changed somewhat. Opportunities arose where it was useful to adopt the role of participant. Such occasions arose during group discussions, for example and it then became necessary to record notes after the programme. Hence, multiple and overlapping data collection strategies were employed when observing the tutor programme while being fully engaged with the sessions as participant while at the same time observing and talking with other participants about whatever was happening (Quinn Patton, p. 266). It could be argued, on other occasions that the observation role extended into that of an evaluation observer

when, for example, the facilitator of a particular session consulted in advance about the content of the programme, and following the process of observation, to determine how he/she had presented the content. At other times, such as when observing the tutors teaching, an onlooker role was once again considered more appropriate.

Another consideration was the concern about the effects of the observer on what was being observed. From the beginning, the purpose of the study and the nature of the involvement of the researcher were explained to the group of tutors. A more detailed explanation was provided for the sample group selected for observation in their teaching setting and for observation as they facilitated the in-service programme. This same group was also selected for periodic personal interviews, described on p. 148 below.

# Recording observational data.

The recording of observational data was another challenge relevant to this study. Observations of all aspects of the tutor programme, the teaching of tutors and the facilitation of the in-service programme were recorded as written field notes. This was a pre-requisite outlined by the DES when giving their consent for the study to be undertaken (this is discussed further below). Observational data included field notes made in situ and expanded notes that were made as soon as possible after the initial observations. Adding material to the field notes was necessary especially during times when the role of the researcher became one of participant. On other occasions the practical issue of the speed of movement in physical education lessons rendered it difficult to record observations accurately, necessitating the recording of some notes following completion of the lesson. Inclement weather conditions during one observation presented problems for recording, it was necessary to record some detail afterwards. The validity and reliability of the observations made will be discussed further in the final section of this chapter as well as the reliability and validity of data drawn from other sources.

Another means of gathering information for the study was the use of questionnaire survey. Much of the information sought for this study was precise enough to be gathered by completing questionnaires. As a method of gathering information the questionnaire survey had a number of advantages pertinent to this study. Denscombe (2003, p. 159) outlined some of these advantages:

- 1. Questionnaires supply standardized answers
- 2. They encourage pre-coded answers
- 3. They eliminate the effect of personal interaction with the researcher
- 4. They allow the respondent time to think before responding
- 5. They can be given to many people at distant sites simultaneously.

Denscombe outlined too the disadvantages of questionnaires: the difficulty posed by providing responses that cannot be probed and the pre-coded nature of the questions being restrictive for some respondents, the problem of a low response rate and the frequency of incomplete or poorly completed answers. However, the interviews (described below) that supplemented the data provided from the questionnaires ensure that at least some of these disadvantages were mitigated. The lack of opportunity to ask further appropriate questions, for example, was somewhat overcome by the opportunities presented in the interview setting to probe at least a sample of the respondents to the questionnaires.

The literature on conducting questionnaire surveys provides many guidelines to overcome the difficulty of a low response rate, and incomplete or poorly completed answers may also be avoided by following the guidelines on question design. The visual appearance of the questionnaire is emphasised in the literature as well as the construction of questions to ensure that the questionnaire is crisp and concise. Cohen et al. (2000) offer guidance on the layout of questionnaires: "The layout of the questionnaire is vitally important" (p. 258). They suggest that the questionnaire should look easy, attractive and interesting. Clarity of wording and simplicity of design are necessary qualities and clear instructions should be given to respondents. They recommend the division of the questionnaire into sections, making the questionnaire look manageable. Use of sectionalising and sublettering questions is a useful technique

for grouping together questions to do with a specific issue. The contents of the questionnaire should be arranged in such a way as to maximize co-operation. They suggest that questions of general interest be included and that attitude questions should be interspersed to allow respondents to air their views. Finally, they recommend that respondents should be assured of confidentiality and even where interviews are being conducted as a follow-up to questionnaires the guarantee of eventual anonymity and non-traceability will still need to be given. Denscombe (1998, p. 96) suggests that pages should be numbered and answer boxes located in a column for the coded answers.

The selection of questions is another very important consideration in devising questionnaires. Some of the key issues outlined by Denscombe (2003, pp. 153-156) are the necessity to avoid duplication and to maintain a balance of direct and indirect questions. The order of the questions should be considered with the most straightforward and least contentious at the start. Leading questions should be avoided which prompt the respondent to give a particular kind of answer. Open and closed questions should be considered carefully with the guiding premise being whether the questionnaire will benefit from using a variety of questions. Salant and Dillman (1994, p. 84) divided questions into four categories (1) open-ended, (2) close-ended with ordered choices, (3) close-ended with unordered response choices, and (4) partially close-ended. They stated that each type of question "has merits and is better suited to providing a particular kind of information." (p. 84).

Cohen et al. (2000) advise avoiding too many open-ended questions because questionnaires cannot "probe respondents to find out just what they mean by particular responses, open-ended questions are a less satisfactory way of eliciting information" (p. 248). Yet, they also advise that closed questions "prescribe the range of responses from which the respondent may choose" (p. 248) which facilitates analysis of data but may be restrictive for the respondent. They list caveats about the framing of questions in a questionnaire. Among these are avoiding irritating questions, those that use negatives and double negatives and those that are ambiguous. A further point noted by Borg and Gall (1989, p. 427) was that questions should be framed in language that the respondents understand.

On the strength of that advice the author set out to develop a number of questions suitable for the tutors involved in the tutor programme of physical education and subsequently for the teachers participating in the in-service programme. The primary function of the questionnaires was to help fulfil the aims of the study but this needed to be achieved with due consideration of the observations on questionnaire design contained in the literature.

# The Questionnaire Surveys Informing the Study

Questionnaires were administered throughout the study to provide data on the tutor programme, the teaching of tutors and the in-service programme for teachers. Hence, the information provided by the responses to questionnaires was linked to both research questions of the study outlined on p. 7. The responses to questionnaires provided information that helped analyse the effectiveness of the tutor programme in preparing tutors to implement the programme of in-service in physical education and helped analyse its impact on teachers.

Four questionnaires were administered to the tutors during the course of this study and two questionnaires were administered to a sample of teachers. Given that the literature emphasised the visual appearance of the questionnaire and the impact it has on increased response rates, all of the questionnaires in this study were produced using Microsoft Word. Each questionnaire was printed on a single side of each page and the survey title was printed on the first page. Copies of the final drafts of the documents are contained in Appendix B.

Each questionnaire administered as part of this study was accompanied by a covering letter on headed notepaper of the Education Department, St. Patrick's College, Dublin. The letter stated the purpose of the research and requested the tutors' or teachers' co-operation in completing the questionnaire. Confidentiality was assured. Copies of the letters are contained in Appendix C. A stamped envelope with the researcher's address was provided to each tutor or teacher to return completed questionnaires.

Some detail of the administration of the questionnaires is provided in Table 13 below. The purpose of each questionnaire is stated and the sections that appeared in the questionnaire are listed. The response rates are recorded. Details of the piloting of the questionnaires as well as details relating to the response rates are presented in Appendix D.

Table 13
Detail of the Administration of the Questionnaire Surveys

| Code and<br>Date    | Target<br>Group | Purpose   | Sections  | Response<br>Rate |
|---------------------|-----------------|---|---|------------------|
| QST <sub>1TUT</sub> | Tutors          | <ul> <li>(a) document the teaching experience of the tutors         with particular reference to physical education</li> <li>(b) establish the views of tutors about physical</li> </ul>  | i. Biographical Information     ii. Your Background in PE     iii. Your School Profile for PE | 96%              |
| (June 02)           | (n=26)          | education in the primary school and their own teaching of physical education and (c) record their expectations for the tutor programme.   | iv. Your Experience of Teaching PE v. In-service Education vi. Teaching of PE                 |                  |
| QST <sub>2TUT</sub> | Tutors          | (a) to obtain feedback on the experience of the tutor programme that had been offered to tutors in June   | i. The content of the tutor programme for trainers  | 92%              |
| (Oct. 02)           | (n=26)          | 2002 and in August 2002. Both parts of the tutor programme were held for a duration of one week (b) to establish the needs of trainers for the next phase of the training programme and (c) to gather information on the effect of the training programme on planning for teaching physical education during the academic year 2002/2003. | ii. The process of training iii. Your teaching of PE  |                  |
| QST <sub>3TUT</sub> | Tutors          | <ul> <li>(a) obtain feedback on the tutor programme delivered<br/>over in November 2002 and August 2003</li> </ul>  | i. The content of the tutor programme for trainers  | 90%              |
| (Oct. 03)           | (n=25)          | <ul> <li>(b) gather data on the effect of the tutor programme on the teaching of tutors during 2002/2003</li> <li>(c) gather information on the effect of the tutor programme on their planning of physical education programmes for 2003/2004</li> <li>(d) establish the needs of tutors for the next phase of</li> </ul>                | ii. The process of training iii. Your teaching of PE iv. Your work as a PE Trainer.           |                  |
|                     |                 | the training programme and  (e) gather information about their readiness to undertake the post of trainer.  |   |                  |

Table13 (continued)

| Code and<br>Date    | Target<br>Group | Purpose  | Sections  | Response<br>Rate |
|---------------------|-----------------|--|---|------------------|
| QST <sub>4TEA</sub> | Teachers        | (a) document the teaching experience of the teachers with particular reference to Physical Education   | Biographical Information     Your Background in PE            | 49%              |
| (Dec 04)            | n=85            | (b) determine the profile of physical education in their schools and   | iii. Your experience of PE iv. The PE profile in your school  |                  |
|                     |                 | <ul><li>(c) record their expectations for the in-service<br/>programme of physical education.</li></ul>  | v. Your expectations for the in-<br>service programme of PE   |                  |
| QST <sub>5TUT</sub> | Tutors          | (a) obtain feedback on the tutor programme delivered on four different occasions from March to   | The content of the tutor programme for trainers               | 88%              |
| (Jan 05) r          | n=16            | December 2004 (b) gather information about tutors' readiness to  | during 2004  ii. The process of training                      |                  |
|                     |                 | undertake the post of trainer (c) gather information about the levels of confidence of tutors to present the content planned for implementation during the first day of the inservice programme for teachers   | iii. Your facilitation of Physical<br>Education for teachers. |                  |
|                     |                 | (d) ascertain the views of tutors on the extent to<br>which they thought teachers would modify their<br>practice after participation in the in-service<br>programme.   |   |                  |
| QST <sub>6TEA</sub> | Teachers        | (a) identify the learning outcomes for teachers of the first day of the in-service programme in physical   | Day 1 of the In-service     Programme of Physical             | 42%              |
| (Feb 05)            | n=85            | education and rank them in order of importance  (b) identify the nature of the intended modifications in practice, if any, reported by teachers as a result of their participation in the in-service programme | Education ii. Day 2 of the In-service                         |                  |
|                     |                 | (C) identify any factors that teachers believe might<br>enhance the second day of the physical education<br>programme.   |   |                  |

### Interviews as a Research Method

Interviews are used in this thesis in conjunction with questionnaires and observational fieldwork as an important element of triangulation. The research questions focused on the effectiveness of the tutor programme and its impact on the inservice programme facilitated by tutors for primary teachers. The purpose of the interviews undertaken was to supplement the data obtained from observation of the programmes and the data gathered from the questionnaire surveys to provide answers to the research questions identified. The main advantage of the interviews was that opportunities were provided to probe issues that were raised in the questionnaires and that they therefore provided "more of an in-depth insight into the topic" (Denscombe, 2003, p. 164). Some of the main disadvantages of interviews were not relevant to this study such as the potential sensitivity of the information or the personal identity of the interviewee. The information that was shared was generally not sensitive and because of the involvement of the author with the programme already the personal identity issues were not significant. There was a risk of bias, however, and this will be discussed below in the context of the validity of the study.

Kvale (1996) set out varying dimensions of research interviews, differing in degree of structure "from well-organized interviews that follow a sequence of standard question formulations, to open interviews where specific themes are in focus but without a predetermined sequence and formulation of questions" (pp. 126-127). The researcher chose to conduct semi-structured interviews particularly because of the opportunity they provided to the tutors to speak more extensively on topics raised, given their depth of teaching experience. Detail of these topics will be provided on pp. 150-153. The benefits of semi-structured interviews are outlined by Denscombe (2003).

With semi-structured interviews, the interviewer still has a clear list of issues to be addressed and questions to be answered... the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and, perhaps more significantly to let the interviewee develop ideas and speak more widely on the issues raised by the researcher. The answers are open-ended, and there is more emphasis on the interviewee elaborating points of interest (p.167).

Initial interviews were organised on a one-to-one basis as the opinions and views at this point of the programme were most appropriately sought from one source. For example, tutors were questioned on their personal response to the tutor programme in terms of its impact on their teaching. However, some subsequent interviews were organised as focus group interviews. Focus groups were selected so that although the topic was selected by the researcher "the participants interact with each other....such that the view of the participants can emerge" (Cohen et al., 2000, p. 288). Cohen et al. argued that in focus group interviews it was from the interaction of the group that the data emerge, yielding insights that might not otherwise have been available in a straightforward interview. Quinn Patton (2002) contended that interactions among participants enhances data quality (p. 386) and noted that focus groups are being used in programme evaluation to identify a programme's strengths, weaknesses, and needed improvements (p. 388). At the time that the first focus group was interviewed it was thought that they might generate hypotheses deriving from the insights from the group that might prove useful in subsequent phases of investigation. An example of this was where tutors were prompted to reflect on the additional year of teaching they were provided with as they engaged with the tutor programme due to the postponement of the in-service programme in physical education for one year. It was thought that tutors might hypothesise on the time that might be required to effect change as they discussed the impact that year had on their teaching of physical education.

### Planning the Interview-based Procedure

Kvale (1996, p. 88) set out stages of an interview investigation that can be used to plan this type of research. The first stage outlined was 'thematizing' which involved formulation of the purpose of the investigation and describing the topic to be investigated. Following on that stage, the designing of the interview schedule takes place that includes consideration of the question format and the response mode. These stages were followed by the researcher and are discussed further below when the application of individual interviews is described. For each interview, however, a general schedule applied:

- The topic to be discussed was identified
- The specific possible questions to be put for each topic were designed

- The issues within each topic to be discussed were identified together with possible questions for each issue
- A series of prompts and probes for each topic, issue and question were identified.

# Interviews Informing the Study

The initial interviews (INT<sub>1</sub>) were undertaken as a follow-up to the administration of two questionnaires (QST<sub>1</sub>, QST<sub>2</sub>). The questionnaires and indeed the observation of the tutor programme had raised some interesting lines of enquiry that were pursued in greater detail in the interview setting. The data obtained complemented the questionnaire data and the data gained from observation of the programme. For example, tutors were asked about their confidence levels to teach aspects of content in the second questionnaire (QST<sub>2</sub>). Observation of the tutor programme and of the teachers teaching physical education in their own school setting yielded considerable data on how confident tutors were with certain aspects of content. Nevertheless, the discussion that evolved when this question was raised in the second interview (INT<sub>2</sub>) with tutors provided further evidence of confidence levels.

In preparation for the first interview (INT<sub>1</sub>) the purpose of the investigation was identified as supplementing the data collected from the first two questionnaires with a particular focus on the content of the tutor programme and the process of learning that tutors had engaged in during the tutor programme. The topic to be investigated was the interviewee's level of satisfaction with the tutor programme and its impact on the practice of the interviewee. The design of the interview schedule focused on the types of questions that would be asked. The author selected a predominance of open-ended items that "supply a frame of reference for respondents' answers, but put a minimum of restraint on the answers and their expression" (Kerlinger, 1970 cited in Cohen et al., p. 275). These questions allowed the author to determine the subject of the question but placed no other restrictions on either the content or the manner of the interviewee's reply. They allow the interviewer to probe to become clearer about what the respondent was saying and to make a truer assessment of what the respondent really believed. In many instances, they provided an opportunity to clear up misunderstandings (Cohen et al., p. 275). While some of the questions set were direct questions the majority were

indirect making the purposes of questions less obvious and more likely to produce frank and open responses. The unstructured response was also favoured, largely because it yielded responses that were not constrained while the questionnaire, focusing on the same broad topics, had constrained responses to an extent. Details of the piloting of the first interview are contained in Appendix E.

### Interviews with Tutors and Teachers

Individual interviews (INT<sub>1</sub>) were held in January 2003 with a sample of six tutors. This sample group and criteria for their selection have been discussed earlier (p. 139) as they had been selected as a focus of the observational fieldwork as they taught physical education in their own school settings. Permission was sought and received from the DES to observe the six tutors in their schools and the researcher decided that this sample would constitute the group to be interviewed also.

The first interviews (INT<sub>1</sub>) were undertaken in a variety of locations depending on the teaching locations of the particular tutors. Within the same period observation of these tutors teaching in their own class situation described above (p. 145) was undertaken. A letter was sent to them outlining the purpose of the interview and observation and assuring them of the confidentiality of the interview and observation session (Appendix F). The aim of the interview was identified as supplementing the data collected from the second questionnaire (QST<sub>2</sub>). The focus was on aspects related to the content of the tutor programme and how tutors were learning. The schedule for the interview is outlined in Appendix G.

The second interview undertaken (INT<sub>2</sub>) was a focus group interview involving five members of the focus group, and one individual who couldn't be present at that interview was interviewed separately. Both interviews were held in a classroom in St. Patrick's College in March 2004 more than one year after the initial interviews. The interviews were recorded using a tape recorder and a mini-disk player. Before commencing the focus group interview, the researcher explained the purpose of a focus group interview as described in the literature as the interviewees had not participated in this type of interview previously. The explanation outlined focused on Quinn Patton's (2002, p. 385, 386) description of the focus group interview: the fact that the interview

was not a problem-solving session, a decision-making group or primarily a discussion but rather an opportunity for participants to get to hear each other's responses and to make additional comments beyond their own original comments. The need for consensus was not important and indeed the interactions among participants enhance data quality. Krueger (1994) described the focus group interview as being both comfortable and enjoyable.

The aim of the focus group interview was identified as supplementing the data collected from the third questionnaire (QST<sub>3</sub>) with a particular focus again on the content of the tutor programme and the process of learning that tutors had engaged in particularly during the previous year since the first interview was conducted. New lines of inquiry focused on the readiness of the tutors to train teachers in physical education and identification of the kinds of supports that tutors needed before this first phase of delivery although a difficulty with this aspect was that there was no date confirmed for the commencement of their work as tutors. The researcher again selected a predominance of open-ended items and planned probes to establish clearly what members of the group really believed. The same framework was used for the individual interview as it was important to elicit the individual's response to the same issues. The framework (see Appendix H) was circulated to all interviewees in advance of the interviews to help focus on some of the most important issues surrounding the tutor programme. The framework was specifically designed to prompt tutors to comment not just on the content of the tutor programme but specifically on how they were learning and to reflect in advance of the interview on their levels of confidence to facilitate the in-service programme to teachers.

The third interview (INT<sub>TEA</sub>), a focus group interview, was undertaken in April 2005 and involved another focus group: a group of three teachers from one school who had participated in the in-service programme for physical education. They were interviewed in a classroom in the school in which they worked. The interview was recorded using a mini-disk player and a Dictaphone. Interviewees had already filled two questionnaires (QST<sub>4</sub> and QST<sub>6</sub>) outlined earlier (Table 13, p.153). The purpose of the investigation was to supplement information gathered from these questionnaires and the observation of the in-service programme itself (OBS<sub>TF</sub>) on (a) the responses of teachers to the in-service programme of physical education, (b) the intentions of

teachers to modify their practice of teaching physical education, and (c) their expectations for the second day of the in-service programme. Another line of enquiry focused on their views of how colleagues in teaching might be encouraged to teach physical education. Open-ended items and planned probes were designed to gather the most accurate information possible from the teachers. The schedule for the interview is outlined in Appendix I.

The fourth interview (INT<sub>3</sub>) was undertaken with two tutors from the focus group in the researcher's own home in June 2005 and with one other tutor from the focus group in his own home in July 2005. Both venues were chosen as the most convenient for the interviewees although it was hoped initially that all three tutors would form a focus group and one interview would be conducted. A Dictaphone and a mini-disk player were used to record the interviews. The investigation was designed to supplement information gathered from QST<sub>5</sub> with a focus on

- (a) the confidence levels of the tutors as they embarked on the facilitation of the inservice programme that they had undertaken during the academic year 2004/2005 and how the tutor programme had prepared them for facilitation
- (b) their experiences of facilitation of the in-service programme
- (c) their views on the responses of teachers to the in-service programme of physical education
- (d) their views on the likelihood of teachers modifying their practice of teaching physical education after engagement with the in-service programme and
- (e) their reflections on Day 2 of the in-service programme.

The focus on items (b), (c), (d) and (e) above was intended to provide comparative data from interviews on the same topics with the teachers. Open-ended questions were planned and probes were designed to ensure that information provided was clear throughout and the same interview framework was used for both interviews (Appendix J). While the interview had the potential to provide much valuable data, Walford (2001) warned that "We need to be cautious in interpreting the words produced in interview, and should try to generate further data about the same topics in a variety of different ways" (p. 96). The data generated by interview in this study

was linked to that provided from observation and from questionnaires and the process of analysing the data gathered is described below.

### Analysis of Data

Analysis of all data gathered as part of this study was focused on the research questions relating to the effectiveness of the tutor programme, its impact on the tutors and the subsequent impact on the primary teachers surveyed. Analysis of data generated from questionnaires, from observational fieldwork and from interviews is described in this section. This is followed by a discussion of the issues of validity and reliability. In a conventional quantitative study data analysis frequently occurs after the evidence has been accumulated. However, since there were four phases to this research, and the research instruments included questionnaires, observational fieldnotes and interviews, a more dynamic and ongoing approach to data analysis was warranted, consistent with the assumptions of 'progressive focusing' (Hammersley and Atkinson, 1995, p. 20) and 'emergent design' where themes emerge during the analysis. Hence, analysis became an ongoing process culminating in a detailed analysis of all of the data after the collection was complete.

# Analysis of Questionnaire Data

Analysis of data gathered from questionnaires was undertaken by using a statistical package. Each of the questionnaires was first checked. The data from precoded questions were analysed using the University of Pittsburgh Statistical Package for the Social Sciences, SPSS 11.0 for Windows. Frequencies and descriptive statistics were computed using standard SPSS procedures. Responses to open-ended questions in questionnaires were firstly 'read through' so that general themes could be identified. They were transcribed into a Word document and categories of responses identified. For example, the responses of teachers were categorised as responses related to the overview of the curriculum, time, skill development, gender, planning, games, aquatics and outdoor and adventure activities. In the same way, categories were identified for the open-ended responses of tutors. The process of relating the evidence gathered from these responses to evidence gathered from analysis of the observational data and from the interviews is described below (p. 165).

Analysis of observational fieldwork was undertaken beginning with the elements (outlined in Table 12, p. 146) that were used to provide a focus for the observation. With reference to the tutor programme, these elements were combined into categories related to (a) content issues, (b) process-related issues, and (c) implementation issues, and data from each phase of observation were assigned to these categories. Analysis of the observational data focussing on the teaching of tutors was undertaken in the same way where data were organised into categories such as data related to (a) the content taught, (b) the methodologies used, and (c) the key considerations of the curriculum identified. Similar treatment of the data related to the in-service programme resulted in the data being divided into categories. The observational data collected were combined and compared to data gathered from interviews with the sample group of tutors and teachers and with data gathered from the questionnaire surveys. This process is described below (p. 165).

### Analysis of Interview Data

After collection of data from each of the eleven interviews, the next stage involved transcribing and analysing them. The challenge of making sure that the data and interpretations made from the interviews were valid and reliable led the researcher to consider how best to pull the data together using a concise theoretical method. The methodological literature identifies many ways in which this can be undertaken to build theories and draw conclusions. For example, Bogdan and Biklen (1982) suggest that data can be cut up and placed in coded envelopes, while Glaser and Strauss (1967) proposed the use of an appropriate coding system and computer analysis programmes such as 'Nud\*ist' and NVivo have been developed to facilitate this coding. The mode of analysis that guided this work was the grounded theory approach of Glaser and Strauss (1967) as it offered a set of analysis procedures for coding descriptive data, although the coding involved was undertaken manually initially and then using a word processing package due to the relatively small amount of data involved (a total of 93 pages of interview data).

Strauss and Corbin (1990) defined the grounded theory approach as a "...qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon." (p. 24). This method was selected to build theory that is "faithful to and illuminates the area under study" (Strauss and Corbin, 1990, p. 24). Glaser's approach imbued grounded theory with rigorous codified methods and use of specialized language that "echoes quantitative methods" (Charmaz, 2006, p. 7). Strauss viewed human beings as active agents in their lives and in their worlds rather than as passive recipients of larger social forces. He assumed that engaging in processes was what was fundamental to human existence and "brought notions of human agency, emergent processes, social and subjective meanings, problem-solving practices, and the open-ended study of action to grounded theory" (Charmaz, 2006, p. 7). Charmaz argued that all of these ideas reflected the pragmatist philosophical tradition that informed symbolic interactionism. This perspective assumes that people can and do think about their actions rather than responding mechanically to stimuli. While grounded theory has moved away from the positivism in both Glaser's and Strauss and Corbin's versions of the method, "grounded theory guidelines continue to describe the steps of the research process and provide a path through it" (Charmaz, 2006, p. 9). Charmaz proposed that researchers can adopt and adapt these guidelines to conduct diverse studies. This concept informs the development of theory in my study (described on p. 166).

Coding the data, described by Strauss and Corbin (1990) as that process by which data are broken down, conceptualised, and put together in new ways to build theory from data, was undertaken after the completion of the gathering of data although some of the concepts were identified earlier in the process of data gathering. Glaser and Strauss (1967, pp. 101-116) described this process as "the constant comparative method of analysis". They suggested that the constant comparison method involves four stages: (a) comparing incidents and data that are applicable to each category, comparing them with previous incidents in the same category and with other data that are in the same category, (b) integrating these categories and their properties, (c) bounding the theory, and (d) setting out the theory (pp. 105-106).

The first step in the analysis employed an 'open' coding system. When all interviews and their transcriptions were complete, cross-analysis that involved reading

each transcript and outlining themes or concepts that emerged from the data was undertaken. This open coding involved differentiating responses from the different interviewees relevant to the main themes identified and dividing the responses into categories. Data manipulation was continued until each piece of data was contained in a category. Each category was assigned a code. This process was undertaken manually by using different colours (highlighting) to distinguish the codes and then the data were transferred into a Word document. An example of this process is provided in Table 14 where the focus of the analysis is the interview data gathered related to the programme of professional development of physical education.

Table 14
Analysis of Data Related to the Programme of Professional Development: Identification of a Sample of Categories

| Category   | Sub-category   |  |
|--|--|--|
| Content issues                                   | Level of satisfaction with  Treatment of strands Adaptability of content Relevance of content  |  |
| Process Issues                                   | Level of satisfaction with   |  |
| Change related to teaching of Physical Education | <ul> <li>Planning</li> <li>Assessing</li> <li>Content taught</li> <li>Methodologies</li> <li>Attitude to teaching PE</li> <li>Reading</li> <li>Depth of knowledge</li> <li>Influence on children's learning</li> </ul> |  |

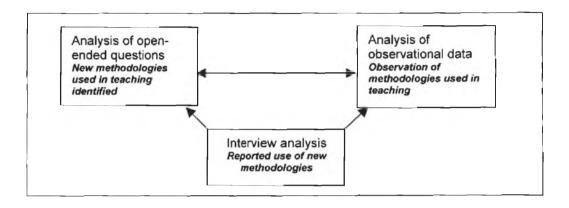
Strauss and Corbin (1990) noted that while the researcher might not initially know which concepts are categories and which are subcategories early in the analysis, this distinction becomes evident as coding proceeds, and this advice was consistent with my experience. Initially, some of the sub-categories were listed as categories. For example, respondents' views on individual items of content of the tutor programme and their views on their appropriateness or practicality merged into one overall category: content issues. Patterns between categories were established; some categories that at the outset seemed distinct were merged into a broader category. An example of this occurred when analysing data from the fourth phase of the study. Teachers' views of supports required for teaching physical education were categorised as 'resource materials', 'cuiditheoir support', 'peer mentoring'. These merged into a broader category 'support for teaching physical education'. The process where interview data coded in this way were triangulated with data gathered from observation and data gathered from questionnaires is described below.

# Triangulation of Data

Tashakkorri and Teddlie (2003) have defined triangulation as "the combinations and comparisons of multiple data sources, data collection and analysis procedures, research methods and/or inferences that occur at the end of a study" (p. 717). In this study the coding of interview data described above provided the framework for triangulation. The categories that emerged from the process of coding the interview data were combined and compared with those that emerged from the analysis of observational data and analysis of the responses to the open-ended questions in the questionnaires. An example of how this triangulation was undertaken is provided in Fig. 2 below. The italicised print is used to identify the focus of the analysis.

Fig. 2

Triangulation of Data



Towards the Construction of Theory

The goal of grounded theory research is the discovery or construction of theory, which emerges from and is grounded in the data (Charmaz, 2000; Strauss and Corbin, 1990; Glaser and Strauss, 1967). This emphasis on theory development is the key distinguishing feature of grounded theory – a theory that is dynamic and always evolving. Within the study, grounded theory represented a set of flexible strategies that helped focus the inquiry on respondents' views of the tutor programme and the inservice programme, as well as the potential impact of the programmes on the teaching of physical education in primary schools. Strauss and Corbin (1990) described the analytic procedures of grounded theory as being designed to

- Build rather than only test theory
- Give the research process the rigor necessary to make the theory 'good' science
- Help the analyst to break through the biases and assumptions brought to, and that can develop during, the research process
- Provide the grounding, build the density, and develop the sensitivity and integration needed to generate a rich, tightly woven, explanatory theory that closely approximates the reality it represents

The analysis undertaken involved application of the procedures of grounded theory but they were adapted to the particular circumstances of the study, while remaining faithful to the spirit of the approach (this is in keeping with the use of grounded theory as proposed by Charmaz, discussed on p. 166). While a grounded theory study implies that an area of study is identified and what is relevant to the area is allowed to emerge, this study was informed from the outset by the extensive literature review covering issues related to adult learning, teacher change, continuing professional development and the design of programmes. Hence, a priori and emergent theories co-exist within the study and all informed the collection of data and helped shape the analysis of the data. Themes were identified from the process of triangulation of the data which frame the findings discussed in chapter 6 and chapter 7. The conclusions outlined in chapter 8 represent the theory that is the product of the analysis described in this chapter.

Throughout the process of analysis of interview data, the researcher needed to be mindful of several issues outlined by Lincoln and Guba (1985: p. 354, 355) including data overload, acting on first impressions only and the dangers of only seeking confirming rather than disconfirming instances. These issues will now be discussed further in addressing the key concepts of reliability and validity below.

### Validity and Reliability

"All field work done by a single field-worker invites the question, 'Why should we believe it?" (Bosk, 1979, p. 193 cited in Maxwell, 2002). The issue of the validity of this study - Robson (2002) defines validity as "the degree to which what is observed or measured is the same as what was purported to be observed or measured" (p. 553) - was a concern for the researcher throughout all phases of the research, particularly with regard to the qualitative aspects of the study. Another concern was the reliability of the research. For the research to be reliable similar results should be found if it were to be carried out on a similar group of respondents in a similar context: "Reliability is essentially a synonym for consistency and replicability over time, over instruments and over groups of respondents" (Cohen et al., 2000, p. 117). These issues will now be discussed with reference to the study that is the focus of this thesis.

Maxwell (2002) described types of validity that are relevant to qualitative research. He emphasised the importance of description, interpretation and theory in particular and these elements can be applied to data collection and data analysis in this study. The descriptive validity issue is concerned with the factual accuracy of research accounts, that the things the researcher saw and heard are not distorted. Maxwell argues that "all of the subsequent validity categories... are dependent on this primary aspect of validity" (Maxwell, 2002, p. 45). "The main threat to providing a valid description of what you have seen or heard lies in the inaccuracy or incompleteness of the data" (Robson, 2002, p. 171). Throughout all of the research process, the researcher consistently checked the descriptive protocols used for observation purposes that shaped the fieldwork notes to ensure that they were facilitating accurate description of the events and happenings of the tutor programme. Similar checks were carried out when observation of the tutors' teaching was undertaken. Where a tendency to note content issues without sufficiently noting methodology issues, for example, was noted in one observation setting this was immediately corrected for subsequent observations to ensure that the descriptions presented a balanced account of what was actually happening. Conversations with the tutors after they had taught lessons provided opportunities to clarify any issues that were not absolutely clear from observation. One such issue was establishing, by means of conversation with a tutor, to what extent content of a particular lesson was informed by a course that he had attended and the extent to which content was developed after engagement with the tutor programme. Audio taping of interviews and video taping of pilot interviews combined with colleague assessment of the interviews enhanced the validity of the resultant descriptions and theories that emerged from the data gathered.

Throughout the programme, the researcher was concerned with interpretive validity described by Maxwell (2002) as seeking to understand phenomena not on the basis of the researcher's perspective and categories, but from those of the participants in the situations studied. Checks were frequently used with research participants, for example, to ensure that the researcher's perceptions of tutors' responses to presentations or activities that they engaged with as part of the tutor programme were shared by them. Such checks were generally undertaken during breaks between

sessions. On some occasions, the participants spoke of aspects that the researcher would not have noted. These aspects were added to field notes and recorded as participants' contributions. On the occasion of the initial interviews, a written account of sections of the tutor programme containing many interpretations by the researcher of what had happened was presented to interviewees and they were asked to comment on it.

The main threat to Maxwell's theoretical validity "is in not considering alternative explanations or understandings of the phenomena you are studying" (Robson, p. 172). Throughout the study the researcher attempted to consider alternative explanations of the phenomena for example when tutors reported that they were accessing journals as a source of support for their teaching of physical education more frequently, the study acknowledged that this may, in fact, have been due to their pursuit of a course of study at the same time. Lincoln and Guba's (1985) threats to the validity of research were defined as reactivity, respondent biases and researcher biases. The issue of reactivity (the way in which the researcher's presence may interfere in some way with the behaviour of the people involved) was in some measure counteracted by the prolonged involvement of the researcher over a two year period and this prolonged involvement also helped to reduce respondent bias (where the respondent withholds information or gives answers which they judge the researcher wants). Prolonged involvement by the researcher meant that it was possible to develop a trusting relationship between the researcher and respondents reducing the likelihood of respondents giving biased information. This much valued relationship facilitated the smooth flow of opinions and ideas between the researcher and the respondents.

In this study it was possible to refer to the quantitative data gleaned from the tutor and teacher questionnaires to support any theories that might be based on interview data, for example, that may have been biased to any degree. However, Hammersley and Atkinson (1995) claim that eliminating the actual influence of the researcher is impossible but that the goal should be to understand it and to use it productively. Maxwell (2005) referred to the negative view of bias as an element that needs to be eliminated from the research design and argued that it could be regarded as a valuable component of it. His view was that it could be profitably capitalized on by viewing bias as experiential knowledge. Hence, researcher bias, or "the subjectivity of

the researcher' (Maxwell, 2005, p. 108) was an issue that the researcher contended with from the outset of this study acknowledging that it may have offered some benefits in terms of the researcher's experience in the field but aware too that it can have an unjustified influence on the study. Some of Ahern's (1999, p. 408) suggestions to help identify areas of potential bias were useful throughout the study. Acknowledgment of areas where subjectivity or role conflict was an issue helped the researcher approach the data collection more sensitively. The researcher's role as a member of the Design Team for the programme was one area that might have constituted role conflict. It was important for the researcher to continually make the distinction between the roles clear and to be open to opinions of tutors about concerns that would have been debated by the Design Team in another context. Another of Ahern's suggestions was that consideration should be given when writing up the account of the study if one respondent is being quoted more than another and if so consideration of why this is so should be undertaken. She advised when blocks occurred in the research process that they should be re-framed. A significant example of this occurred in the treatment of the tutor programme by the DES (described on p. 115). When the tutor programme was not accepted as the guiding framework for the education of the tutors it was necessary for the researcher to re-negotiate its status by consultation with individual facilitators.

A valuable and widely used strategy in validating data is triangulation. Campbell and Fiske (1959) described triangulation as a powerful way of demonstrating validity in qualitative research. While Denzin (1970) distinguished six types of triangulation, this study exemplifies methodological triangulation combining quantitative and qualitative approaches. Cohen et al. (2000, p. 112) argued that exclusive reliance on one method may bias or distort the reality being investigated. The use of multiple methods: personal and group interviews, observation and questionnaires helped to counter the threats to validity. "If, for example, the outcomes of a questionnaire survey correspond to those of an observational study of the same phenomena, the more the researcher will be confident about the findings" (Cohen et al., p. 112). It is this confidence that leads the researcher to believe in the validity of the findings.

Member checking is another valuable means of guarding against researcher bias. It demonstrates that perceptions and contributions are valued. All transcripts of

interviews were returned to interviewees and none of the tuors suggested changes in the information presented. Fieldwork notes related to observations were checked by a different member of the group of tutors as well as findings from the study. The membercheck of the interpretations did not contain any proposals to change the interpretations. A suggestion did emerge that the findings and interpretations could prompt interesting discussion at a later stage between tutors who were engaged in the study. An audit trail that entailed keeping a full record of activities while carrying out the study was maintained by (a) the use of a research journal (an A4 ring binder where schedules, references, any thoughts relevant to the project, meetings held, dates and times of interviews were kept), (b) storage of raw data (including tapes and transcripts of interviews, field notes and questionnaires) and (c) details of coding and data analysis.

The validity of the questionnaires designed for use as part of this study was checked by means of piloting. In order to ensure fair trial of the questionnaires the pilot studies focused on respondents similar to those who eventually completed the survey, on the clarity of the questions and on the general format of the survey (described in Appendix D). Fink's (1998, p. 36) guidelines for 'bolstering' validity include making sure that all relevant topics have been included in the survey. Cohen et al., (2000, p. 109) describe this type of validity (content validity) as the process of ensuring that the main issue to be covered is a fair representation of the wider issue under investigation and that the elements chosen are addressed in depth and breadth. This was a concern in the study from the initial stages when the research question sought to focus on the training of tutors for implementation of a programme that would enhance the quality of provision for physical education and the subsequent investigations were focused on the quality of the tutor programme, the teaching of tutors and the responses of teachers to the programme of in-service. Each of these elements was treated in some depth within the questionnaires with sections devoted to the tutor programme itself and tutors' responses to it, questions devoted to their own teaching and questions to teachers probing their responses to the in-service programme.

Internal validity of the qualitative aspect of the study is concerned with issues such as the authenticity, the credibility and the confirmability of the data (LeCompte and Preissle, 1993, p. 323-4). The researcher's knowledge of the programme, the

reviews of literature on which it was based (chapter 2 and chapter 3) and the tutors' responses both in the interview setting and in completing the questionnaires represented consistent checks on internal validity. The responses of the sample of teachers represent a further check on this aspect of validity. External validity, referring "to the degree to which the results can be generalised to the wider population, cases or situations" (Cohen et al., p. 109) will be discussed further in chapter 8.

While Maxwell (2005, p. 105) argued that there are no methods that can completely assure the relationship of conclusions to reality, he stressed the importance of addressing the threats to validity. The threats to the validity of this study have been described above; the effects can be minimized by careful attention to the issue throughout. As the research was undertaken, attention to the richness of the data gathered, the participants approached, the extent of triangulation and the consistent efforts to maintain objectivity during observations helped address the issue of qualitative data validity. Careful design and administration of questionnaires as well as appropriate statistical treatment of the data addressed the issue of quantitative data validity.

#### Reliability

Many of the measures addressed above that enhanced the validity of the study were also relevant to the reliability of the study. With reference to the questionnaires used as part of the study, reliability is promoted by the careful design of the questionnaires. For example, where questions were used to 'track' developments over time the structure of the questions was retained exactly so that responses could be compared. Hence, these particular questions should be replicable in other studies of programmes of professional development. Piloting of each of the questionnaires, ensuring that the contents are refined appropriate to the sample being targeted should enhance reliability. The sample selected initially was a sample comprising all tutors. This should promote reliability in terms of the responses being representative of a complete cohort of adult learners undertaking a particular programme of professional development. The decline in the number of tutors with time was a cause for concern in terms of reliability but this was an unavoidable consequence of the long-term nature of the study.

Within qualitative research, Cohen et al. (2002) argue that reliability includes "fidelity to real life, context and situation-specificity, authenticity, comprehensiveness, detail, honesty, depth of response and meaningfulness to the respondents" (p. 120). Reliability of interviews can be enhanced by careful piloting of interview schedules, careful use of questioning and careful analysis. Each of these aspects was addressed throughout this study and has been addressed above in the discussion of the use of interviews in the study. An example of the piloting of the interview schedule is described in Appendix E where the instance of the use of leading questions in the pilot interview was raised as one example of the attention paid to the type of questioning. Analysis of interview data using grounded theory offered a framework for checking, rechecking and ensuring that transcripts were thoroughly examined. Each of the measures described should enhance the chance of the questions being useful to other researchers. The development of the observation schedules (outlined on p. 146) should promote reliability of observations carried out as part of this study making them replicable in other studies. As all of the observations were carried out by one researcher, this eliminated the need for inter-rater reliability.

Robson (2002, p. 177) argued that the data gathered should provide insight which should allow their projection to other contexts or situations. Being thorough, careful and honest in carrying out the research and being able to show others that you have been by using an audit trail consisting of raw data (transcripts, field notes), the research journal and details of coding and data analysis helps determine the reliability of a study. These aspects of the research outlined in this study have been described above. The attention to the issues of validity and reliability underpinned the work involved in this study throughout each of its phases.

#### Ethical Considerations

Ethical considerations represented another aspect that was of paramount importance as the study was planned and implemented. Firstly, permission was sought from the DES to undertake the study (see Appendix K). The design of the study was outlined including a brief description of the observational fieldwork, the interviews and the questionnaires that were planned as part of the study. The permission was granted subject to agreement by the researcher to refrain from taping the sessions, either using

an audio or video tape (it appears that this practice had been undertaken by a researcher in the recent past without permission and had met with disapproval), that observation of the tutors teaching would be undertaken on no more than two occasions and that observation of the implementation of the in-service programme would be undertaken on no more than one occasion for each of the tutors. There were no restrictions placed on the number of interviews carried out or on the number of questionnaires administered. Secondly, in the case of the observational fieldwork agreement was sought from the sample group of six tutors to observe their teaching of physical education and from the boards of management of schools (where the Principal was the subject of the research) or from the Principal in order to conduct the classroom observations (Appendix L). Thirdly, observation of the in-service programme was undertaken having received permission from the PCSP. The Principal of each school involved at each of the three venues was contacted in advance by telephone. An explanation of the role of the researcher as observer for the duration of the day's programme of in-service was provided. Each of the tutors was consulted about the observation of the programme and their consent was sought. Copies of letters seeking approval for undertaking observations are contained in Appendix L.

In the case of the questionnaires administered a cover letter was sent with each questionnaire explaining the purpose of the questionnaire and seeking the co-operation of the tutors and teachers in completing them. As indicated earlier, copies of the cover letters sent with questionnaires are contained in Appendix C. With regard to the interviews undertaken as part of the study, each tutor involved was contacted by letter explaining the nature of the interview. The statement of purpose was always simple and straightforward indicating possible topics (Appendix F). A follow-up phone call from the researcher was made to arrange the date and time of the interviews and to check that each of the tutors was willing to be interviewed. A transcript of the interviews was sent to the interviewees with a request for any feedback or queries that might result from the examination of the transcripts. Throughout the study the confidentiality of all data gathered was assured. Tutors and teachers were offered the option of completing the questionnaires anonymously. In the case of interview data, pseudonyms were used to protect the identity of the interviewee and where a response to an open-ended question in a questionnaire was quoted it was identified by the use of a number. Throughout the study the researcher was always "thinking and judging what are ...ethical obligations"

(Rubin and Rubin, 1995, p. 96). This awareness ensured that explanations of the methods used in the study were offered and relevant permissions sought.

#### Summary

The research design of the study is outlined in Table 15 below as an aid to the reader. The instruments used are identified, the subjects and focus of each phase of data gathering are outlined and the frequency of their application is illustrated. The findings related to the programme of professional development and the in-service programme of physical education gleaned from the use of the selected methods are discussed in the next two chapters. Data related to the effectiveness of the physical education programme of professional development in preparing tutors for implementation of the in-service programme are analysed in the following chapter.

Table 15

|  | Overview | of the | Research | Design | of the Study |  |
|--|----------|--------|----------|--------|--------------|--|
|--|----------|--------|----------|--------|--------------|--|

| Instruments              | Subjects           | Frequency/Duration       | Main Focus of Data Gathering  |
|--------------------------|--------------------|--------------------------|---|
|                          |                    | of Application           |   |
| Observation              | All tutors         | 150 hrs.approx           | Tutors engaging with programme of professional development: focus on what they were learning and how                |
|                          | 6 tutors           | 10 occasions in schools  | Transfer of learning in terms of content taught, methodologies and approaches used, key considerations incorporated |
|                          | 85 primary         | 3 occasions at different | Responses to the in-service   |
|                          | teachers           | locations                | programme: content, methodologies and key considerations  |
|                          |                    |                          | How teachers were learning  |
| Questionnaire<br>Surveys | All tutors         | 4 administrations        | Background information on teaching<br>experience related to physical  |
|                          |                    |                          | education; Focus on what tutors were  |
|                          |                    |                          | learning and how; Tutors' levels of   |
|                          |                    |                          | confidence to facilitate the in-service programme   |
|                          | 85 primary         | 2 administrations        | Background of teachers and school   |
|                          | teachers           |                          | context for teaching physical   |
|                          |                    |                          | education   |
|                          |                    |                          | Expectations for in-service   |
|                          |                    |                          | programme   |
|                          |                    |                          | Outcomes of in-service programme  |
| Interviews               | 6 tutors           | Twice                    | Focus on what tutors were learning  |
|                          | 3 tutors           | Once                     | and how   |
|                          |                    |                          | Effectiveness of transfer of learning   |
|                          |                    |                          | into teaching contexts  |
|                          |                    |                          | Effectiveness of programme of   |
|                          |                    |                          | professional developmentin their  |
|                          | 2 primon.          | Onco                     | learning  |
|                          | 3 primary teachers | Once                     | Experiences of in-service programme   |
|                          | leachers           |                          | Expectations for teachers implementing a physical education   |
|                          |                    |                          | programme   |
|                          |                    |                          | Experiences of in-service programme   |
|                          |                    |                          | Intended transfer of learning to their  |
|                          |                    |                          | teaching  |

#### **CHAPTER SIX**

# The Effectiveness of the Physical Education Tutor Programme

#### Introduction

In this chapter, data relevant to the evaluation of the effectiveness of the physical education tutor programme derived from the questionnaires, observations and interviews described in the previous chapter are analysed. By way of background information, a preliminary section examines the biographical details provided by the tutors in the initial questionnaires. This section also reports on tutors' views of the post of Physical Education Trainer that they were undertaking, on their vision for Physical Education and on their expectations for the in-service programme. The remaining data are then linked to the research question that relates to the tutor programme. Findings are presented under headings related to some of the key themes emerging from the quantitative and qualitative analyses undertaken to answer the research question set out for the study. The questions and themes that provide the structure for the chapter are:

Question I: Were there key factors that shaped the physical education tutor programme? Related themes and sub-themes:

- Relevance and Effectiveness of Content
   Content as relevant and adaptable; Beginning with familiar content; Content fostering critical reflection; Content prompting innovation and change
- Methodologies as Supports for Learning
   The promotion of active learning including group discussion and peer-guided learning; Dialogue about the programme; Promotion of reading and examination of materials; Learning styles and discovery learning; Facilitation and facilitators; Emergent issues

Question 2: Did tutors change the way they taught physical education? Related themes:

- Planning as a factor in physical education
- Expanding the programme taught
- Trying new teaching approaches
- Identifying supports for learning

- Influencing colleagues
- Thinking about children's learning
- Collegial support as a factor in change
- Changing attitudes towards the teaching of physical education

Question 3: Did tutors feel ready to implement the programme?

#### Related themes:

- Content knowledge and understanding as key to confident facilitation
- Investment in planning for implementation
- Confidence built on ownership of a programme

As indicated in chapter 5, due to the fact that many data gathering instruments and periods are discussed, the reader is referred to a coding system used to simplify the identification of them in the text. The outline of this system is repeated below to facilitate reading of this chapter.

- Different administrations of the tutor programme are labelled sequentially using the code TP. Hence, the first course delivered as part of the tutor programme is referred to as TP<sub>1</sub>
- Questionnaires administered to tutors are identified by using the code QST; the
  first questionnaire is then labelled QST<sub>I</sub>, the second QST<sub>2</sub> and so on. As two of
  the six questionnaires were administered to teachers, they have an added
  element in the code to distinguish them e.g. QST<sub>6TEA</sub>
- Observation of the tutor programme is referred to as OBS<sub>TP</sub> and observation of
  the tutors as they taught their own classes in schools is referred to as OBS<sub>TT</sub>.
  Again, these are numbered sequentially to distinguish the different data
  gathering periods. Observation of the tutors facilitating the in-service
  programme to teachers is referred to as OBS<sub>TF</sub>
- Interviews conducted with the tutors and teachers are referred to as *INT* and *INT* <sub>TEA</sub> respectively. These are also numbered sequentially

Interview participants and questionnaire respondents are identified by using a
number placed after their contribution to ensure confidentiality. Tutors'
responses appear as TUTS for example, while teachers' responses are identified
as TEA9. Individual facilitators are referred to by use of a pseudonym.

The data were collected immediately prior to and during the administration of the tutor programme. The tutor programme was administered from June 2002 until December 2004. Further support was provided by the Primary Curriculum Support Programme (PCSP) as the tutors continued to implement the in-service programme for teachers from January 2005. This support is on-going but doesn't involve investigation for the purposes of this study. A timeline for the different phases of the tutor programme and related data gathering is included in chapter 5, p. 142.

### Background and Contextual Data

It was important for the purposes of this study to collect some data on the teachers who were selected to be tutors with the responsibility for supporting teachers in the implementation of the Physical Education Curriculum (Government of Ireland, 1999b). Biographical data are presented below as well as data related to physical education in the schools of tutors, tutors' physical education practice and motivation, their vision for physical education and expectations for the in-service programme.

Given that the PCSP policy on selecting tutors was to select teachers with a primary teaching qualification rather than personnel with particular expertise in physical education, it was considered important to ascertain to what extent they had gained some specialist expertise in physical education or related areas such as sports coaching for example. This expertise could be significant in determining appropriate approaches within the tutor programme and in identifying starting points related to the content to be presented. Another area that merited investigation was the extent of their teaching experience as this could be considered an important aspect of their approach to the facilitation of the in-service programme. Investigations of their own teaching contexts related to the availability of school plans for physical education, the time allocated for physical education and approaches to record keeping would provide valuable data that informed the implementation of the tutor programme although it was

the Design Team that had ultimate responsibility for its implementation. Information on the tutors' practice of teaching physical education with particular reference to the extent to which they taught aspects of content and the methodologies that they employed would provide useful insight into the extent to which content and methodology needed to be explored within the tutor programme.

#### Tutors' Biographical Information

Biographical information and contextual information was gathered from the group of tutors using a questionnaire (QST<sub>1</sub>) administered immediately prior to the commencement of the tutor programme. Twenty five of the tutors responded to the questionnaire. Sixteen were female and nine were male. The majority (77%) of the respondents were between 31 and 50 years old. Their teaching experience was largely in primary schools with a majority (53%) having taught for between 11 and 20 years. They taught in a range of different school types with the largest grouping being in coeducational schools that enrolled children from junior infants to sixth class.

Eighteen of the tutors had completed either a Bachelor of Education Degree or a Diploma in national teaching (NT) with seven having completed degrees at masters level. Over half of the respondents (62%) reported that they had completed a course in physical education since the completion of their teaching degree or diploma while 85% had completed a sports related course. The number of tutors completing sports courses would probably be higher than the average for the cohort of primary teachers indicating that this group of tutors joined the programme with some additional physical education related expertise. Nevertheless, in a study of fifth and sixth class children in primary schools in Ireland Broderick and Shiel (2000) found that 40% of pupils are taught by teachers who have attended more than 30 hours of training in physical education since their initial teacher training course.

#### Physical Education in the Schools of Tutors

Part of QST<sub>1</sub> was constructed to facilitate tutors in providing data on the specific provision for physical education in their schools. This provided a bank of data that shed some light on their engagement with physical education prior to engagement

with the tutor programme and on possible constraints on their teaching of the subject. Information was gathered on the level of responsibility they undertook for physical education in their schools, the school plan, facilities, time allocation, the strand of the curriculum most emphasised in schools and records of pupil achievement.

Special duties posts for physical education were held by 39% of tutors and 96% of tutors supported colleagues in teaching physical education. Eighty four percent of respondents reported that their school had a written school plan or had a school plan that was under review but only 62% reported that their school had a plan for physical education. The lower percentage for physical education plans may be explained by the fact that some respondents indicated that planning for physical education in their schools would follow the completion of the in-service programme for the subject. As reported earlier, Broderick and Shiel (2000) found that 65% of children attend schools in which there is a school plan for teaching physical education. Hence, it would seem from both studies that encouragement to develop a school plan for physical education and support for schools in doing so is an important consideration in providing for quality physical education in schools. As indicated in chapter 3, since 1999 a School Development Planning Support service (SDPS), an initiative of the DES, has provided support to teachers, parents and boards of management in primary schools with their development planning needs. The Service "aims to support collaborative planning as a means of promoting school effectiveness and renewal" (School Development Planning Support, 2007, para. 2), and support materials for planning in physical education have been provided for schools since 2005. Support has also been provided by the support personnel for the individual subject areas (cuiditheoirí). In the case of physical education this support has been provided since September 2006 (discussed in chapter 3).

The dearth of facilities for the teaching of physical education has traditionally presented significant challenges for teachers (McGuinness and Shelly, 1995). Hence, this issue was addressed again in this study. What emerged from the data was a distinct difference between satisfaction levels with outdoor and with indoor facilities. While over two thirds of tutors (69%) indicated that outdoor hard surface facilities were satisfactory, only 36% responded positively related to the indoor facilities. In general, these figures support the trends shown in earlier surveys of physical education in the

primary school. For example, McGuinness and Shelly reported that 78% of the teachers surveyed had outdoor hard surface areas although only 50% had indoor halls. Half of the tutors described their grass facility and their aquatics facility as either very satisfactory or satisfactory. In commenting on their aquatics facility it can be assumed that the tutors were referring to having reasonable access to aquatics facilities rather than necessarily having their own facility as this situation applies to only a minority of schools in Ireland. McGuinness and Shelly reported that 57% of teachers responded that they had a swimming pool accessible to their schools. It would appear that there was little change in this study in terms of provision of facilities for aquatics from the evidence reported by the tutors in their schools.

A majority (65%) of tutors reported that the time recommended for the teaching of physical education in the school plan was between 45 and 60 minutes per week. The DES recommendation for physical education is one hour per week (Government of Ireland, 1999a, p. 70). Fifteen per cent of tutors reported that the school plan recommended less time and the remainder reported that the plan recommended in excess of one hour per week. Over three quarters of the tutors (77%) stated that the games strand was allocated most time. This finding supports that of Broderick and Shiel (2000) who reported that over half of all time allocated to physical education is used to teach games. Games was also the most frequent extra curricular element provided in their schools (80%) with athletics as the second most frequent (35%).

The data provided by the tutors in QST<sub>1</sub> on assessment in their schools revealed that only 8% of them worked in schools that had records for pupil achievement in physical education. This figure is less than that found by Drewett (2005) in schools in Co. Kildare where 20% of teachers recorded pupils' progress in physical education. It is possible that the lower figure reported in the data gathered from the tutors might be explained by the tutors' sensitivities to the need for more detailed assessment records to be kept. Drewett found that 43% of teachers rarely or never assessed in physical education and only one quarter of the teachers indicated that they felt confident in knowing how to assess. Data recorded on the schools of the tutors in this study indicate that although 35% kept records of the content (many indicated that this information was provided in their monthly records of content taught) only 20% made the content records available to other class teachers. The data gathered from both studies indicate that

assessment in physical education is an area that is undertaken by a minority of teachers only. It would appear that, in order to promote teacher confidence in knowing how to assess and to promote recording of assessment data, this is an area that merits special attention. Indeed, the DES (2005) state that it is essential that all schools have written school assessment policies incorporated in the whole school plan. While these data are helpful in gaining an understanding of how physical education was organised in the schools of tutors, the data to be discussed in the following section are focused on tutors' own practice of physical education.

#### Tutors' Physical Education Practice

In QST<sub>1</sub> tutors were given an opportunity to provide information on how much time they allocated to teaching physical education, their favourite strand, the teaching methods they employed and the kinds of supports they used. It should be noted at this point that these data will be used to evaluate the effect of the tutor programme later in the chapter. Fifty per cent of the tutors indicated that they taught more than one hour of physical education per week while 42% said that they taught between 46 and 60 minutes. Games was the preferred strand of 35% of tutors with athletics preferred by 19%.

Table 16
Preferred Strand of the Curriculum

| Preferred Strand      | %  |
|-----------------------|----|
| Athletics             | 19 |
| Dance                 | 8  |
| Gymnastics            | 8  |
| Games                 | 35 |
| Outdoor and adventure | 15 |
| Aquatics              | 8  |
| Missing               | 8  |
| n=26                  |    |

Eighty eight per cent of the tutors had a background in competitive sport and this is a likely factor in influencing their choice of preferred strand as most competitive sport is centred on games. Almost all tutors indicated that they taught games and athletics very frequently or frequently (97% and 81% respectively). Figures for teaching gymnastics, dance and outdoor and adventure activities were considerably lower: 66% of tutors reported that they taught gymnastics 'rarely' or 'never', equivalent figures for dance and outdoor and adventure activities were 54% for each strand. Similar figures were reported for the teaching of aquatics: 50% of tutors reported that they never taught aquatics. However, it should be borne in mind that children in those schools could have been engaged in an aquatics programme taught by an external instructor, which is a common feature in schools instruction. (The National Safety Council Survey, 1997, reported that external instructors provided instruction in 80% of schools). It was clear, then, that games and athletics occupied a dominant position in the physical education programme of tutors with dance, outdoor and adventure activities, gymnastics and aquatics receiving little attention. Similar findings were reported by Broderick and Shiel (2000) regarding the teaching of dance and outdoor activities, with only 8% of curriculum time allocated to dance and 3% to outdoor activities while gymnastics and athletics were each allocated 10% of curriculum time. It should be borne in mind that since the tutors are representative of teachers with a particular interest in physical education, it is likely that their commitment is greater than that of many of their less sporting minded colleagues. The evidence provided by the data reported above suggests, therefore, that more systematic rather than selective implementation of the Physical Education Curriculum (Government of Ireland, 1999b) represents a considerable challenge to current practice. The demand of this challenge in the context of teacher change on a national scale is an issue that will be addressed again later in the dissertation.

On examination of the teaching methods employed by tutors, a majority (69%) indicated that they taught physical education using the guided discovery method while almost all tutors used group teaching (97%) and direct teaching (92%). It is difficult to ascertain, however, whether the tutors' understanding of group teaching matched the definition of group teaching provided in the Physical Education Teacher Guidelines (Government of Ireland, 1999c, p. 50, 51) where a distinction is made between children playing team games in groups and children working within groups to develop different skills defined as use of the station teaching approach. When asked about the supports

used for teaching physical education, 80% of the tutors reported that books informed their teaching of physical education, with 61% using websites and just 34% using journals to support their teaching. Information on the extent to which they used particular methods or supports was not gathered as part of this study and this information would be helpful in any similar or follow-up study undertaken. The information provided on the background of tutors and on the contexts of their teaching experiences was useful to provide a general overview of the distinct nature of this particular group of tutors with reference to physical education. Other areas that merited attention were the motivation of tutors to undertake the post of Physical Education Trainer, their perceptions of developments in physical education and their expectations of the in-service programme that they would provide for teachers. These issues will be discussed in the section to follow.

Tutors' Motivation, Vision for Physical Education and Expectations for the In-service Programme

Views on the motivation of tutors to undertake the work of a Physical Education Trainer, on the developments in physical education that they would wish to see and on the in-service programme for teachers were sought using open-ended questions in QST<sub>1</sub>. Most tutors referred to their interest in and passion for the subject as a key motivating factor in undertaking the work of a Physical Education Trainer. Many tutors referred to the importance of physical education for the child and on the importance of raising the profile of physical education among teachers while some tutors claimed that it was a positive step in terms of their own professional development. It was not surprising that tutors pointed to their experience in physical education as the key factor in their selection as tutors. Other factors considered important were their experience of facilitating in-service training and their communication skills.

Tutors were asked about their vision for physical education at primary level. Five issues seemed to be important to them:

increased time necessary for the teaching of physical education

- the provision of programmes in schools reflecting the Physical Education
   Curriculum (Government of Ireland, 1999b) with its emphasis on providing a wide range of opportunities for children
- provision of appropriate facilities and equipment to teach physical education
- effective school planning with its emphasis on progression from class to class and record keeping, and
- the need for in-service support to include support materials as well as support personnel and training programmes.

The recurrence of issues, having been raised and discussed by McGuinness and Shelly (1995) and Broderick and Shiel (2000) among others, is noteworthy. Such widely discussed matters have been addressed to some extent by the publication of the Physical Education Curriculum (Government of Ireland, 1999b) and the recent publication of support materials by the Primary School Sports Initiative (PSSI, 2006). One element that the tutors in this study emphasised was the principle of the class teacher as the key provider of the programme for children. One respondent described how teachers needed to understand the concept of the value of the class teacher teaching physical education "...that teachers realize that they don't have to be experts to teach it (physical education) and confidence in the subject is enhanced benefiting all" (OST<sub>1,TUT1</sub>). This concept is outlined in the Physical Education Curriculum (Government of Ireland, 1999b): "Given that the programme is to be integrated with the other curricular areas, a class teacher is the most appropriate teacher to teach the physical education programme" (p. 8.). This concept will be discussed further in chapter 8 linked to recommendations arising from this study. A related issue raised was the importance of developing the role of outside personnel such as physical education specialists or coaches from National Governing Bodies as a positive support for the teaching of physical education.

The tutors outlined the most important issues for them in facilitating the inservice programme. Many tutors referred to the importance of (a) providing practical work for teachers to really engage with physical education, (b) the importance of the venues for the in-service programme, (c) the necessity of imparting the key messages of the Physical Education Curriculum (Government of Ireland, 1999b) such as the

importance of a broad programme illustrating progression and continuity ("And I would hope to show that PE can mean more than just the ability to play ball sports" QST<sub>ITUT6</sub>), and (d) the importance of participants experiencing the 'fun' aspect of Physical Education.

Factors that related directly to the training needs of tutors were outlined in the responses of many tutors: opportunities to try out ideas in advance, ability to use a wide variety of presentation methods effectively and the importance of having a thorough knowledge of the curriculum. Such a view was articulated by one tutor as follows: "I believe it is important to be fully briefed in all areas of curriculum and to feel confident in teaching each strand" (QST<sub>ITUT6</sub>). Others outlined some issues that were related to the facilitation of an in-service programme: knowing how to motivate and enthuse teachers, how to deal with teachers who lack confidence and knowing what supports exist for teachers in the form of materials and journals for example. Another tutor's priorities were captured in a response to one of the open-ended questions in the first questionnaire:

...refining my tutor techniques, becoming very familiar with curriculum documents, becoming familiar with other departmental documents and reports, developing a knowledge of teaching methodologies for all strands, familiarising myself with content of in-service course, development of a knowledge of support materials, journals etc. development of a knowledge of equipment available/suitable. (QST<sub>1TUT6</sub>)

From the researcher's point of view, one of the challenges posed in the provision of a tutor programme was to ensure that tutors would be enabled to provide the kind of in-service programme identified by them at such an early stage of their work as tutors. Other challenges the researcher faced that have stemmed from the review of literature were (a) ensuring that elements of a quality programme of learning for adults such as the facilitation of content that reflects the principles of adult learning (Knowles et al., 1998) would be embraced by the tutor programme, (b) that the programme would provide opportunities for the tutor to reflect on his/her role as facilitator (Brookfield, 1986), (c) that the programme would facilitate transformative learning (Cranton, 1996; Mezirow, 1991), and (d) that the design of the programme would encompass those aspects of programme design that have been identified as significant steps in the design of programmes of learning (Caffarella, 1998). The response of the tutors to the tutor

programme that was provided and attempts to identify factors that shaped the programme are described under question one below.

Question 1: Were There Key Factors that Shaped the Physical Education Tutor

Programme?

One of the aims of this study was to ensure that the key factors pertaining to programmes of adult learning identified in the literature could be exemplified in the tutor programme described in chapter 4. The tutor programme was facilitated from 2002 to 2004 (the nomenclature for the different administrations of the tutor programme are TP<sub>1</sub>, TP<sub>2</sub>, TP<sub>3</sub> and TP<sub>4</sub> respectively) and further elements were facilitated during 2005 and 2006 as the in-service programme was being presented to teachers on a national basis.

This section reports on the responses of the tutors to the overall tutor programme undertaken between 2002 and 2004 and on their responses to elements identified within the literature review as significant supports for learning. These elements are related to the content of the programme and to the methodologies used in implementation. It also treats some other aspects identified by tutors themselves as significant issues for them. Their responses to the tutor programme are discussed below with reference to (a) the information gathered from the questionnaires (QST<sub>2</sub>, QST<sub>3</sub>) QST<sub>5</sub>), (b) data gathered from interviews with the tutors (INT<sub>1</sub>, INT<sub>2</sub>, INT<sub>3</sub>), and (c) data gathered from observation of the programme itself (OBS<sub>TP1</sub>, OBS<sub>TP2</sub>, OBS<sub>TP3</sub>) OBS<sub>TP4</sub>), from observation of the tutors teaching in their own school setting (OBS<sub>TT1</sub>) OBS<sub>TT2</sub>), and from observation of the implementation of the in-service programme for teachers (OBS<sub>TF</sub>). Analysis of these data helped identify some key factors that emerged: factors that appeared to significantly shape the tutor programme. An argument will be made later in the dissertation that identification of these key factors exemplified in the tutor programme should contribute to the development of a framework for programmes of professional development for those entrusted with the responsibility of providing programmes for teachers.

After their first engagement with the programme (TP<sub>1</sub>), data gathered from a questionnaire (QST<sub>2</sub>) revealed that tutors' overall satisfaction with the tutor programme

was high with 89% claiming that they were either very satisfied or satisfied with the programme. Data gathered from QST<sub>3</sub> indicated that a majority (85%) of tutors rated the subsequent phases of the programme (TP<sub>2</sub> and TP<sub>3</sub>) as very satisfactory or satisfactory. The levels of satisfaction with TP<sub>4</sub> continued to be high as tutors were engaging with some aspects as they taught in their school setting while other aspects were treated just prior to facilitation of the in-service programme to teachers. All tutors who responded reported that they were either very satisfied or satisfied with the overall programme as the study concluded (QST<sub>5</sub>). Overall levels of satisfaction were calculated at 91%. The questionnaire data described above provide a clear statement about the success of the tutor programme in the minds of the tutors.

#### Relevance and Effectiveness of Content

Elements of the content of a programme of learning that were identified as key elements of programme design were discussed in the review of literature in chapter 2. Writers such as Brookfield (1986) and Knowles et al. (1998) identified the importance of (a) content being relevant to the needs of learners, and (b) content being adaptable to their individual contexts.

#### Content as relevant and adaptable.

Data from questionnaires (QST<sub>2</sub>) and interviews (INT<sub>1</sub>) revealed that tutors identified the relevance of the content as an aspect of the programme that was successful. Tutors were asked about the relevance of TP<sub>1</sub> to the context of schools and how the programme helped them to adapt content. A majority (85%) of tutors claimed that they were satisfied that the content was relevant to the contexts of schools. Tutors who were involved in teaching children at this time made frequent reference in INT<sub>1</sub> to the content being relevant to their teaching. One tutor articulated this view as follows: "It (the tutor programme) has enriched my teaching of PE in school" (QST<sub>2TUT5</sub>) while another commented that she was "well equipped from taking in the training programme to doing it with my class" (INT<sub>1</sub> GB). Another tutor commented that the dance element of the programme gave him the courage to try to be more adventurous in his teaching of dance while he was motivated to teach the orienteering and outdoor activities that he wouldn't have touched on before (INT<sub>1</sub> MM) because it was relevant to his teaching

context. In responding to an open-ended question (QST<sub>2</sub>) a tutor described the tutor programme as "...very stimulating and contained many practical, successful and user-friendly activities for use in the classroom." (TUT6). Later, after engagement with TP<sub>2</sub> and TP<sub>3</sub> over 70% of tutors reported that they were satisfied that the programme helped them to adapt content (QST<sub>3</sub>). Data from INT<sub>2</sub> conducted around this time revealed that there was strong agreement that the content was adaptable to individual school situations. Tutors identified the support materials as an important element in helping to adapt the content to teaching situations. When asked in QST<sub>2</sub> to comment on any aspects that might have enhanced the delivery of the tutor programme, tutors frequently commented on the support materials (six tutors referred to support materials in some form: video, handouts or course notes).

As tutors' future teaching and facilitation of the in-service programme was to be linked to the implementation of the Physical Education Curriculum (Government of Ireland, 1999b), it was very important that the content treated was relevant in guiding tutors to implement the curriculum in their own teaching contexts and to facilitate other teachers to do the same through the in-service programme. Observation of the programme revealed that tutors responded very well to parts of sessions where facilitators referred back to content objectives taken from the curriculum. There was awareness among tutors that the activities explored by them in athletics, for example, were those that matched the objectives of the curriculum and tutors were increasingly confident in proposing adaptations to suit individual class contexts. One tutor while commenting on the practical nature of the programme added

Also the fact that it relates so closely to the actual revised curriculum and that's obviously what we are going to be presenting on when we go out as trainers...I'm much more familiar with the curriculum now and I can use it an awful lot easier. (INT<sub>1</sub>MJ)

While it is difficult to ascertain to what extent this increased familiarity with the curriculum might have been an outcome of the tutor programme rather than an element that might have been achieved independently, questions posed during interviews and questionnaires were carefully devised to ensure that tutors understood that the effect of the tutor programme was central to the investigation. A question such as: "How has the tutor programme for trainers influenced your planning for physical education?" (QST<sub>3</sub>)

is illustrative of how the tutor was prompted to identify the impact of the tutor programme in a specific way.

Another example of content presented that was closely linked to the curriculum objectives and hence relevant to the needs of tutors, was a practical aquatics workshop that provided opportunities for tutors to engage with activities that were appropriate for inclusion in an aquatics programme for in-service for teachers. (The aquatics module was planned and facilitated by tutors who were active in the Irish Water Safety Association). A theory session, which focused on teaching the water safety strand unit of the curriculum, preceded a practical session and time was allocated for discussion of the issues surrounding the teaching of aquatics in schools. The water safety content was closely linked to the objectives outlined for water safety in the curriculum. Among the issues raised that were linked to the teaching of aquatics was the role of the class teacher in the aquatics programme as outlined in the Physical Education Teacher Guidelines (Government of Ireland, 1999c). Field notes contain references to a group discussion as part of the first workshop related to aquatics (during TP<sub>1</sub>) where this issue was identified by tutors as an area that needed clarification. The discussion described below was observed by the researcher during the first presentation on aquatics and was significant in raising some of the issues that were linked to the aquatics strand.

Most interesting group discussion: animated! Differing views of what aquatics should be for trainers. Some held view that it was necessary for trainers to experience a considerable amount of aquatics....others that emphasis should be on what aquatics is about in schools and what teachers should know and do. Further discussion centred on the role of the class teacher. Declan (a tutor) questioned the presenter to clarify what exactly the aquatics organiser course award offered a teacher. He was unsure if a teacher was expected to actually teach a group to swim. The presenter clarified for him that the role of the class teacher was to liaise with the swim teacher in planning a programme and to monitor the effectiveness of the programme. [Fieldnotes: 26/8/02]

This clarification of the role of the class teacher in the aquatics programme underpinned the practical work undertaken at a later point in the programme by tutors. Field notes describing the context and content of the practical aquatics workshop relate how tutors were introduced to the pool activities and games that promote skills such as buoyancy and propulsion as well as focusing on entry to and exit from the pool. Equipment used was explained with reference to the activities suggested within the curriculum

Anne (the facilitator) showed tutors how to teach children to learn to enter the pool via the steps and from the pool edge...they then played some of the games that promote confidence in water as well as skill development such as relays using a ball. Equipment was explored: buoyancy aids, egg-flips, etc. and she guided tutors on how children should use these with an emphasis on progression and differentiation. Anne constantly referred to how particular pieces of equipment could be used differently within the same lesson to meet the needs of individuals. [Fieldnotes: 16 /6/04]

The combination of the theory session where the presentation of the activities was clearly explained in relation to the curriculum objectives for the strand and the practical workshop appeared to leave tutors with a greater level of confidence about the aquatics module that they were beginning to plan for facilitation to teachers. Evidence of this growing understanding of the aquatics strand can be found on examination of the questionnaire data collated towards the end of the tutor programme where 13 out of a total of 14 tutors reported that they were very confident or confident to facilitate the aquatics strand. They seemed to have come to terms with the kind of presentation that they would offer to teachers - a combination of theory with a presentation of aquatics on a video clip and engagement by tutors in some playground games that could be replicated in an aquatics session. It seemed from observation of the group who were planning for implementation of the aquatics strand during TP<sub>4</sub> prior to implementation that the links with the objectives of the aquatics strand, emphasised throughout this module, underpinned their planning. A clear understanding of the strand units of the curriculum was evident as they discussed how it could best be presented to teachers. The impact on tutors' learning of having to present to teachers subsequently might be significant but it was not a feature that this study sought to examine.

Observation of tutors' engagement with creative dance activities during TP<sub>1</sub> provided further evidence of occasions where content was presented that seemed to be relevant to tutors' needs and directly related to the treatment of dance within the Physical Education Curriculum (Government of Ireland, 1999b). Given that most tutors had almost no experience of teaching creative dance, it was significant that throughout the treatment of this aspect of dance within the tutor programme they seemed to be able to see its relevance related to the curriculum. It was noticeable that content was closely matched to the objectives of the dance curriculum and activities were explained in light of the progression proposed within the curriculum. Field notes refer to instances where the facilitator prompted tutors to examine the objectives of the dance strand and to identify activities that they had engaged in that matched the particular objectives:

The facilitator explained to the tutors that the next series of activities would explore body awareness with an emphasis on body shapes. The tutors explored how the body can create different pictures or shapes by arranging its various parts in different ways. They explored 'Freeze Frame' (musical statues) and mirror shapes as ways of encouraging children to be aware of different shapes...They applied different levels to these movements. Partner phrases were composed exploring mirroring movement and aiming to work in unison. Pairs discussed and then created, most repeated the activity modifying sections of the phrase after they had discussed it. She developed this further to focus on contrasting shapes. Tutors responded really enthusiastically to these tasks, much discussion was involved that centred on timing of the movements when pairs of tutors were trying to work in unison. They used space well but needed to be prompted to vary levels initially (much discussion on this took place and plenty of laughter as the variation in levels provided challenges to mobility!). Tutors were then prompted by the facilitator to examine the Physical Education Curriculum (Government of Ireland, 1999b) to identify the objectives introduced at first and second class level which focused on mirroring movements, working in unison. They did this with ease. Their second task was to identify objectives that focused on children gaining an understanding of contrasting shapes (introduced at third and fourth class levels). Some tutors made a record of the activity that they had just completed with the objective 'heading', others noted where a reference to the activity was contained in the handout provided. (Field notes: 27/6/02)

Using video clips of children's responses to the same activities reinforced understanding of the match between activities and objectives of the curriculum as tutors were asked to identify instances where they could clearly see an activity that matched an objective identified from the curriculum. Examination of a tutor response to an open-ended question (QST<sub>3</sub>) where tutors were asked to comment on aspects that enhanced delivery of the tutor programme is useful in illustrating the benefit of linking with curriculum. The tutor identified a presentation on gymnastics where the facilitator was "...excellent-she had us looking up the curriculum, [identifying objectives that matched activities undertaken], and tabbing them" (TUT17), and the tutor described the activity as very worthwhile.

#### Beginning with content that was familiar.

Another aspect of facilitation, illustrated in the treatment of folk dance in particular, was the introduction of content that was familiar to the group. This element was one that had been identified from the literature when the thinking of Maslow (1972) centred on the importance of the 'safety' of the learner was discussed. One tutor identified this aspect as significant in enhancing delivery of the content:

I feel that it was correct to begin with teaching the basic content of each strand as tutors didn't feel confident about teaching all strands because of lack of knowledge. By recognising this, tutors didn't feel under pressure (QST<sub>2TUT7</sub>).

Hence, the 'new' aspect of the initial exploration of folk dance, for example was confined to the treatment of teaching methodology as the dances explored at this initial stage were generally familiar to tutors. The response of tutors to this approach as well as their levels of participation seemed to indicate a new confidence for many tutors in the area of folk dance. This was an area where some tutors had expressed a lack of confidence as they had little experience of teaching folk dance.

## Content fostering critical reflection.

While the content was clearly regarded as relevant by the tutors it was also considered important in the literature (Brookfield, 1986; Cranton, 1996) that content should be thought provoking, fostering critical reflection. The importance of particular methodologies in fostering this kind of approach will be discussed below. While the review of literature discussed various definitions of critical reflection, Cranton's statement about critical reflection formed the basis for the discussion of instances of critical reflection throughout:

It is generally agreed in the literature (Brookfield, 1987; Boud and Walker, 1991; Tennant and Pogson, 1995) that critical reflection is the key to learning from experience. Educators learn about teaching by talking about their experiences, becoming aware of the assumptions and expectations they have, questioning these assumptions, and possibly revising their perspectives. (Cranton, 1996, p. 2)

It should be remembered, however, that the concept of engaging in critical reflection was not discussed formally with the tutors. On the one hand, this avoided possible bias in the interpretation by tutors but it did lead to some uncertainty on the part of the researcher, at least initially in defining instances of critical reflection. Observation of the tutor programme was undertaken throughout with Cranton's statement on critical reflection outlined above informing my interpretation. Instances where tutors were questioning and discussing theory behind practices or issues that they had encountered during their work as teachers or as tutors were interpreted as evidence of critical reflection by tutors and recorded as field notes.

When asked to comment on this aspect of TP<sub>1</sub> a majority of tutors (88%) believed that critical reflection was encouraged. It was notable that throughout the

duration of my study none of the tutors questioned the researcher about a definition of critical reflection or at any point during interviews appeared to be in any way unsure of my questioning on this aspect of the programme. While satisfaction ratings with this element were not as high later in the programme (just 68% were satisfied after TP<sub>2</sub> and TP<sub>3</sub> that critical reflection was promoted) it was probably at least in part caused by the overload referred to by one tutor during an interview (INT<sub>2</sub>) that led to the perception among tutors that there wasn't time for reflection at this stage of the programme, at least in any formal sense undertaken with others, due to the amount of content being treated. A comment recorded by a tutor (TUT9) in responding to an open-ended question about the content of the tutor programme emphasised this point: "...more time for reflection and absorption of information would be beneficial." The issue of the effectiveness of the tutor programme in prompting critical reflection was one that tutors discussed as part of INT<sub>1</sub>. There was agreement that the programme prompted tutors to reflect on their teaching with an emphasis on being "...more mindful of the whole process of what I'm doing" (INT<sub>1</sub> MM) and this appeared to be particularly reflected in an increase in the amount of planning that tutors engaged in prior to their teaching. This aspect will be discussed further when the issue of how tutors changed their practice is considered (question two).

Throughout the programme, theoretical sessions were designed to provide a background to the practical activities in which tutors would engage and it was noteworthy that both the practical and theoretical sessions prompted frequent discussion and questioning that appeared to prompt critical reflection. During TP<sub>1</sub> a theory session on physical activity merited comment by a tutor who felt that it "was fascinating from a theoretical point of view..." because it prompted him to think why we teach physical education and the purpose of "...what we're actually doing on a given day or in a given term" (INT<sub>1</sub> BR). Following TP<sub>1</sub> and TP<sub>2</sub> tutors discussed, for example, their teaching of dance and seemed intent on clarifying how they were applying Laban Principles of Movement to their work with children. On other occasions, review sessions, organised by the Primary Curriculum Support Programme (PCSP) as part of the tutor programme to facilitate discussion among tutors about their practice, provided further evidence of critical reflection by tutors. In the view of this observer, these review sessions appeared to help considerably in providing opportunities for the group to engage in critical reflection together and were particularly important when scheduled during times when tutors were engaging with a

great deal of content. It was during these sessions that tutors questioned the purpose of activities that they were engaging in and in my view it seemed that some tutors found these sessions afforded a time for them to question their peers about issues that had arisen either during their teaching or as they facilitated the in-service.

The workshops on assessment in physical education provide further examples of sessions that seemed to prompt this type of critical reflection. The initial introductory session on assessment was deemed 'very satisfactory' or 'satisfactory' by 43% of tutors, the follow-up session was rated in these categories by 61% of respondents. From observation of the programme it seemed to me that the tasks set for the tutors during the initial session on assessment were thought provoking and the perceptions of tutors were very enlightening and appeared to be grounded in their own experience.

Perceptive comments on the realities of assessment in schools. One tutor questioned "We need to record...but how? How many of us have successfully recorded even our own observations of a child's progress? At least now we have discussed 'what' to assess. But we must be able to guide teachers on that. Then we need to guide them on ways of recording. We've a lot of work to do on that ourselves". Group discussion followed on how to encourage teachers to record, how to guide them in terms of what should be recorded. The discussion then reverted again to the 'what' of assessment...[Fieldnotes, 22/11/02]

There was a sense among the group, however, that the debate was left 'unfinished' due to time constraints and a sense of frustration was evident as the session closed. "Some tutors expressed dissatisfaction that the issue of assessment had not been 'solved'". (Fieldnotes, 22 /11/02). It seemed to me that as assessment was a very new area for debate and discussion there was a sense of anxiety surrounding it on the part of tutors and many were seeking an 'answer' in the form of a formula that could be easily implemented by the tutors and in turn by teachers. It is possible that the relatively low rating of this session was at least in part due to this failure to provide answers to the difficult area of assessment in physical education. I felt that the process of working through solutions slowly became apparent to tutors and the understanding that the onus was on the group of tutors to pioneer and pilot means of assessment was more evident when the second assessment workshop took place at a later point in the programme. Observation of the second assessment workshop during TP<sub>3</sub> indicated that tutors had gained from the first session as they debated the issue of assessment with a better understanding of what to assess and hence were able to turn their attention relatively

quickly to means of recording assessment. While the Physical Education Curriculum (Government of Ireland, 1999b) offered general guidelines on why to assess, what to assess and how to assess tutors were acutely aware of the need to engage with the issue of assessment at a much deeper level and to try to come to grips with the practicalities of assessing achievement.

During a PCSP review session on tutors' teaching of particular strands that they had been introduced to during TP<sub>1</sub> each tutor was prompted to evaluate his/her teaching of these areas. The framework suggested was loosely based on identifying the aspects that they were satisfied with and those that challenged them. There was further evidence of the success of the programme in prompting critical reflection as the tutors reported back, firstly within a group of tutors who had taught similar content and then when a group member reported back on the discussions within the group. Field notes written at this time describe the willingness with which the group shared the challenges reported by individuals and attempted to find some answers to problems posed. For example, within a discussion on orienteering tutors debated the issue raised by a tutor related to different groups of children finishing tasks at different times:

Tutors discussed how to plan orienteering activities to 'solve' the issues raised by Gemma. These concerned children finishing the course earlier than others. Some solutions were suggested: planning some outdoor challenges to be completed as indicated in the Teacher Guidelines or beginning with star orienteering where children who are slow to find controls return after each task and so complete fewer tasks. Oisin who had enlisted help from an experienced orienteerer shared his experience of this practice. [Fieldnotes: 21/11/02]

Another example of tutors discussing issues that had prompted considerable reflection as tutors taught was the discussion of the issue of multi-class teaching within athletics. My observation was that tutors came to the discussion having reflected critically on their practice and this process was encouraged and extended within the review session described. However, the time allocated to this 'reflective' process was limited, (usually about one and a half hours was set aside during a two day programme) and I felt that it merited further attention given its potential to promote further learning by tutors. As a feature of programmes of professional development where tutors are engaging in practice related to the programme and have such rich experience to inform their reflection I believe it is a very significant learning opportunity for tutors.

Another session that focused on special needs education was particularly noteworthy, as few tutors had claimed to have any particular expertise working in this area. The tutors were encouraged to participate in activities suitable for children with special needs and responded with enthusiasm to these activities. Almost all of the activities were experienced by tutors for the first time and this led to much questioning and discussion with frequent opportunities for tutors to examine materials presented. This part of the session followed an examination of a video clip of non ambulant pupils playing games which generated much discussion and progressive activities were highlighted that tutors clearly grasped. A follow-up session on teaching children with special needs was informative for tutors because a description of the NCCA Guidelines for Physical Education for children with special needs was provided as part of the input. I felt that this session during the initial stage of the tutor programme (TP<sub>1</sub>) was effective in prompting tutors to reflect on provision for children with special needs and this was especially significant given that only two tutors had indicated that they had particular experience in teaching children with special needs.

Observation of other workshops during the early stage of the tutor programme (TP<sub>1</sub>) such as those related to physical activity levels of children, illustration of progression within games teaching and use of group teaching within physical education provided evidence of much debate and discussion among tutors. This aspect of reflecting critically on the content presented and on the teaching of physical education in general was a factor that tutors frequently referred to within workshops as being valuable to them as they returned to teaching the content explored. Some interview data also shed light on the process of reflecting critically.

And I think also some of the topics of her lecture [a lecture on physical activity and children] would have come into a lot of the practical sessions as well because it made us maybe think more of...when I was doing things in the practical sessions...I found myself also thinking of some of the things she'd be saying, why I would be doing this and why I would be teaching this to a particular class or how if I was dealing with a group of teachers how I would have been informed by some of the content of her presentation (BR INT<sub>1</sub>)

The findings related to opportunity for critical reflection as part of the tutor programme suggest that the programme prompted critical reflection and this element was significant for tutors as the literature reviewed in chapter 2 supports the idea that

transformative learning (Mezirow, 1991, Cranton, 1996) leading to innovation and change is more likely to occur when learners have engaged in critical reflection. It would appear crucial then that any programme for tutors involved in facilitating programmes of professional development should prompt learners to engage in critical reflection and provide ample opportunities for it. It is difficult to state definitively what aspects of the programme prompted this level of critical reflection. In all likelihood, the methodologies employed by facilitators with the emphasis on brainstorming, active learning including group discussion and peer-guided learning combined with selection of appropriate content contributed to the success of the programme in prompting reflection. It is possible too that the PCSP policy of allocating some time for review, for example, was important in providing some time for this element of learning and it is likely that the subject co-ordinator who facilitated these sessions also contributed to the success of the process. It could be argued, however, that further attention might need to be given to the intent and method of critical reflection in other programmes of professional development.

#### Content prompting innovation and change.

Linked to this theme of promoting critical reflection was the extent to which the content prompted innovation and change. While Mezirow (1991) (referred to above) was one of the key writers on the concept of transformative learning leading to change, the concept of innovation and change has been identified by Joyce and Showers (1988), Pasch and Harberts (1992) and others as significant in any programme for adult learners. Following TP<sub>1</sub> a majority of tutors (96%) were satisfied that the programme prompted them to innovate and change and ratings remained almost as high (85%) after TP<sub>2</sub> and TP<sub>3</sub>. Interview data provided insights into what teachers defined as innovation and change. One tutor described his engagement with the programme by stating that he was involved "...in a continuous process of change" (INT<sub>1</sub> BR) while another stated that he was teaching "...strands of the PE curriculum that I wouldn't really have ventured into before and I suppose that has been the most exciting element of it for me is the new areas that it has opened up for me" (INT<sub>1</sub> MJ).

I'm reflecting all the time and adapting and changing and it does shake you out of doing the same old thing all the time, the 'old reliables', you go out of the comfort zone, I mean I've started doing the dance now...(INT<sub>1</sub> MJ).

The overall impression gleaned from tutors' reports of reflecting critically on their practice indicated a willingness to share knowledge and information (many of the discussions were interspersed with tutors' suggestions of ways of improving practice further) and a keen interest in innovation in aspects of their teaching. Evidence from observation of the tutors engaged in teaching physical education in their own school contexts indicated that they had implemented change both in content treated and in teaching methods used. This will be discussed further below when the issue of teachers changing their practice is discussed. It is notable that these experienced teachers needed a relatively intense exposure to the strands to even begin teaching them for the first time. This has implications for our expectations for less experienced or less confident teachers. This issue will be discussed further in chapter 8.

#### Methodologies as Supports for Learning

While issues concerned with the content treated have been discussed above, many issues concerned with how the programme was facilitated were investigated throughout the study. It will be recalled from the literature review that important elements related to methodologies employed in programme implementation were identified (Knowles et al., 1998; Brookfield, 1986; Cranton, 1996; Caffarella, 1998). Data from questionnaires (QST<sub>1</sub>, QST<sub>2</sub>, and QST<sub>3</sub>) as well as data gathered from interviews (INT<sub>1</sub>, INT<sub>2</sub> and INT<sub>3</sub>) were used to provide evidence of tutor responses to methodologies used in the tutor programme. Data gathered from QST<sub>1</sub> revealed that there was generally a very high level of satisfaction with the elements concerned with implementation of the first phase of the tutor programme (TP<sub>1</sub>) outlined above (see Appendix M). Interviews conducted after TP<sub>1</sub> provided further evidence of the tutors' views on these elements. Investigation of these elements continued throughout the second and final phases of the programme and the findings related to these elements are presented under a number of sub-headings: the promotion of active learning including group discussion and peer-guided learning, dialogue about the programme, the promotion of reading and examination of materials, learning styles and discovery learning and facilitation and facilitators. When discussing the various methodologies employed throughout the programme it should be borne in mind, however, that it is likely that some of these processes led to the promotion of critical reflection discussed above in the context of aspects of content fostering critical reflection. In fact, the discussion of the process of critical reflection could probably be as appropriately

situated within the discussion of methodologies that promoted learning by tutors. In this context, the process of reflecting critically on content could be considered as a key methodology in promoting learning. Finally, some issues are discussed that were raised by tutors themselves during the process of data collection.

#### The promotion of active learning.

Active learning is generally understood to refer to the process whereby learners are actively engaged in the learning process. Both the literature related to continuing professional development and to adult learning suggest that learning as part of continuing professional development should be both active and practical. However, within the physical education tutor programme 'active' could refer in a narrower sense to being active by engaging in physical activities. Clarification of this would have been helpful for interpretation of questionnaire data but throughout the interviews conducted and on examination of responses to open-ended questions it seemed that tutors' interpretation was based on a definition of active learning that was concerned with being physically active and engaging in physical activities related to those that were proposed in the Physical Education Curriculum (Government of Ireland, 1999b).

From the beginning of their engagement with the tutor programme, tutors expressed satisfaction that active learning was a key feature of the programme (all tutors rated this element as very satisfactory or satisfactory) and these high levels of satisfaction were maintained throughout. Tutors welcomed the 'practical' involvement that underpinned most of the sessions, (practical involvement in this discussion is used to denote the physical activity that is implicit in so many activities within Physical Education). The practical nature of the content sessions was "...one of the most appealing aspects of the whole couple of weeks..." (INT<sub>1</sub> MJ). When asked about the level of active learning one tutor commented (INT<sub>1</sub>):

Well...to be actively involved in learning you know through actual participating yourself (sic) is where you'll learn the most and then you'll be able to adapt from that. That's what I found from the in-service we were given to be the most beneficial. When you can read, you know the way you can read and read, but it still doesn't mean as much or even in an oral presentation you still can't take as much from it without being actively involved yourself...for me you

know the lectures are one thing and they're great to go back to but it was definitely being actively involved. (INT<sub>1</sub> LM).

Another tutor observed that the tutor programme "...was very much to do with active participation" and "...really that's how I remember it...I think it was very effective in my own learning." (INT<sub>1</sub> GB). Observation of the initial presentation on games as part of the tutor programme suggested that as tutors engaged with the content their learning was focused not just on the content itself but on concepts such as progression and the use of various methodologies, concepts that are highlighted as key factors in the Physical Education Teacher Guidelines (Government of Ireland, 1999, p. 16, p. 34). Progression, in this instance, refers to the selection and development of skills by children that are carefully matched to their stage of development. Fieldnotes (28/6/02) related to this particular games module record an instance of discussion related to progression in the development of games skills:

Another very *active* session emphasising tactics such as use of space, defence and attack in the context of the small-sided game (3 v 1, 4 v 2 etc.) followed. Tutors explored these games using various equipment e.g. ball, stick and ball. Another very lively group *discussion* took place on the introduction of small-sided games with trainers debating the stages at which children could confidently explore these games as well as the application of these games to a wide variety of sports. There was consensus on the necessity for introducing these small-sided games before children were exposed to more formal games such as 5v5 basketball or hockey. Some discussion followed on how to help teachers manage different groups playing these games simultaneously. [Fieldnotes 28/6/02]

With regard to methodologies illustrated, as physical education teaching had been dominated by direct teaching (as discussed in chapter 3) it was important that tutors were engaging with a variety of methodologies through their active involvement. Within the module, the facilitator was modelling frequently the use of guided discovery through questioning and the use of group work within games.

Observation of the programme throughout TP<sub>1</sub>, TP<sub>2</sub> and TP<sub>3</sub> showed that tutors were being prompted to engage in many sessions that demanded high levels of physical activity and within theory sessions being challenged to debate and discuss issues that related to the content being explored, hence they were engaging in various kinds of active learning. One tutor, however, stressed the need for balance between being physically active and those times when "...we needed to sit back and look at issues." (INT<sub>1</sub> MJ). This need for balance was expressed also as a response to an open-ended

question in QST<sub>1</sub>(TUT9) when a tutor stated that "...more time for reflection and absorption of information would be beneficial". This is a key point as the development of competence in the activities themselves is one part of the skill set required by the teachers to become effective tutors. Another part is the ability to present the content to teachers in such a way that they too could develop this competence. The process of "sitting back and looking" at issues should form the link to ensure this can happen. Three further examples of active learning experienced later in the programme than those identified above were: when tutors were engaged in activities using modifications that would help adapt activities for children with special needs, when they participated in a workshop that provided tutors with a series of outdoor challenges to be completed and when they explored issues surrounding use of equipment in physical education. The latter example involved tutors discussing rationale for use of equipment, which included exploration of appropriate equipment to meet the needs of a wide range of abilities of children.

Within the gymnastics strand, however, the researcher noted while observing TP<sub>1</sub> that some tutors were reluctant to engage fully with the content during the initial section of the tutor programme. This represented a rare occasion when tutors were somewhat daunted by the demands of active learning in the sense of physical activity. It was clear from the biographical information collected that a significant number of tutors had little experience of teaching gymnastics and this could account for the fact that some tutors were somewhat daunted by the tasks set. In contrast, although few had experience of the activities explored within outdoor and adventure activities (the data gathered from QST<sub>1</sub> indicated that half of the tutors had not taught this area previously) tutors displayed a very positive attitude to undertaking the tasks involved. It was more likely, therefore, that their reluctance to engage with some of the content of the gymnastics session was due to their personal skill level with reference to performance of specific gymnastics skills. Traditionally, very few schools offered a gymnastics programme and as well as having little experience of teaching gymnastics tutors may also have rarely engaged in gymnastics as part of their own school experience. It was significant, however, that as the programme evolved progress was made with regard to the treatment of gymnastics through practical engagement and higher levels of confidence in teaching the gymnastics strand (81% of tutors reported that they were confident to teach gymnastics after engagement with gymnastics over two phases of the tutor programme) were recorded. It is difficult to gauge if competence levels had

increased accordingly. Further work was planned at a later stage of the programme as it wasn't one of the strands selected for treatment in the initial stage of the in-service programme. It should be pointed out, however, that the Physical Education Curriculum (Government of Ireland, 1999b) does not demand mastery of a wide range of specific gymnastics skills. The emphasis is on producing quality movement based on principles of movement that allow the child to interpret and perform tasks without the need to master more difficult skills. This emphasis on the 'manageability' of gymnastics, which was a focus of the treatment of gymnastics in the tutor programme, possibly influenced the confidence levels of tutors expressed in their questionnaire responses.

Finally, a vignette is presented below (Table 17) to illustrate the implementation of the tutor programme, with a particular emphasis on the active involvement by tutors in their learning. (This element is indicated in Table 17 by the use of italicized print). Discussion of the section of the programme illustrated is then undertaken with the aim of drawing out implications for practice in continuing professional development for tutors who will in turn be facilitating programmes of in-service for teachers.

# Table 17 An Illustration of Active Learning

#### June 25th 2002 Tuesday morning: Athletics (1)

The classroom-based presentation on athletics began with an introduction to what the tutor programme for trainers should promote. Reflecting the principles of adult learning the programme would present opportunities for active learning and group discussion for example and should meet the needs of individual trainers in their own particular teaching context. The programme should also prompt trainers to reflect, adapt and innovate.

The classroom based presentation on the aims, rationale and content of the athletics strand of the curriculum allowed for some *brainstorming* by trainers of the aims of athletics. Trainers had no difficulty in outlining what athletics might contribute to the development of the child. Emphasis in the responses was on linking athletics with the primary aims of the Physical Education Curriculum (Government of Ireland, 1999b).

Trainers actively engaged in a selection of running (sprinting) and throwing activities in the gym. Throwing activities explored were all related to javelin practices (shot put and discus activities remain to be explored). These activities prompted some discussion focussing on class organisation and suitability for different age groups. The tutors were prompted to focus on specific teaching points for activities and some tutors displayed knowledge of many of the key points. Others required much practice and possibly need further sessions to ensure that they have a full grasp of teaching points and progression in athletics.

June 25th 2002 Tuesday afternoon: Athletics (2)

This session focused on further running activities such as hurdling and relays as well as jumping activities. All of the session involved active participation by trainers. There was some opportunity for discussion and questioning.

The technique of relay running for example prompted very lively *debate* with trainers offering different opinions on how it might be presented as well as much *peer-guided learning*. Trainers seemed to gain an understanding of the difference between the downsweep and upsweep techniques of baton passing. A *video* analysis of each technique appeared to help with the differentiation between techniques. Hurdling was explored with much enthusiasm by trainers and the progression involved in teaching it was grasped by the group.

June 26<sup>th</sup> 2002 Wednesday morning: Athletics (3)

This session focused on continuous running activities involving active participation by trainers. Groups of tutors were presented with sample activities (outside on track) and were asked to organise and present the activities to their peers. Much peer-guided learning occurred as trainers presented content and debated the tasks undertaken. The trainers were very creative in their interpretation of the tasks and made very good use of the school location where they were working. They debated adaptation of tasks and showed a good understanding of the activities.

A classroom-based session focused on planning a school programme of athletics and on exploration of teaching approaches for athletics with a focus on group teaching. A presentation on assessment of athletics was followed by a *group task* where trainers were presented with a case study of pupil self-assessment and teacher-designed tasks related to a hurdling activity. Tutors were challenged to devise similar methods of recording achievement related to javelin and long jump activities. This exploration of assessment succeeded in opening the debate on why athletics should be assessed, what should be assessed and what forms of assessment would be most useful. However, it would seem that trainers would welcome more analysis of assessment. This was followed by a short presentation on evaluating an athletics programme

The session described above represents a typical session that formed part of the tutor programme. While this module of the programme was allocated 10 hours, there was a predominance of active learning by tutors, with the presentation by the facilitator using a lecture format that included use of video material- using less than ten percent of the time allocated to the topic. Tutor activities included completion of group tasks, discussion and debate, a brainstorming activity and some peer-guided learning. These activities frequently involved tutors completing tasks involving physical activity of some kind. Discussion centred on issues such as organizational points or elements related to facilities and equipment. There was some debate too around the aspects that children enjoyed most with some tutors able to recount from their own experience what they thought children enjoyed most about athletics. For some tutors this would have been their first exposure to a broad programme of running, jumping and throwing so this provided them with some aspects to consider as they set out to implement it for the first time. A key message portrayed was the importance of providing lessons that incorporated aspects of running, jumping and throwing. This module was typical of those designed for other strands of the curriculum such as games, outdoor adventure activities and dance. The evaluation of modules such as this which emphasise active learning by tutors (all tutors indicated that they thought it was very satisfactory or satisfactory) illustrate how important this element is in the design of programmes of learning in physical education. It is likely that programmes in areas other than physical education would also be enhanced by this emphasis.

#### Group discussion and peer-guided learning.

A closer examination of elements of active learning prompts scrutiny of more specific elements that are highlighted in the literature as important elements of active learning. The provision for group discussion and the promotion of peer-guided learning were identified as important facets of programme design. The concepts are linked in this discussion because interviews revealed that tutors rated the provision of opportunities for group discussion very highly in promoting peer-guided learning. In describing how frequently presenters allowed tutors to explain their practices in teaching aspects of physical education, one tutor pointed out how it meant that tutors were then in effect tutoring their peers. Another tutor commented that the process of teasing out issues and allowing conflicting views to emerge was

"...excellent...wonderful and every facilitator has facilitated that" (INT<sub>1</sub> MJ). A majority of tutors (83%) reported high levels of satisfaction with the opportunities that the first section of the programme presented for promoting group discussion although this dropped to 69% after TP<sub>2</sub> and TP<sub>3</sub>. This could have been related to the emphasis on facilitating a wide range of content during this second phase and perhaps the amount of content militated against the provision of opportunities for discussion.

Satisfaction with the encouragement of peer-guided learning remained high throughout the programme. One tutor commented: "I feel I learned from my peers, we were given a lot of opportunity...you know to come up with ideas from our experience...and I think that was very valuable in our own learning from each other." (INT1 GB). Another, while acknowledging "...we had a lot of very useful discussion..." and "...resolved certain teaching points and certain issues by discussing it..." cautioned that at times the tutor or facilitator needed to keep a "tight reign" on discussions or the discussion can "...take a life of its own and go off on a tangent". (INT1 MM). The discussions appeared to prompt further discussion that a number of tutors referred to which took place "...informally within the group later" (INT1 BR) or prior to other lectures, discussions that prompted tutors with particular expertise to share experiences that were beneficial to other tutors. This aspect of informal peer learning was commented on by other tutors who claimed that peer learning was happening not just during classroom time but going on "...throughout the day" and was referred to by one tutor as "...meeting of minds" (INT1 MM).

Observation by the researcher of the tutors engaging with TP<sub>1</sub> supported their view that they had engaged in valuable peer-guided learning. This was particularly noticeable within work on the games strand where many of the group had considerable expertise. At a later stage of the programme, the Design Team scheduled a session on games, which provided a number of tutors with an opportunity to present parts of a games module related to a game that they had taught extensively. For example, one tutor presented tag rugby activities while another followed with hurling activities and a group of tutors presented a session focussing on gaelic football activities. Another less formal but noticeable aspect of peer-guided learning throughout the programme was when tutors with particular expertise in athletics were able to join with the facilitator in

teaching aspects of hurdling technique. Field notes contain references to this valuable input:

The group of tutors broke into two smaller groups, the facilitator guided one group while Shane and Jim (tutors) used their expertise in teaching and competing in hurdling events to guide another group, many of whom had no experience in teaching hurdling to children. This really helped consolidate the learning...they could actually provide individual feedback to each tutor on their learning". [Fieldnotes 25/6/02]

One tutor described this incident as "...just one example of how we are learning from each other." (INT<sub>1</sub>, MM). In contrast, where creative dance was being treated the content was very much guided by the facilitator with little real input from the group of tutors.

The emphasis in the final section of the programme (TP<sub>4</sub>) was on facilitation of some content relevant to presentation of the first day of the in-service programme for tutors but mainly on allowing time for planning among tutors of the content to be mediated and identification of methodologies and strategies for organisation. Observation of this planning phase revealed that there were many opportunities for groups to work together, featuring many fine examples of debate among groups about presentation of aspects of the content. One particular example illustrates how important this opportunity for discussion was. A planning session focused on planning for facilitating games to teachers. Four different groups worked on the task and each group reported back to the group on their plan. Each group had treated content and methodology involved in presentation and while there were significant differences in aspects that they had chosen to cover, common themes emerged. From observation of the programme, this particular debate (undertaken at the beginning of TP<sub>4</sub>) appeared to provide reassurance to the group that they would have further opportunities like this one to plan what they were going to facilitate and how they would undertake this. The group discussion was the beginning of the process that became so important to the group: that process of having ownership over the programme that they would finally facilitate. The following vignette provides an example of how one group engaged in the task described above. It is significant that the programme allowed for time to engage in such detailed discussion.

I joined a group of four trainers for the task set: 'design an outline of the presentation on games that might form part of the in-service programme for teachers'. From the outset, there was agreement that the introduction to the session should involve activity in the physical sense, leaving the 'formal' presentation until the end of the session. Linda argued strongly that teachers would welcome activity 'early' in this process. Matt and Tom agreed but I questioned the 'gap' in teachers' understanding that might be filled by using a short presentation at the outset...indicating what the emphases in the games module might be. Shane pointed out that teachers were a bit tired of 'powerpoint' presentations and this session would probably be preceded by an introduction using Powerpoint. Group agreed that advantage of engaging in activity early outweighed this disadvantage. There was much debate around what games would be selected to 'break the ice' for teachers but that could also be used to illustrate an aspect of ball handling. Many games were suggested e.g. name game, busy bee, free-space etc. The activity levels for teachers were an important consideration i.e. would some prove too demanding 'energy-wise' for the less active. Matt suggested balance...select some low and some high-energy games. Need to balance this with message of developing fitness using these fun games. Little attention given to the stretching element at this point, selection of stretches can be re-visited. Tom suggested approaching the concept of progression by looking at individual/pair and groupwork as one element while practices were then selected to match this progression. (I wondered at this point if the practices that were selected were a little unimaginative? Nevertheless, this was balanced with the need for them being easy to grasp, I struggled to decide which was more important here...) But there was scope to re-visit these. The group discussed the concept of progression and agreed it could be better illustrated by selecting more advanced practices towards the end of the session. Some discussion followed on the merits of introducing station teaching. Matt suggested that it would be important to emphasise the variety of activities that could be used to illustrate this method. Linda questioned whether we would have time to spend on explaining organisational issues. I suggested that this is a feature that teachers will be more comfortable with anyway...they tend to be good on organisational concepts but maybe weaker on content aspects...Discussion finished by debating the allocation of time to each element with a Powerpoint presentation being proposed to summarise key considerations. All attention was directed to curriculum and guidelines 'to fish out' what sections would best illustrate important considerations re: games. Decided on p. 10 of teacher guidelines. Also it was considered important to outline aims and objectives related to a selection of class levels. We were curious about suggestions from other groups...would they differ significantly. So we finished by brainstorming a rationale for each of the components we had suggested. Shane led that process. I sensed that the enthusiasm of the group was really positive, there was a real sense that they had embarked on real planning for the coming year. [Fieldnotes: 22/3/04]

Debates such as this became the norm for the tutors in the planning process where group discussion and peer-guided learning were clearly evident. There were several more instances of this type of planning during TP<sub>4</sub> where the focus remained on allowing groups of tutors to discuss presentation of the components of the first day of the inservice programme for teachers.

The process of peer-guided learning also supported the principle of adult learning related to the recognition of the wealth of experience that adults bring to their learning discussed in the review of literature (Merriam and Caffarella, 1991; Knowles et al., 1998). The instances of peer-guided learning described above enabled tutors to share this experience while guiding others in their learning. Evidence from this study supports the belief that group discussion and peer-guided learning as facets of the broader definition of active learning have a significant impact on the effectiveness of tutor programmes in physical education. While the component of learning through physical activity is probably quite unique to physical education the broader interpretation of active learning including group discussion and peer-guided learning would be applicable in a more general sense to programmes of learning related to any curriculum subject.

Dialogue about the programme.

Brookfield's (1986) model of programme planning emphasised engaging in dialogue with the learners about the aims of any programme of learning.

Programs that are based on learner's characteristics and engage learners in a dialogue about content, aims, and methods are likely to provide settings for meaningful learning. In contrast, programs in which organizational and institutional needs are the dominant ones in giving form and function to the program and in which learners' aspirations and experiences are not considered are likely to be much less successful in prompting personally significant learning (Brookfield, p. 258).

Somewhat lower satisfaction ratings were recorded related to the opportunities that the programme provided for dialogue about the aims of the programme and dialogue about the programme itself (at different stages of the programme 71% and 58% rated it as very satisfactory or satisfactory) than had been recorded for other aspects of the programme. At the outset of the programme, dialogue about aims of the programme, although desirable, was not feasible with the group of tutors as the nature

of the recruitment process meant that tutors were recruited just one month before the commencement of TP<sub>1</sub>. Hence, the programme presented could not encompass any of the specific aspects that tutors might have raised if given the opportunity. Observation of the programme indicated that there were some occasions where tutors were engaged in dialogue about aspects of the programme. For example, tutors were generally asked by the co-ordinator from the Primary Curriculum Support Programme (PCSP) to identify their future training needs during the closing session of a section of the programme. The tutors appeared to welcome this aspect of involvement in the decision making process as the Design Team appointed by the PCSP then took account of these needs in planning for future input. These opportunities to become aware of the needs identified by the tutors helped the Design Team plan for future learning but this study can only prompt questioning on how the impact of engaging learners in dialogue about the programme before engagement with it might enhance the programme.

## The promotion of reading and examination of materials.

One of the principles of adult learning proposed by Knowles et al. (1998) that was discussed in the review of literature (chapter 2) was the concept of adults being responsible for their own decisions and becoming self-directed learners (Brookfield, 1986; Candy, 1991; Merriam, 1994). An implication of this principle for the tutor programme that forms the basis for this study was the necessity to design experiences that help adults to make this transition from dependent to self-directing learners. The promotion of reading and examination of materials are important experiences that programmes of learning need to embrace as elements of promoting the process of adults becoming self-directed learners. During the early stages of the tutor programme time was not set aside for discussion of reading or examination of materials so it was not surprising that the finding of QST<sub>2</sub> indicated that over half of the tutors found this element of the programme relatively unsatisfactory. It was disappointing however that this figure remained low after a designated session on examination of materials had been presented as part of the programme. Furthermore, some reading had been assigned to tutors outside of their contact time with the programme. Yet, only 45% (QST<sub>3</sub>) of tutors claimed they were very satisfied or satisfied that this had been encouraged through the programme so the interpretation of the questionnaire responses here might lead one to conclude that the tutors were referring to the fact that within the programme

schedule itself time had not been allocated to reading or discussion of readings. The findings of this study, reflecting the findings of Ward and O'Sullivan (1998) and Sugrue et al. (2001) discussed in chapter 3, indicate that this was an element that was considered relatively unsatisfactory as an element of the tutor programme and merits specific attention in planning future programmes if learners are to be supported in becoming self-directed. A concrete way of promoting an emphasis on reading would be to schedule time for discussion of reading within the programme as well as expanding the practice of assigning reading outside of the contact time with the programme.

### Learning styles and discovery learning.

Learning styles or different approaches or ways of learning were discussed in chapter 2. The process of learning described by Kolb (1984) and Solomon and Felder (1992) involved classification of learners and identification of dimensions of learning respectively. The examination of instructional and learning preferences by Dunn et al. (1999) and of cognitive factors influencing learning (Riding and Rayner, 1998) were among the elements discussed. However, the research support for learning styles is not conclusive and Caffarella's (1998) emphasis on recognising that differences exist among learners and need to be accommodated in programmes of learning became a guiding principle for the design of the tutor programme. This study sought to examine if tutors believed that different learning styles were accommodated throughout the learning experience. In practice, however, it was difficult to ensure that this principle was applied. Consultation with each of the different facilitators focused primarily on content issues and methodologies. However, in practice, it was difficult for some facilitators to adjust presentation styles to accommodate different learning styles. The views of the tutors on this issue can help to emphasise the importance of this factor in the development of future programmes. While initially a majority of tutors (83%) reported that the tutor programme was very satisfactory or satisfactory in accommodating different learning styles there was a drop in the satisfaction ratings later in the programme (after TP<sub>2</sub> and TP<sub>3</sub>) where 68% (QST<sub>3</sub>) rated this aspect satisfactory. Tutors identified meeting individual needs as an important element of the debate around different learning styles that took place in an interview (INT<sub>2</sub>) and there appeared to be some concern that this was an element that did not receive sufficient emphasis. It was probably this lack of focus on individual differentiation that prompted tutors to respond less positively in the questionnaire at this stage. In practice, it would be necessary to offer facilitators considerable guidance on this facet of their work to ensure that recognition of individual difference could be more strongly emphasised.

On closer examination of the interview data (INT<sub>2</sub>) the tutors' comments about the need to differentiate some content to 'match' particular strengths or weaknesses of tutors rather than pitching content at whole group level throughout highlighted an element of the facilitation of the programme that merits some discussion. One tutor pointed to the fact that this was an approach that was being recommended for use with children and yet was not being applied within the tutor programme itself and so was not part of his own learning. The concept of taking a group of tutors with particular needs in an area of the curriculum and paying special attention to these needs had not been applied; all tutors were being taught as a whole group and this aspect of the programme "...doesn't really do anything for your confidence..." (INT2 OL). Another tutor supported the suggested practice of differentiating within the group in order "...to have our individual needs maybe met more". (INT<sub>2</sub> MM). Therefore, with regard to the accommodation of different learning styles as part of the tutor programme, it would appear that some differentiation as suggested by certain tutors interviewed would have enhanced learning by many of the tutors and would have led to greater levels of satisfaction with this element of the programme. Furthermore, it would have meant that differentiation as a key consideration outlined within the Physical Education Curriculum (Government of Ireland, 1999b) would have been modelled in a more genuine way if it had been part of tutors' own experience. This is a key point for tutors and in turn, teachers, who will be constantly challenged by the issues of differentiation, where class size and short duration of lessons present particular difficulties for differentiating activities.

In reviewing teaching in an adult context, the work of Bruner (1961, 1966) and Bandura (1963) in developing concepts that had significant impact on teaching was discussed. It was the work of Bruner that emphasised the inquiry method in teaching with its focus on students engaging in acts of discovery which he argued would increase the likelihood of nurturing the willingness to learn. This study sought to establish tutors' views on the fostering of discovery learning throughout the tutor programme. Observation of the programme also helped to ascertain the extent to which

discovery learning was a feature of the programme. This element of the programme was rated highly throughout the programme by the tutors with over 80% consistently satisfied that this was a successful element of the tutor programme. Some activities that had been planned to promote this type of learning were undertaken. A particular short module promoting the creation of simple games by tutors (as part of TP<sub>3</sub>) and other occasions during the dance module provided some evidence that tutors were engaging in discovery learning. The emphasis in these activities was on providing tutors with an experience of discovery learning where the facilitator provided the structure for them to create their own game or dance. The following excerpt from fieldnotes provides some evidence of the nature of this learning

Tutors explored working in pairs on strong movements (pushing hands, pulling partner towards you, back against back) and light movements (using a bubble to go under, over, around). They then moved to music that alternated these two qualities. Variety was added to the movement by challenging dancers to find different actions, pathways, directions and shapes. They explored sudden and sustained movement using a balloon. (The air is released smoothly and suddenly requiring an appropriate response by dancers). Tutors were then prompted to create their own dance incorporating strong and light movements. [Fieldnotes: 27/6/02]

Observation of all phases of the tutor programme would suggest, however, that opportunities for further exploration of this type of learning were rare. Yet, tutors rated this aspect of the programme highly. However, as the emphasis in sessions was on mediating a considerable amount of content, my observation of the programme over time would indicate that there was limited time available to foster discovery learning which by its nature would need considerable time allocation. Time constraints were influential in limiting the time available for this type of learning but perhaps this suggests that if time were to be devoted to learning of this nature that it might be more effective in achieving learning outcomes than allocating time to other aspects of the programme.

#### Facilitation and facilitators.

Early work by Bandura (1963) developed modelling as a concept of teaching which placed emphasis on the importance of the facilitator of learning. Rogers (1969) defined the role of the teacher as one of facilitator of learning. Tough (1979) outlined characteristics of what he termed as 'helpers' in the process of learning. Cranton (1996)

was another writer who identified the importance of facilitators acting as models of effective presentation and she showed how teachers and facilitators must be understood as adults engaged in transformative learning to prompt other learners to transform their way of thinking. Due to the sensitive nature of the issue of commenting on styles of individual facilitators the questionnaires did not focus on this element. The questioning in the interviews specifically focused on identification of aspects of facilitation that tutors might have been particularly influenced by rather than discussion of particular facilitators' practice. This sensitivity was particularly relevant as in some cases members of the Design Team, including this researcher were involved in facilitation. In other cases, the tutors themselves were facilitators of learning.

Analysis of interview data, however, indicated that facilitation was an area that tutors considered significant. Given the importance attached to the role of facilitators in the literature, this was not surprising. Many tutors commented on the work of facilitators in the open-ended questions in QST<sub>1</sub> referring to the "...energy, enthusiasm and commitment of tutors (facilitators)" (TUT24), the "...professionalism of the presenters: knowledgeable, well prepared, pleasant and helpful" (TITTI7) and the "expertise" of tutors (TUT19). These comments prompted questions in subsequent interviews with the tutors on facilitation and on facilitators that they had been exposed to throughout the programme and this discussion provided some interesting insights. One tutor expressed a preference for the aspects of facilitation that were "...discussion based and bringing the knowledge from the people in the group, rather than talking to them all the time" (INT<sub>2</sub>BR). Another tutor didn't concur with this opinion. He felt that direct teaching was more important and he was "...looking for more direct teaching in the strands I wouldn't have been comfortable with like the dance and gymnastics...I suppose when I think back on the dance in ways I would have preferred, more sort of 'this is the way you should do something', rather than 'what way do you think you could?' (INT<sub>1</sub> OL). Another tutor indicated that he had learned effectively from the presentations and identified a number of factors that contributed to this for example the fact that sessions were facilitated by people who work with children operating "...at the chalkface" (INT<sub>1</sub> MJ) and who used a wide variety of methods of presentation and content. He pointed to particular aspects of their teaching approaches as being significant. For example, he explained that the direct teaching used early in the programme followed then by using a task-based approach was an effective element of presentation by facilitators. These aspects contributed to his being enthused by what he

had done on the programme. Others commented on how the facilitators offered them much practical guidance on managing children in the physical education setting and significantly how they might facilitate in-service with teachers. One tutor reflecting on his impending facilitation of in-service commented on the importance of using an "...introduction that would be probably as brief as possible so that you could get people involved in whatever strand we were going to cover but into an activity fairly quickly" (INT<sub>1</sub>OL). He said that identification of this course of action was based on his reflection on effective facilitation as modelled by the facilitators to whose work he had been exposed. The importance of the role of the facilitator as outlined in the literature has been supported by the evidence gathered through this study even though it was an aspect that the study set out to investigate in a narrow sense by use of interview only for the reasons outlined above. It was the tutors themselves who emphasised the importance of this element by incorporating it into some of their replies to open-ended questions.

#### Two emergent issues.

Throughout the process of data gathering and analysis two clear issues that could contribute to enhanced learning in a tutor programme were raised by the tutors themselves. Firstly, a concern emerged from engagement with the programme related to the amount of content that tutors were experiencing at each stage of the tutor programme. Tutors interviewed felt that there was a sense of overload and perhaps the quality of the content was lessened as the tutors tried to 'cover' so many different aspects. This issue has been referred to above in the discussion of the time constraints within the programme. One tutor stated "The problem we have is that we have been hit with a huge amount of content" (INT<sub>2</sub> MJ) while another tutor, acknowledging the amount that he learned from workshops and from other people, stated "...at times we've tried to cover too much and at the end of some weeks like by the Friday I'm just like a dead duck!" (INT<sub>2</sub> MM). He felt the need for focusing on less content and striving for increased emphasis on quality. Another tutor (TUT9) referred to the "...danger of missing many salient points or techniques due to information overload" when responding to an open-ended question (QST<sub>2</sub>) about the content of the programme. The views of tutors about overload of content and the need for more consolidation of existing content treated would suggest that this is an issue that merits close attention in programmes of learning and may indicate that the emphasis on treating many aspects of content at the expense of examining some in more depth may be misguided. This represented a salient

point for tutors themselves as they attempted to plan to introduce teachers to six strands over the course of two days. It probably succeeded in alerting them to the problem of overload as they planned the in-service programme.

Secondly, as the facilitation of TP<sub>4</sub> continued in the period immediately prior to facilitation of the in-service programme to teachers, the focus was primarily on planning the sessions that would be presented to teachers. There was only a short time devoted to facilitation skills and this phase of the tutor programme was probably the most opportune time to focus on facilitation as the tutors were about to embark on facilitation of in-service programmes. Many of the tutors had indicated that they didn't have experience of facilitation of adult learning in the first questionnaire (QST<sub>1</sub>). Data gathered from open-ended questions in QST<sub>5</sub> revealed that some tutors believed that this was an area that required further treatment. One tutor (TUT14) described the treatment of facilitation skills as "...a bit woolly – no opportunities to practice skills and then get tips on how to improve. Very generic presentation (sic)." Another tutor referred to the treatment of facilitation skills as "...sadly lacking-almost no opportunity to watch and learn from wealth of styles within [the] group". (TUT2) Other tutors, however, commented on the facilitation workshop as worthwhile in terms of "...encouraging trainers own style of delivery" (TUT7) and as "motivating" (TUT5) and "excellent" (TUT24) (TUT25). Most tutors who suggested that an aspect of facilitation merited more treatment highlighted the need for individuals within the group to have the opportunity to present and receive feedback on their facilitation skills. Observation of this aspect of the programme by the researcher while acknowledging the useful guidance provided on general aspects of facilitation, raised questions about the lack of specific guidance provided to tutors on facilitating learning by teachers that would involve teachers engaging with physical activity. For example, there was no advice offered on prompting adults to engage in activities that they might have perceived to involve high levels of physical skill so that they would benefit from the programme in a more real way. There was little guidance or debate on working in large spaces, organisation of equipment to facilitate learning or communicating to different kinds of learners.

The expertise of many of the tutors in some of these areas appeared not to be utilized. Many tutors lamented the fact that opportunities were lost to learn about

facilitation when tutors themselves were not provided with opportunities to facilitate content to each other and they constantly identified such opportunities as praiseworthy: "Trainers giving a delivery on specific area very worthwhile. More experiences like this the better." (QST<sub>3</sub>, <sub>TUT21</sub>). The review of literature involved discussion of the role of facilitators and facilitation skills including the work of Rogers (1969), Tough (1979) and Cranton (1996). The importance of the role of the facilitator was emphasized throughout the literature. There is some evidence from this study that there was not enough consideration of this aspect of the work of tutors especially the particular work of facilitation of programmes of physical education.

# Conclusion Regarding Question 1: Key Planned and Emergent Factors

It would appear then that there were some key factors outlined in the review of literature that were most significant in the implementation of the tutor programme: (a) the content was relevant and prompted critical reflection, innovation and change, (b) the methodologies employed in the programme that were most successful were those that promoted active learning including group discussion and peer-guided learning, (c) the facilitators although employing a range of different styles of presentation modelled effective facilitation. Tutors identified two further factors discussed above that might contribute to further enhancement of learning within a tutor programme: avoiding overload of content and providing further treatment of facilitation skills given the work that they were to undertake in facilitating a national programme of in-service. This lack of balance between ensuring that tutors taught physical education better and tutors' competency to facilitate an in-service programme for teachers could be identified as a significant limitation in the programme that tutors experienced given the importance of good facilitation skills as evidenced in the literature. Nevertheless, there was some justification for emphasising the teaching element of their experience in order that they could have experienced all the elements that they would be concerned with as facilitators of an in-service programme. This issue will be discussed next in the context of the success of the programme in helping teachers change the way they taught physical education.

Considering the background of the teachers selected as tutors it was clear that their lack of expertise in areas such as gymnastics and dance in particular pointed towards the importance of providing them with opportunities to benefit from teaching these elements in their own school context before they would attempt to facilitate the in-service programme. Their learning during this period had the potential to constitute a significant element of their development as tutors. Hence, this study attempted to identify if in fact they did benefit from this extended opportunity to teach as they engaged with the tutor programme. In this section data pertaining to the tutors' teaching of physical education are analysed. The section is organised around eight themes that formed lines of enquiry for the research reported in this study. Some of these themes were identified within the Physical Education Teacher Guidelines (Government of Ireland, 1999c) as key issues in teaching physical education: planning for physical education, expanding programmes of physical education and trying new teaching approaches. Another theme focused on the supports for learning used by tutors. This was an area investigated by the researcher in order to identify supports that might be developed to help tutors as part of the programme but also after completion of the programme. The promotion of collaborative learning discussed in the review of literature prompted development of another theme: influencing colleagues. Further themes emerged from the data gathered from tutors: thinking about children's learning, using the support of colleagues and changing attitude towards the teaching of physical education. All the data were gathered by using questionnaires (QST<sub>2</sub>, QST<sub>3</sub>) and interviews (INT<sub>1</sub>, INT<sub>2</sub>) and by observing the tutors' teaching of physical education  $(OBS_{TT})$ .

## Planning as a factor in Physical Education

The Physical Education Teacher Guidelines (Government of Ireland, 1999c) places special emphasis on providing guidance to teachers on school and class planning for physical education: "The successful implementation of the Physical Education Curriculum (Government of Ireland, 1999b) will be dependent on efficient planning by the school and teachers." (p. 16). From the beginning of the study the researcher sought to establish if the tutor programme had an influence on the planning of teaching by

tutors. When questioned (QST<sub>2</sub>) about the effect of the tutor programme on their planning for teaching physical education after their initial engagement with the tutor programme (as the tutors were back in their own schools teaching when the questionnaire was administered) a majority (92%) indicated that the programme had influenced them with 71% of tutors claiming that it had influenced them 'a lot'. As one tutor commented in the first phase of interviews "I would find myself being more conscious of covering the strand units in sections...within a definite structure" (INT<sub>1</sub> BR) while reflecting on "...the way I was doing things" (INT<sub>1</sub> BR). At a later stage all of the respondents claimed that the programme had influenced their planning (QST<sub>3</sub>). All of the tutors interviewed indicated that a change had occurred for them in terms of their planning for physical education

...for instance, we'll say if you take two years ago if I was doing an exercise in games I might have a rough idea what's going to happen after ten minutes and have an idea that I would be setting up an exercise or a game in a certain situation whereas now I actually know that the lesson is going to happen in the order of x, y and z and I would actually do my level best to keep it in that order. So we'll say planning and assessment mainly...(INT<sub>2</sub>MM)

Another tutor indicated that the change for him occurred "...primarily from the point of view of planning the individual lesson and also planning the units and even the yearly scheme" (INT<sub>2</sub> BR). Improved structure of the physical education lesson was cited as a change for another tutor "I find my lessons are much more structured, like warm ups...now every lesson has a warm up and your relaxation at the end." (INT<sub>2</sub> LB). While the responses of tutors clearly indicated that the tutor programme had influenced their planning for physical education more in-depth knowledge of the extent and nature of the influence would be useful for further study. For example, investigation of the areas identified within the Teacher Guidelines: use of the school plan, the timetabling of individual strands, planning for integration and providing for differing abilities could guide such investigation and provide more depth to the evidence gathered.

It could be argued that some of the changes outlined by tutors above could be expected to be part of their teaching prior to selection as tutors and that the initial selection of tutors should have focused on selection of tutors who had a more in-depth knowledge and understanding of physical education. This would have lessened the need for such a comprehensive tutor programme. Such specialisation, however, would

probably have meant recruitment of some primary teachers with others being selected because of their 'specialism' in physical education. Many of those in the latter category, however, while having a sound knowledge of physical education would have been teaching largely within the second level education system and would have little or no experience of working within primary schools. A further difficulty with the specialisation argument is based on two factors: firstly, PCSP policy (applied consistently in their recruitment of trainers for subjects other than physical education) centred on selection of primary teachers to provide in-service programmes for colleagues, any deviation from that policy could have undermined the efforts to build capacity within the subject at primary level. Secondly, by allocating additional time for the tutor programme, the PCSP were recognising the need to build capacity in physical education so that subject specialists within primary teaching would emerge as a result of their efforts. Hence, it could be argued that prioritising primary teaching experience as a pre-requisite for selection as trainers was a very positive aspect of their policy given that they were prepared to invest in 'upskilling' in the area of physical education. An alternative approach to this issue will be discussed in chapter 8.

### Expanding Programmes of Physical Education

The Physical Education Curriculum (Government of Ireland, 1999b), as discussed in chapter 3, emphasises the importance of providing a broad and balanced programme of physical education in primary schools. "An important aim of the physical education programme is to provide a wide variety of activities" (Government of Ireland, 1999b, p13). This statement is restated, linked to school planning:

"When the physical education plan is being devised, all aspects of the curriculum and the extent to which it can be implemented need to be considered. It is only when such an approach is adopted that a broad and balanced programme can be offered within the school" (Government of Ireland, 1999b, p8).

Hence, it was important for the study to investigate if tutors were actually teaching a wider variety of activities to children within their physical education classes. After engagement with TP<sub>1</sub>, tutors were questioned about their confidence to teach various strands to their classes (QST<sub>2</sub>). A majority of tutors (96%) indicated that they felt 'very confident' or 'confident' to teach athletics while 92% expressed the same levels of

confidence to teach games. Outdoor and adventure activities was an area where tutors felt confident also with 83% indicating that they were very confident or confident to teach it. It was particularly significant that tutors expressed such high confidence levels in their teaching of outdoor and adventure activities as 54% in QST<sub>1</sub> had indicated that they 'rarely' or 'never' taught outdoor activities previously. While equivalent figures for confidence levels to teach gymnastics (78%), dance (59%) and aquatics (39%) were somewhat lower it was noteworthy that these three strands were ones that tutors had taught very little previously so their confidence levels could be described as very encouraging after such short engagement with these strands in TP<sub>1</sub>. In QST<sub>1</sub> only 8% of tutors indicated that either gymnastics, dance or aquatics was their preferred strand while 54% indicated that they taught dance 'rarely' or 'never'. This, however, does raise the question of how class teachers without such exposure to the treatment of strands can become confident to a comparable level.

The sessions that allowed time for tutors to review their practice, described under question one above, provided opportunities to find out more about the content that other tutors were teaching. Observation of these sessions that took place shortly after the tutors had returned to teach their classes after TP<sub>1</sub> provided evidence of tutors having implemented very new aspects of the Physical Education Curriculum (Government of Ireland, 1999b). In some cases, they had taught a strand for the first time, in other cases they taught aspects of strands for the first time. One tutor reported on a very successful experience of implementing the aquatics strand for the first time in her school. Another reported very positively on implementing the outdoor and adventure activities strand for the first time and described children engaging in a unit of work in orienteering as part of the work in this strand. This particular tutor was building on work in this strand first undertaken as part of his engagement with a pilot programme of in-service for teachers presented by the Primary School Sports Initiative (PSSI).

Subsequently, observation of a sample of tutors teaching in their own school setting (OBS<sub>TT1</sub>) indicated that the content being taught was representative of a broad range of strands. This was encouraging given that the findings from QST<sub>1</sub> revealed that there was a strong preference among tutors for teaching games. From the six lessons observed only three were games lessons. Dance, outdoor and adventure activities and

athletics were taught as part of three other lessons and each of the teachers of the lessons indicated that these areas of content were being taught as part of a unit of work that they had undertaken for the first time. The outdoor and adventure activities lesson observed (OBS<sub>TT1</sub>MM) was taught in a special school setting and focused on preparatory work for orienteering undertaken indoors in the school hall. The tutor indicated that children were responding enthusiastically to it and that he hoped to conclude the unit by completing an orienteering course outdoors. The athletics lesson observed (OBS<sub>TT1</sub>OL) was notable for the variety of activities evident that had been introduced to the tutor as part of the tutor programme. The lesson was taught outdoors in a school where there was no adequate indoor facility. The tutor commented on the adaptability of the athletics content presented as part of the tutor programme and how so much of it had been relevant to his particular school context (20/1/03). The dance lesson (OBS<sub>TTI</sub>MJ) was taught to a fourth class group who had no prior experience of dance. Another games lesson featured some content that the tutor had introduced as part of an athletics unit of work earlier with the children. The tutor had attended a course where this content was treated with its focus on developing speed, agility and quickness (SAQ). He had combined this with content from the tutor programme and managed to adapt content from the experience of the course attended and the tutor programme to meet the objectives he had outlined.

Having completed TP<sub>1</sub>, TP<sub>2</sub> and TP<sub>3</sub> and with tutors continuing to teach in their school setting, QST<sub>3</sub> sought to establish their confidence to teach strands of the Physical Education Curriculum (Government of Ireland, 1999b). Highest confidence levels were reported for teaching games with 95% claiming that they were very confident or confident while tutors' confidence in teaching outdoor and adventure activities (90%), athletics (81%) and gymnastics (81%) also ranked highly. These scores had dropped slightly on those recorded in QST<sub>2</sub> with the score for athletics having dropped by 15%. The lapse in time since the input in athletics for tutors was probably a significant factor in this trend. Athletics had not been treated since the first phase of the programme, which constituted a time lapse of fifteen months. As some tutors were seconded to other duties, they had limited opportunity to transfer their learning in the tutor programme to working with children. It is possible that this also prevented some tutors from expressing confidence about teaching particular aspects treated within the tutor programme. Tutors were still less confident about their ability to teach dance (57%) and aquatics (57%) although the score for aquatics had risen by 18%. The lower score for

dance matched the fact that when questioned about areas that needed further consolidation tutors identified dance in particular.

Tutors interviewed (INT<sub>2</sub>) indicated that changes in the content taught continued to be a significant feature of their development mainly in terms of "...broadening the scope of what I teach" (INT<sub>2</sub>MJ) or "...[increasing] the breadth of what I'm covering." (INT<sub>2</sub>MM) The issue of colleagues in their schools becoming 'curious' about the content also was raised again during these interviews where colleagues saw and tried to replicate some new content explored by the tutors. This aspect helped tutors to "...feel good about it from that point of view that it hasn't just impacted on what I'm doing myself and [sic] a lot of other teachers have latched on as well." (INT<sub>2</sub>OL) While the emphasis in this section is on breadth of content taught and how colleagues observing new content were motivated to extend the content they taught, this issue is discussed further below (p. 235) where the issue of influencing colleagues in a broader sense is discussed.

During this second year of the tutor programme all tutors indicated that they had taught new content in the period prior to completion of the questionnaire (QST<sub>3</sub>) and indicated that this aspect was very satisfactory or satisfactory. Ninety three per cent rated a second new aspect taught by them as being very satisfactory or satisfactory while a third new aspect was rated by all tutors as being very satisfactory or satisfactory. The content that they had introduced varied across a wide range of strands.

Observation of the content that tutors were teaching in their own school setting took place for the second time in March 2004 (OBS<sub>TT2</sub>) approximately seven months after QST<sub>3</sub> was administered. Tutors were about to embark on TP<sub>4</sub>. It was apparent from observation of the lessons taught that each of the five tutors observed at this stage had grown in confidence in terms of their teaching of physical education. One of the tutors observed (GB) had embarked on new content from the outdoor and adventure activities strand introduced as part of the tutor programme with a sixth class group. Another tutor (LB) who had referred to the fact that she was enjoying teaching physical education (this is discussed more fully below) clearly had become more comfortable with both the content that she was teaching and the organisation involved. In teaching children a games lesson, she succeeded in planning and implementing a lesson that was

notable for its high activity levels and active engagement of the children throughout. The teaching approaches used by the tutors during these lessons will be discussed below.

The evidence presented above indicates clearly that significant changes occurred related to the content taught by tutors after engagement with the tutor programme. Some lessons can be learned from this experience in the context of programmes of continuing professional development. Firstly, tutors were offered considerable exposure to the various elements of content. Tutors were offered a total of eight hours of contact time with athletics for example with further time devoted to related areas such as development of fundamental motor skills. Further research would be required to establish the extent of contact time that would be necessary to prompt teachers to teach a broader range of content. Secondly, tutors were offered time to engage in active learning, and to receive considerable support from peers in the form of group discussion, for example. Thirdly, they were exposed to facilitators who were identified because of their expertise related to the content areas. Finally, the tutor programme was on-going as they taught the new content required. This offered them opportunities for additional support from peers and others. The argument that results from the analysis of the study data is that these factors are critical in enabling tutors to offer programmes in aspects of physical education that were new to them. The question remains to what extent tutors would continue to teach new aspects of content without the supports outlined above. These supports are likely to be pertinent to any programme for tutors in other subject areas and would also be relevant in any discussion about teachers broadening the scope of the content they teach.

## Trying New Teaching Approaches

An INTO study (1996) reports the predominance of direct teaching as a methodology among teachers in Irish primary schools. The Physical Education Curriculum (Government of Ireland, 1999b) supports using a variety of methodologies: "One of the keys to the successful teaching of physical education is the use of a broad range of approaches and methodologies." (Government of Ireland, 1999c, p. 42). The Teacher Guidelines for Physical Education suggest that three teaching approaches are particularly appropriate for teaching physical education: the direct-teaching approach,

the guided-discovery approach and use of integration. Group work is also promoted with a particular emphasis on its use in organizing the physical education lesson. Evidence from the initial data supplied by tutors indicates that tutors in this study used each of these methods but does not provide information on the extent of their application of particular methods. Hence, one of the aims of the tutor programme was identified as enhancing tutors use of a variety of methodologies in their teaching. Given the predominance of direct teaching within physical education generally, using a variety of methodologies was likely to be a key issue for tutors as they facilitated programmes of in-service for teachers. The data gathered from questionnaires, from interviews with the tutors and from observation of the tutors' teaching provided evidence of changes in the extent to which they used a variety of teaching approaches as they engaged with the tutor programme. This section reports on those changes in teaching approaches and particular approaches highlighted in the Physical Education Curriculum (Government of Ireland, 1999b) provide the focus for the investigation: the guided discovery approach, use of group teaching, integration and direct teaching.

Tutors were asked to comment on their *intention* to use particular methodologies after TP<sub>1</sub> and all tutors indicated that they would use guided discovery and group teaching in their teaching of physical education (QST<sub>2</sub>). Integration and direct teaching were methodologies that were identified for frequent use by 88% and 96% of tutors respectively. While figures for those intending to use group teaching and direct teaching remained similar to those that emerged in QST<sub>1</sub>, there was a significant increase of 31% in those that indicated that they would use guided discovery. From observation of the tutor programme (TP<sub>1</sub>) it would appear that the understanding of both guided discovery and group teaching had been considerably enhanced. Facilitators had emphasised using guided discovery in their own teaching, particularly the use of questioning and many activities were modeled using group teaching as a methodology. Fieldnotes recorded during TP<sub>1</sub> illustrate how one facilitator illustrated the use of questioning

Maria (the facilitator) was guiding the group on the teaching of the lay-up shot to children. She began by questioning their understanding of the shot...when it was used and at what level it should be introduced. This opened up a discussion about class size and experience of the children. She illustrated the five progressions in the teaching of the shot...on moving on to each new stage, she asked the group to demonstrate the previous stage and questioned them to

describe that stage as if they were teaching it. Her questioning focused on various points of technique: hand positioning, foot placement, where the child should be looking at a particular point. She emphasized prompting children by questioning in this way to enhance their understanding. [Fieldnotes, 27/8/02]

This example is highlighted to provide an illustration of use of a guided discovery method within the programme because traditionally more complex tasks like this one would be presented using a direct teaching style.

In relation to the promotion of group teaching as a methodology, games and athletics workshops illustrated this methodology particularly well. Observation of one games workshop illustrated how children could work on specific tasks with minimal guidance while the teacher focused on the teaching of specific games skills to one group (OBS<sub>TP1</sub>). A section of an athletics workshop (TP<sub>1</sub>) described below illustrated how children could be given the opportunity to practise specific tasks related for example to the long jump while the teacher could help a group of children to begin the high jump.

Tutors were asked to identify what practice children could work on unsupported by the teacher and with which element the teacher should try to guide children. One group of tutors examining long jump tasks that children didn't need support with identified the standing long jump as an example while they compared that to the need for the teacher to guide development of the approach run before the long jump. This was used as an illustration of how the teacher could turn her attention to teaching beginning elements of the high jump while the independent work on long jump i.e. the standing jump, could be undertaken by children. After each group had presented individually (the task remained similar for all groups but the focus was on different activities within athletics) the facilitator then asked them to work on demonstrating organizational aspects: e.g. collecting and placing equipment, moving from station to station. Some time was spent on tutors modelling and discussing movement of children in this way. It was emphasized by the facilitator as a crucial element in the learning of children in terms of the atmosphere created in the group of 'safety', respect for others and respect for equipment but also in terms of the importance of the tasks set. [Fieldnotes: 25/6/02]

Another illustration of this method was where tutors themselves were given task cards outlining running tasks matching objectives of the running sub-unit of the curriculum. Each group engaged in the particular activity before demonstrating it to other groups. Hence, tutors had an experience of interpreting a task, undertaking it and explaining it and so experienced the process that children would engage in as part of group work. The following vignette describes another example of how group work in athletics was

demonstrated. It provides an indication of the range of tasks introduced to tutors and illustrates how the tutors responded to the session.

One group worked in a corner of the pitch on a parlauf relay, a second group was set a task to work out a relay involving number cards, a third group worked on pair tasks that promoted continuous running. Tutors engaged with the tasks and worked out any organizational aspects that would enhance smooth explanation and undertaking of the task by other groups. Each group in turn demonstrated the activity to the whole group of tutors. There was lots of discussion about the organisation and preparation involved for some of the activities and how teachers might baulk at this..the facilitator emphasized the idea of teachers in a school sharing such resources and prompted tutors to think about this issue in the context of school planning (this was the first reference to school planning as a support for teachers!). Olivia commented on the variety of tasks presented indicating that she intended using them straight away with her class on her return. Tim pointed out how useful some of these activities would be in re-inforcing learning and he referred specifically to junior school work. Maeve, who had taught a lot of athletics but without using groupwork, pointed out that she had seen how tasks could be adopted to provide a greater variety of running activities and how the groupwork allowed for some independent work by the children and good use of limited space (some activities were undertaken in a tiny part of the field, others used the full perimeter). [Fieldnotes 25/6/02]

Two months after TP<sub>1</sub> tutors reported a change of teaching methodology in their teaching of athletics during a formal PCSP review session observed by the researcher. While the emphasis in their reporting was on how they had structured the content of their lessons with careful planning, the improved response of children and the difficulties that they had encountered with some equipment issues, some tutors commented on their efforts to guide the children in their learning with less emphasis on direct teaching.

Linda commented on her teaching of athletics indicating that she found, with a difficult group, she preferred individual work by children rather than group work. She commented, however, that this didn't facilitate guided learning to the same degree. Matt, having provided a brief account of his lessons, reported animatedly on the use of groupwork that had enabled him introduce nine different athletic activities and actually guide children in their learning at a particular station each week. He reported how he had questioned children on aspects of their technique, something that was new for him. [Fieldnotes 21/11/02]

It was encouraging that tutors were specifically mentioning teaching approaches albeit as secondary to content as they hadn't been asked to comment specifically on this for the review session. This appeared to indicate an awareness of teaching methodologies as

a factor in their teaching even if, at times, they were reporting that it was difficult to apply particular methodologies because of contextual factors such as 'a difficult group' as reported above. When asked to comment on any aspects that had enhanced the delivery of the tutor programme (QST<sub>3</sub>) one tutor (<sub>TUT6</sub>) wrote: "Being empowered to innovate new ways of teaching and change existing methodologies".

When questioned after teaching for a period of one year after engagement with the programme, all tutors indicated that they had modified their teaching methodology (QST<sub>3</sub>). When asked about what methodologies they planned to use in their teaching over the course of the next year, a majority of tutors (95%) declared that they intended using direct teaching very frequently or frequently but there seemed to be a determination too to use guided discovery (90%), group teaching (81%) and integration (85%). Interviews provided some insight on the methodologies employed

...I would have been very much a 'directed teaching teacher' [sic] whereas now I would consciously try to build in elements of guided learning or discovery learning into all aspects of..., particularly into games where I would have been very much the direct teacher (INT<sub>1</sub>MJ).

The tutor went on to explain that this approach was easier to apply to those areas of content that he was comfortable with and how he had "...yet to master it".

While discussion of the teaching of a sample group of tutors above focused on the content taught by tutors, observation of their teaching (OBS<sub>TT1</sub> and OBS<sub>TT2</sub>) also provided some useful insights into the teaching approaches used by the tutors in their teaching of physical education. The approaches used reflected a continuing dependence on direct teaching in some cases but there were significant efforts made to incorporate a guided discovery approach to their teaching. For example, although a particular class was dominated by direct teaching, the tutor questioned the children at regular intervals throughout the class period. She indicated in conversation after the class that she had modified her approach because of her awareness of varying her teaching style gained from the tutor programme (GB).

Talked briefly with Gemma before I left the school. She reported how she was planning more carefully, reflecting on content more and trying to increase

activity levels, she acknowledged that she was conscious I was observing with this in mind! She indicated that she was gradually trying to question children more...trying to involve them more in their learning. I suggested that perhaps she needed to plan specific activities to promote this with children because she had made a good start with her use of questioning. [Fieldnotes: 17/1/03]

Another tutor (MJ) who was teaching a dance unit of work for the first time (referred to above) questioned children regularly during the lesson and adopted the role of a facilitator of creative work by the children. The response of the children was very enthusiastic and their learning through dance was evident. Given that this was their first time engaging with creative dance, they demonstrated a sound understanding of concepts such as space, dynamics and body actions. The tutor indicated that he was generally very satisfied with the unit of work and the response of the children, even though his first encounter with creative dance as outlined in the Physical Education Curriculum (Government of Ireland, 1999b) was through the tutor programme. It seemed that the fact that the tutor was teaching dance for the first time might have contributed to the predominance of guided discovery methods throughout the lesson.

Pairs of children were working on a sequence of movement. Matt counts for them. Q: Now who wants to 'refine'? General response: 'yes' so Matt asks 'What do we need to do?' Children respond 'Timing'. Matt is very encouraging, gives children idea of holding for a count, he moves among them as they practise: much better after this guidance. Matt counts them in again and they practise.....Moving on to working in groups of four, they undertook lots of planning and discussion. Then they practised partner and echo in 2's before coming together again in groups of 8. Performed all three sections together with music...Generally enthusiastic response to repeating with half the group watching. Girls performed alone, boys performed alone. Really good quality, children very co-operative. Matt really a facilitator here, prompting, questioning and providing small amounts of feedback. e.g. possible work to be done on start and finish. Children through discussion and exploration really create dance. [Fieldnotes:12/2/03]

Guided discovery was the main focus of the approach illustrated in the treatment of dance within the tutor programme and some tutors indicated that new methodologies were easier to apply to new areas of content. Other tutors, as reported above, believed that a new approach was easier to apply to an area of content with which they were very comfortable. An implication can be drawn from this study related to the issue of adopting new methodologies. In spite of the fact that the content of the dance unit was very new to tutors, the fact that a particular approach (the guided discovery approach) was well illustrated by the facilitator of the dance module meant that the particular tutor

observed was very comfortable applying this methodology to his teaching of dance. The challenge for programmes of learning in physical education is to provide teachers with similar models of application of methodologies even within areas such as games where traditionally the direct teaching approach was dominant.

The outdoor activities lesson observed (OBS<sub>TT2</sub>) was very appropriate to the needs of the pupils who were active in their learning and the lesson was dominated by the guided discovery approach. The tutor spent the greater part of the lesson (approximately 23 minutes of a 35 minute lesson) prompting the children in their learning when they required help but intervening only where necessary. The lesson observed was an orienteering lesson (with a co-operative challenge introduced at the beginning of the lesson) and was taught to children in fifth and sixth class.

Some made the usual mistake of not reading the map correctly. Oisín was always ready to help, encourage, question but they generally worked independently. He helped one group 're-group' who had become disjointed. He helped one child orientate the map but significantly that child recognised that it wasn't orientated correctly in the first instance. Oisín was constantly interacting with the group, encouraging, helping where necessary. Children were really enthusiastic, excited, co-operative...Lots of discussion when they finished, some realised that they had found some 'extra' controls. Some tried to examine map again to see where it was they made the error. Teacher interaction was so positive. [Fieldnotes: 10/3/04]

The games lesson referred to on p. 223 (where the issue of expanding programmes taught was discussed) provided an opportunity to also examine the teaching approach. It was presented to children with an emphasis on moving from merely performance of the activities to children understanding how they could improve their execution of the skills. Despite the very inclement conditions for this particular outdoor lesson, the tutor was very successful in engaging the children by his use of questioning and guiding them towards further learning. This was particularly noticeable in the development of the lesson where children were playing games of Olympic Handball. He constantly prompted them to think about how they were playing with questions such as 'How might you receive a pass?' Earlier in the lesson he had prompted them with questions about passing as part of a practice to develop ball skills. Field notes contain references to a point that the tutor made in discussion afterwards.

He indicated that the tutor programme had raised his awareness of prompting children to think for themselves while playing games and to work out solutions to problems. [Fieldnotes: 15/1/03]

Another games lesson, taught by a tutor who had indicated in an interview that she was teaching a structured programme of physical education for the first time (INT<sub>1</sub> LM), featured games content that was appropriate for the class level concerned but the emphasis in her teaching seemed to be very much on good class organisation to facilitate the content rather than on incorporating a variety of teaching approaches. On the second visit to observe her teaching over fourteen months later (described below on p. 241) it seemed that her level of confidence in teaching physical education was much greater and her teaching approach more varied. Her lesson continued to be dominated by direct teaching but she did guide the children with some questioning through some of the learning in the lesson. Significantly, only one of the classes observed at this point of the programme (a total of six tutors were observed) featured group teaching. In this instance, children moved from working in pairs to working in groups of eight. Two of the other classes did, however, incorporate a considerable amount of activity where children worked in pairs.

When teaching approaches of the tutors were observed over one year later (OBS<sub>TT2</sub>) it became apparent that the group were aware of their own teaching approaches and methodologies. Observation of tutors teaching in their own school setting that took place for the second time in March 2004 (discussed on p. 224) where the focus was on the content taught also provided opportunities for observation of the teaching approaches used by the tutors in their teaching. The orienteering lesson observed, while notable for the high levels of activity of children was particularly marked by the tutor's questioning of children as well as his prompting children to discuss and interact with each other. He had successfully used group teaching as part of this lesson also. The outdoor and adventure activities lesson, in particular, featured much work involving problem solving and discussion undertaken by pairs of children.

Advised to orientate map each time, took a little time to practise this. Some children found this difficult, needed the repetition/consolidation that Oisín allowed. Oisin warned that extra controls were left out to ensure map is read correctly! All children collected their maps in turn. The task set was a star orienteering task. Children had to identify features on the map, locate them and record the control at that feature. Additionally, they had to work out the 'answer' having collected the various clues. This wasn't so much a problem to complete

but provided a check on the accuracy of their completion of the task. Most groups worked on these various tasks together (groups of four). One group 'split'. This activity was physically challenging for some but it was the problem-solving aspect involving the key skill of orientating the map that provided the greatest challenge. [Fieldnotes: 10/3/04]

A tutor [MM] who was working with groups of students with special needs had introduced the particular group to group teaching, within a station teaching context. While the games activities undertaken focused on striking and shooting activities that were very appropriate for the children concerned it was the rotation of groups that provided the challenge for this group. However, once mastery was achieved it was very apparent that the station teaching approach, introduced to the tutor as part of the tutor programme, was particularly effective for this group of ten 12 and 13 year old children in challenging them cognitively as well as physically. It also promoted high levels of activity. This particular tutor described in an interview the advantages for children taught in a group teaching context claiming that it offered some children an alternative to team games while offering children who play at a more competitive level the chance to practise different activities or to perfect technique in which they were already proficient:

...[children] actually enjoy, kids actually enjoy just doing something correctly and they like being able to do something new rather than playing on a team. So that they are all happy, so you could have somebody who is on a school team, and somebody maybe that has difficulty in striking a moving ball and they'll all be happy after the same lesson. But certainly the station teaching [group teaching] has gone down a bomb this year. (INT<sub>2</sub> MM)

A further lesson observed some three months later was taught by a tutor [MJ] who was teaching a games lesson that emphasised integration with mathematics and development of understanding of the game played through extensive questioning by the tutor.

Matt questioned the children on the 'tactics' they were using: How will you avoid bunching in the middle? Child responded: 'Move away from person with

the ball'. 'What do you do when you have given a pass?' Another child explained: 'Run away into space and call'. Another question prompted thinking about the positioning of the goalkeeper: children discussed this coming up with a few viable options. Overall, children were good on responses, questions provoked thinking and discussion. They did apply aspects on resumption of games, sometimes prompting one another, sometimes responding to prompts from Matt. Questioning was very effective. Points re-inforced by stopping play regularly but not so often to spoil game. [Fieldnotes: 28/6/04]

While the content of the lesson had been taught on many previous occasions by the tutor, the guided discovery approach described above was a modification that the tutor himself reported in discussion after the lesson. Another tutor (GB) engaged the children in pair and group work with ease as part of outdoor challenges and subsequently as part of the orienteering strand unit and frequently prompted discussion and co-operation among the group. She organised children to work in groups to complete a word relay activity and prompted them to confer as a group to decide on the strategy that they would use. Her use of guided discovery was very evident in the lesson observed where questioning of children was a feature throughout as the children worked on route maps. She also prompted them to reflect on their own progress as this was an activity with which some had difficulty in the previous lesson.

The classes observed, reported above, provided evidence of this increasing awareness of methodologies although it is difficult to suggest to what extent tutors modified their practice as they hadn't been observed teaching prior to their engagement with the tutor programme. In this instance, the field notes presented above recording discussion with tutors after observation of their teaching and the interviews with tutors provide more reliable evidence that although the content to be taught continued to be the dominant factor in the preparation of the lesson, tutors were becoming aware of various methodologies and applying them in their teaching. An implication of examining the extent of the increase in use of a variety of methodologies is that over the course of two years, with the support of on-going links with the tutor programme methodologies were becoming a focus of physical education teaching by the tutors. The question remains, however, whether this emphasis would continue to be a feature of their teaching without on-going support of some form. Further research will be required in due course into the extent to which teacher behaviour changes as a result of the inservice experience. It will be important to examine if a change of teaching methods employed as well as content taught has actually occurred.

The line of enquiry pursued as part of this study regarding supports for learning sought to establish which supports were used and to what extent any change occurred in usage throughout the programme. Data from QST<sub>1</sub> indicated that books were the main source of professional support for the tutors (85%) with 58% of the tutors reporting that they used websites and just 39% using journals. This trend continued for the duration of the study but those indicating that they would use journals rose by 28%. The increasing use of journals throughout the programme as a source of support probably indicates an increased awareness of the resources available to them and their willingness to engage with content at a theoretical level. This was particularly significant for that substantial group of tutors -sixteen in all- who at this point were pursuing a Certificate/Diploma in Physical Education in St. Patrick's College. A substantial part of their coursework required that they engage with a wide variety of reading material. It is difficult, then, to argue the extent of the influence of the tutor programme on their use of supports for learning. After initial engagement with the programme QST<sub>2</sub> sought to establish if tutors would use specialist support or attend weekend courses to enhance their professional development. Responses were very positive with 83% indicating that they would welcome specialist support and 79% indicating that they would attend weekend courses. When the questionnaire was administered, the DES had not signaled the extent to which they would provide time for undertaking a comprehensive tutor programme. It was with this in mind that the questionnaire sought the information on the personal time that tutors would be prepared to spend to avail of specialist support. In fact, this need never arose throughout the programme as the DES provided such an amount of specialist support within the normal working hours of the tutors. This use of supports in their learning albeit by a very committed group of tutors needs to be taken into account when designing similar programmes for tutors and indeed teachers so that tutors and teachers are provided with supports and guided towards possible sources.

## Influencing Colleagues

The impact of the tutor programme on the tutors was a major theme of the research but one facet of the investigation focused on how many tutors intended supporting colleagues where the influence of good practice might be extended. The

literature (chapter 2) on teacher learning communities supports the importance of professional development involving teachers in active, collective participation (Garet, Porter, Desimone, Birman and Yoon, 2001). Wenger (1998) focused on communities of practice that involve learning from others in a group that are more expert in an area. A majority (88%) of the tutors indicated that they did intend to support others in the teaching of physical education (QST<sub>2</sub>) (while 96% indicated prior to commencement of the tutor programme that they supported colleagues, a small number of the tutors were seconded to other responsibilities and hence, were not in a position to support colleagues at this point of the programme). Tutors spoke of the nature of this support during interviews: "I have passed on say the athletics programme that I have done with my own class and other teachers are using it in the school and so for them its probably easier having seen me doing it" (INT<sub>1</sub>GB). Another tutor commented on teachers in his school who saw him covering new content areas, outdoor and adventure activities in particular, and got involved in teaching these areas themselves reflecting, he felt "...an increased interest in PE" among staff. (INT<sub>1</sub>OL). A third tutor responded to an openended question on supporting colleagues "I'm working with a colleague who has no confidence teaching PE. We've two strands covered to date and the empowerment is great. I always knew she could do it!" (TUTI). A total of 21 responses outlined the content that they proposed to treat with colleagues. At a later stage in the tutor programme an open-ended question in QST<sub>3</sub> provided information on work that had been undertaken. One tutor responded:

Mentoring in outdoor and adventure undertaken last year has resulted in other requests in that area. Input into planning units with some other teachers-difficult to balance between being available/being a class teacher-also issues with role as colleague- not wishing to take over or take control (TUT24)

This reference to the time issue or being available as a class teacher to support others was a problem that Duncombe (2005) explained as a practical barrier to collaborative learning in physical education in her study of a group of primary teachers.

Given that almost all tutors in this study were already engaged in supporting colleagues the change in the nature of the support was probably the most noticeable aspect with regard to influencing colleagues. Opportunities were presented for

colleagues to see some new content and a variety of methodologies as discussed above. Garet et al. (2001) identified the opportunity to observe other teachers as a significant factor in effective CPD. Further investigation would be necessary to establish the extent to which the methodologies, in particular, were embraced by colleagues. None of the responses to the open-ended questions referred to methodologies as an emphasis in their support. Nevertheless, it is interesting that there was some evidence of collaborative learning. Whether these collaborations were incidental rather than occurring within a community of practice (Wenger, 1998) is difficult to gauge from the data gathered.

#### Thinking About Children's Learning

Some themes on which the researcher had not intentionally provoked discussion emerged from INT<sub>1</sub> and later from INT<sub>2</sub> with tutors. One of these themes was the influence the programme had on children's learning. It could be argued that the influence on children's learning is the fundamental issue in curriculum change and should form the focus of research into implementation of the curriculum although the complexity of undertaking a study of children's learning in physical education should not be underestimated. It is an area, however, that was not within the scope of this study as it was undertaken prior to implementation of the Curriculum. Reports on the implementation of curriculum in Ireland had suggested that while teachers espoused the notion of child-centred teaching, the practice of teachers did not emphasise this concept (INTO, 1996). It would seem that this was a concept that at least tutors were prompted to reflect on and to embrace in their teaching as a result of the tutor programme. "Well...I felt that the emphasis was very much on the child centred programme. Very much so and I think we were always made conscious of that especially from some of the facilitators who were facilitating it, and taking in mind the child and the safety of the children" (INT<sub>1</sub>GB). Another tutor commented that the programme resulted in him being "...much more conscious now of...working with the process of what they're (the children) doing and when they are doing things." (INT<sub>1</sub> BR). He expressed the opinion that children might be prompted "to see a purpose for doing what they are doing or if they are having problems to be able to maybe self diagnose to why they are doing something wrong and if so, to get help to change it or to work out strategies for

changing it themselves". Another tutor expressed a similar opinion on children's learning in that it resembled the way they were learning as tutors

...the way we have been learning as adults...you know guiding each other and helping each other, showing each other and discussing with each other the way things should be done...I think that sort of thing is a real learning experience, it's a formative type of experience, for us on the training course and for them in the class. (INT<sub>1</sub> MJ)

The impact on children's learning was described by one tutor as "...very, very positive" (INT<sub>2</sub> MM) because children, having moved away from the traditional activities taught by the teacher were seeing that other children could excel at these 'new' activities. A tutor commented that rather than just teaching a lesson without considering the children's needs she was now conscious of planning so that all the children would be involved and that "...they would get something out of it" (INT<sub>2</sub>GB). Another tutor commented that the

...experience of going through the training would have kind of given me the confidence to try those sort of things [station/group teaching] and its [a situation of] moving again from a direct teaching style to one where the children have more of a role in what they are doing and can work out solutions to problems themselves with the teacher's guidance rather than me trying to solve solutions to all the problems for them (INT<sub>2</sub> BR).

Another tutor explained that she would have set up very competitive games situations in her class and resigned herself to the fact that they became overly competitive and indeed aggressive whereas she was now trying to provide more opportunities where children were competing against themselves or in small group situations that would promote more co-operation. It is likely that the content knowledge and knowledge of different methodologies gained by engaging with the tutor programme contributed to the ability of this particular tutor to promote co-operative learning by the children in her care. There is some evidence then from this study that the tutor programme prompted tutors to reflect on how children were learning and to plan learning experiences that matched the needs of children to a greater extent than they had previously.

# Collegial Support as a Factor in Change

A further theme emerged from the interviews with tutors. The interviews revealed that a very positive group dynamic had developed and the interviewees considered this a very significant factor in their learning and further practice. This was

an aspect of learning that the researcher did not set out to investigate in a very specific way. Firstly, tutors came to realise from the early stages of the programme that considerable expertise existed within the group: "I suppose the single most important thing that impressed is just I suppose the enthusiasm and the expertise within the group, and I suppose the first week really drove that home to me". (INT<sub>1</sub>MM) He referred to the expertise within the group as being a very convincing factor as some tutors although "...experts... are people who are out in the classroom dealing with it." (INT<sub>1</sub> MJ). The potential for learning within the group can be related to Wenger's (1998) discussion of communities of practice. However, a central tenet for collaborative learning to occur within the group is the establishment of trust. The importance of establishing trust between colleagues is well documented in the literature (Hargreaves, 2002, Nicholls, 1997). During the first week of the tutor programme, it was noticeable from observation [OBS<sub>TP1</sub>] that the session focussing on playground and co-operative games presented tutors with a range of activities that challenged them to draw on their experiences of teaching similar games as they discussed and devised modifications of the games. This fostered a sense of co-operation and sharing among tutors at the earliest stage of the programme while also providing opportunities for group members to begin to develop a good working relationship of which trust was a central element. One example of their eagerness to share experiences of their practice was when the facilitator asked if tutors had presented particular playground games to children: "Some tutors proposed adaptations of the games explored that they had used with children and commented on the responses of children". [Fieldnotes: 24/6/02]. Other sessions observed throughout the initial week such as the dance session fostered that growing sense of collegiality that prompted comment informally by many of the tutors as they engaged with the second residential week of the programme.

A tutor (INT<sub>1</sub>GB) who described the group as very focused and the programme as "...the best training programme we were ever on as a teacher" identified motivation as the key to the learning within the group (identified in the literature by Knowles et al., 1998, as one of the precepts of adult learning) while a colleague felt that it was the openness to learn from each other in the group that was most important. This openness to learn from others is also based on the recognition of the expertise of others in the group referred to above. This tutor also referred to the focus within the group on "...doing PE a good service" (INT<sub>1</sub>MM). This openness to learn and enthusiasm for the subject was very evident in observing the programme where field notes frequently

contained references to the co-operation within the group and the enthusiasm with which they approached tasks.

A particular example of this enthusiasm was when the group was based at an outdoor centre where they engaged in land-based and water-based activities that were offered to school groups. This was a very valuable experience for many of the group who had little experience of this type of activity. The enthusiasm with which they approached the tasks was remarkable in this instance because the tasks were particularly challenging from a number of different perspectives. Tutors had to respond to challenges that were physically and mentally demanding- pier jumping was one of the tasks encountered- and where co-operation between members of the group was particularly important. This was one of the few occasions not observed first hand by the researcher. However, fieldnotes recorded as the group returned from the challenges illustrate how on a personal level, many of the group spoke of the real sense of achievement that they felt on achieving some of the challenges set. One tutor commented: "An amazing experience, I couldn't and wouldn't have achieved that [pier jump] without the group. It was such a terrifying experience" (TUT17) (Fieldnotes: 14/6/04). Another example of the collegial aspect were the lengthy planning sessions prior to facilitation where there was considerable pressure on tutors to work well together to plan the sessions that they would present to teachers (OBS<sub>TP4</sub>). A response to an open-ended question related to factors that had enhanced the delivery of the programme describes another factor that contributed to the positive atmosphere prevailing among the team: "...a very good atmosphere engendered by the team, probably through being residentially accommodated allows for the trainers to be mutually encouraged and thus feel valued and empowered to contribute to the delivery and respond to the programme confidently" (QST<sub>2</sub>, TUT24). The residential aspect of the tutor programme was described by Cranton (1996) as 'the retreat' element . She emphasises the merits of this type of workshop in terms of its promotion of critical reflection. It is possible that it also promotes good working relationships as described by the tutors above.

An additional aspect that emerged through the interviews was the tutors' satisfaction in teaching physical education expressed in terms of their enjoyment of the physical education lesson. "I feel that the whole enjoyment, that I'm enjoying it much more, because I'm so clear on what's to be done and how to do it" (INT<sub>2</sub> LM). She went on to say that "I'm not afraid of PE any more...that's what it is mostly. I'm really looking forward to my PE days with the kids". Comments on the second occasion observing her teaching are recorded in the fieldnotes:

She was very positive about her work with this class. Was extremely pleased with progress. Very relaxed about her teaching. Seemed very much 'in control', happier with teaching than previously. [Fieldnotes: 8/3/04]

This observation was made somewhat tentatively initially by the researcher but was validated after the interview described above. Another tutor expressed the same sense of enjoyment (INT<sub>2</sub>MM) claiming that the content was being 'taken over' by the children and that they were more independent of him.

Conclusion Regarding Question Two: Change in Tutor Teaching of Physical Education

The data gathered revealed that engagement with the tutor programme had impacted on many aspects of the teaching of physical education by tutors. It appeared to impact on tutor planning of both lessons and units of work for physical education and it also had an impact on the breadth of content that tutors taught. In terms of teaching approaches employed, direct teaching was still the methodology employed most frequently by tutors but tutors did use group teaching and guided discovery especially for some when an area was new to them and for others when they were more confident with the content involved. This impact on teaching was summarized by a tutor in response to an open-ended question in a questionnaire: "Overall the programme has had a very positive impact/influence on my approach to PE in the classroom" (QST<sub>2</sub>, TUT13). The increased use of journals as the programme progressed was the most significant change reported relating to modifications in terms of supports used for teaching physical education but that may have occurred for some tutors because they engaged in

a further course of study as discussed above. While it is difficult to ascertain to what extent the provision of support for colleagues was due to the tutor programme it would seem that new opportunities were provided for teaching colleagues to observe tutors teaching new areas of content and employing a greater variety of teaching methodologies. Tutors raised the issue of the impact of the changes in their teaching on children's learning and also pointed to the significance of the support from tutor colleagues in furthering their learning and on the increased enjoyment they gained from teaching physical education. It would seem that their teaching experience at this stage of engagement with the tutor programme made a significant contribution to their confidence and competence to facilitate an in-service programme for teachers. This aspect of 'readiness' to implement the programme is discussed below under question three.

# Question 3: Did Tutors Feel Ready to Implement the Teacher In-service Programme?

Data discussed under questions one and two above focused on tutors' learning through the tutor programme and on their teaching of physical education. A major element of the final phase of data gathering focused on tutors' readiness to facilitate the in-service programme to teachers. It will be discussed under the headings: content knowledge and understanding as key to confident facilitation, investment in planning for implementation and confidence built on ownership of the programme. These were themes that emerged largely from interviews (INT<sub>3</sub>) with the tutors who talked about these elements as being crucial to their confidence prior to facilitation of the in-service programme to teachers. Observation of the final section of the tutor programme (OBS<sub>TP4</sub>) prior to facilitation also provided valuable insights about the confidence of tutors in particular. Further evidence was gathered from a questionnaire (QST<sub>5</sub>) administered to tutors in January 2005, prompting them to reflect on their experience of facilitating the in-service programme for teachers which they had been undertaking for a period of three months.

# Content Knowledge and Understanding as Key to Confident Facilitation

From observation of the final stage of the tutor programme (TP<sub>4</sub>) it appeared that this phase of the tutor programme represented an important stage for tutors as it

incorporated much consolidation of work previously explored and, appearing much more 'comfortable' with the content in each strand, tutors' discussion of content had a focus on presentation to teachers. In commenting on aspects of their experience of the tutor programme one tutor wrote: "Felt very knowledgeable on each of the strands" (QST<sub>5TUT25</sub>). They were supported in this work by the Physical Education Co-ordinator from the Primary Curriculum Support Programme (PCSP). It seemed to me from observing the programme that this support was sustained and was relevant to the needs and demands of the group of tutors. The sense of having a thorough understanding of content issues consolidated in this section of the tutor programme appeared to influence positively the levels of confidence of tutors. This was particularly evident from observation of the planning sessions (OBS<sub>TP4</sub>) where tutors were able to focus on issues such as selection of particular content without having to question any of the aspects of content that they had little experience of teaching as they embarked on the tutor programme. For example, only 54% of tutors had indicated at the outset that they had taught outdoor activities frequently and yet they engaged with a wide range of content options taken from each of the strand units within that strand as they planned for implementation of the in-service programme. Their increased knowledge of content, identified as a key element in the design of the programme of professional development for tutors, represented a particularly significant development given the evidence gleaned before commencement of the programme indicating that poor content knowledge placed constraints on their teaching of a broad programme of physical education. Garet et al. (2001) concluded that one of the core features of effective professional development was its focus on content knowledge as a "central dimension of high-quality professional development" (p. 925).

Tutors identified a significant factor that underpinned their confidence to facilitate an in- service programme to teachers (described under question two above). As they engaged with TP<sub>1</sub>, TP<sub>2</sub>, TP<sub>3</sub> and some of TP<sub>4</sub> a majority of tutors continued to teach physical education in their own school situation. One tutor elaborated on this: "It is a very good idea to allow tutors to try out what they have learnt during the school year with their classes. In this way tutors will implement what they know over time" (QST<sub>2 TUT7</sub>). Another tutor commented on the uniqueness of this opportunity:

I have had two years of trying to implement it in the classroom with children which is most unusual because most of the other trainers in the other subjects did not have that opportunity, so it is a good thing. (INT<sub>2</sub>GB)

Observation by the researcher (OBS<sub>TT1</sub>, OBS<sub>TT2</sub>) identifying the achievements of the tutors as they taught is reported under question two above. Another positive outcome of availing of the chance to teach during engagement with the programme was the opportunity created to "…discuss with [tutor] colleagues their experience of teaching PE lessons" which was considered very valuable (QST<sub>3</sub>, <sub>TUT11</sub>). Another tutor commented that "The review of work in schools, in particular, facilitated a good exchange of views, ideas, anxieties." (TUT13). The creation of a good bank of lesson plans was also seen as very positive as tutors' class notes were collated for sharing among the group (QST<sub>3</sub>, <sub>TUT14</sub>) and observation of the group during the review session where they shared these notes (OBS<sub>TP2</sub>) indicated that the notes helped understanding of the work that was undertaken by individual tutors as well as providing them with a resource for their own teaching.

This engagement with content and teaching methodologies over a prolonged period provided many opportunities for building confidence of tutors prior to implementation. It would seem that it provided tutors with time to engage with the breadth of content that is involved in examining the curriculum and to deepen their understanding of content and issues surrounding the teaching of content. This time devoted to engaging with the programme, allowing them extended opportunities to transfer their learning into practice in the classroom, was especially important for this group of tutors, many of whom had indicated that they hadn't taught particular strands of the curriculum to any great extent. Hence, it would appear that providing participants with ample opportunity to transfer their learning into their teaching situation is a central message for providers of continuing professional development in programmes of learning for tutors in other subject areas and indeed, in any area of learning where participants will, in turn, be facilitating content.

The sharing of their lesson plans is another issue that merits examination. Arguments are put forward at pre-service level against providing resources such as these that are perceived as being overly prescriptive and traditionally the DES has not supported the publication of such material. Nevertheless, these were considered a valuable resource by tutors in this programme. It would seem to vindicate the recent

publication of a comprehensive set of such materials by the Primary School Sports Initiative supported by the DES (PSSI, 2006) discussed in chapter 3. This resource forms the basis for much of the work in supporting teachers in physical education currently undertaken by the support service (cuiditheoireacht).

# Investment in Planning for Implementation

It was very evident that during this section of the programme tutors were engaging with real enthusiasm in planning for the facilitation of in-service. While their understanding of the content issues was discussed above as an element that facilitated ease of planning, there was evidence of firm commitment from the tutors as they grappled with some of the more difficult issues within the planning sessions. One tutor described this process as: "The [planning] sessions were very intense and tough going but a sense of achievement in the end!" (QST<sub>5TUT5</sub>). There was prolonged debate and discussion on some of the minor issues as well as the major issues involved in presenting the in-service programme to teachers. When tutors worked in groups on planning for different strands, for example, they reported back to the whole group on the issues that they had grappled with when devising the content to match their particular strand. Observation of these sessions (OBS<sub>TP4</sub>) revealed that issues raised ranged from the delivery of key messages of the curriculum through the in-service programme to the issue of providing the balance necessary between theory and practical elements of the particular strand. Field notes recorded during this time contain references to "...groups discussing doable content, grappling with identification of suitable levels of physical activity for teachers throughout the session" and "engaging in a long debate among the group of seven trainers identifying content that illustrates progression as well as methodologies"(Fieldnotes: 4/9/04).

This time devoted to planning for implementation was a crucial element in the preparation of tutors for facilitation of in-service. The benefit of allocating this extended time to planning (the first session devoted to planning had been scheduled in March 2004, the final intense period of planning was undertaken immediately prior to facilitation in September 2004) was clear as tutors embarked on facilitation of the inservice programme. The only occasion where they indicated that they felt under pressure in this process is described below (p. 247) and this was an issue of timing of a

particular element of the programme rather than the amount of time allowed for it. A clear message emanates from this experience for provision of continuing professional development: the allocation of ample time for planning the programme offered is a very important part of the preparation of tutors. In this instance, it was built into a programme that had provided tutors with good subject knowledge but without the time for planning it is doubtful whether this subject knowledge of tutors would have allowed for the creation of a good programme of in-service for teachers.

# Confidence Deriving from a Sense of Ownership

A particular outcome of the planning workshops of tutors discussed above was the growing sense of ownership that tutors displayed as they selected the content to be presented, the methodologies to employ and the key messages to be facilitated. At an early stage of the programme, following TP<sub>1</sub> and TP<sub>2</sub>, one tutor commented on the fact that active learning "...enables one to gain ownership of and internalise what is presented. This involvement should lead to greater self-knowledge and a deeper understanding and retention of what is presented by the tutors." (TUT20). At a later stage field notes, relating to the time during TP<sub>4</sub> that tutors spent planning, contain many references to the intensity of the debate around the issues raised above and the detailed planning of the organisational aspects that would ensure smooth facilitation of the content. One tutor described the process of planning for facilitation: "Learnt a lot from working within a small group on one strand...Many heads within a group working on one strand was a good idea. Therefore consensus and discussion was more meaningful with 7/8 in a group as opposed to 17 trainers (tutors)" (QST<sub>5TUT15</sub>). Another described these sessions as "...relevant to trainers' needs". (QST<sub>5TUT14)</sub> The sense of 'ownership' of the in-service programme combined with the tutors' growing understanding of content issues appeared to contribute significantly to their development as tutors, confident to present to teaching colleagues.

Tutors' confidence was particularly evident when they presented a sample of the programme that they were planning to a group of invited 'critical friends'. Feedback from the invited observers was particularly positive and tutors were very satisfied with their facilitation of the sample programme when only minor changes remained to be made. There was concern, however, that very little time to implement these changes

was available and there was some unease among tutors that they hadn't sufficient time to become really familiar with the revised content. One tutor described the sessions focused on planning for delivery as "Very productive. Could have had more time, very rushed." (QST<sub>5TUT8</sub>). This unease was palpable among the group on the final day together before each tutor embarked on a week of individual preparation and it was an issue raised by the tutors in the interviews discussed below (INT<sub>3</sub>) that seemed to effect their confidence somewhat.

When tutors were questioned in INT<sub>3</sub> about their 'readiness' to undertake the work in hand, they expressed general satisfaction with their readiness at the start of the programme and particularly underlined their level of confidence with the content aspects of the programme.

I believed in the content, so that was always something there that helped me along the way. And I think that came across in my days and working with teachers, that I did believe...I had done that stuff [sic] with children. And I wasn't speaking from a book, I was speaking from my own experience, you know? (INT<sub>3</sub>LM)

Another tutor claimed that he was "...very, very comfortable with the content..." All three tutors expressed their fears about presenting to a group of adults where some members of groups might have little interest in physical education. One tutor felt that there wasn't sufficient guidance sought from tutors from other groups who were familiar with the ongoing demands of teachers that were presented to them on a daily basis and thought that an element of 'cross-team' support might be useful (INT<sub>3</sub>MJ).

Tutors described their initial anxieties at presenting to teachers in INT<sub>3</sub> as being very short lived. While acknowledging that in the first few weeks of the work they were anxious about teachers' reactions both to them as presenters and to the content, as time went on and evaluations of the work were positive they were then able to focus more clearly on the work in hand. It was then that they began to become aware of the challenge that they had undertaken and they raised the issue of the personal gain that was involved. One tutor described this

I suppose from a personal point of view, it was a challenge to stand up in front of twenty five adults or thirty adults, you know, and especially when they're

your peers. Some of them might be more senior than you and there's ...a certain, I suppose confidence building element to that, when you actually cope with it comfortably. (INT<sub>3</sub>MM)

He went on to explain that meeting people who were "...hugely positive when it came to PE" was a "...very, very positive experience". All of the tutors interviewed agreed that they had gained from the experience and described it in terms of working independently with adults "...it was just a different type of work - you were working with adults, a different environment - to me that was great - personally it was a great thing, you know." (INT<sub>3</sub>MJ). Another tutor identified dealing with confrontation as being one of the most positive personal gains. Developing the ability to listen was identified by one tutor as a very important quality and one that had transferred across into lots of different areas of life. (INT<sub>3</sub>LM). This sense of personal gain raised and debated by the tutors is a theme that emerged that merits further study in relation to engagement with a programme of learning.

Finally, data gathered from QST<sub>4</sub> helped to establish how the tutors themselves rated their readiness to facilitate a programme of in-service to teachers. The tutors were asked to describe their levels of confidence as they began to facilitate the in-service programme. All of the tutors (14) were very satisfied or satisfied that the programme had prepared them well for facilitation. Thirteen tutors reported that they were confident to facilitate an introduction about physical education and about an aquatics programme, while fourteen tutors reported the same confidence levels to facilitate the games and outdoor and adventure activities programme to teachers (these were the topics that had been identified by the tutors in consultation with the PCSP for the initial phase of the in-service programme for teachers). Overall, evidence gathered from observation of TP<sub>4</sub>, from INT<sub>3</sub> and from QST<sub>5</sub> indicated that tutors felt ready to facilitate the programme. They were confident about the content they were presenting although some expressed reservations about skills directly related to aspects of facilitation discussed under question one above.

From the discussion of the confidence of tutors to present an in-service programme to teachers, four messages emerge for providers of continuing professional development in any subject. Firstly, allowing time to fully engage with the tutor programme and time to plan the in-service programme would appear to be crucial

elements of providing programmes. Secondly, the experience of presenting to a group of 'critical friends', while contributing significantly to the quality of the programme to be facilitated and indeed to the confidence of tutors to facilitate this programme, needs to be timed carefully to avoid having the reverse effect: impacting in a negative way on the confidence of tutors. Thirdly, direct liaison with tutors who have experience of facilitation of in-service programmes in other subject areas could be useful in preparing tutors for implementation. Finally, the issue of the personal gain for tutors described above raises an interesting question for the professional development of teachers. Providing opportunities for facilitation of areas of particular expertise by teachers opens up doors for teachers who otherwise are limited to working with children. This experience of working with adults could contribute significantly to their own personal development and this in turn could have a very important positive impact on their work with children.

# Conclusion Regarding Question Three: Readiness of Tutors to Implement the In-service Programme

The data gathered from tutors revealed that they were confident to implement the in-service programme to teachers after engagement with the tutor programme. All of the tutors were satisfied that the programme had prepared them well for facilitation. They attributed this to a number of factors (a) their 'comfort' levels with the particular content of the Physical Education Curriculum (Government of Ireland, 1999b) that they were about to present, (b) the opportunities they had throughout the extended period of the tutor programme to teach the content in their own teaching contexts and the opportunities they had to discuss their teaching experience with other tutors, and (c) the time spent on planning for implementation. It would appear that the time spent on planning for implementation provided them with a sense of ownership of the programme that contributed significantly to their confidence levels before implementation. Any anxieties they had about presenting to teachers were short lived, particularly because they had an opportunity immediately prior to implementation to present to a group of 'critical friends' as described above and also because they were quickly affirmed by the positive reactions of teachers to their programme.

The three research questions which provided the organizational framework for this chapter were focused on the key factors that shaped the physical education tutor programme, the impact of the programme on the teaching of physical education by the tutors and the readiness of the tutors to implement the in-service programme. However, another important task of this study was to evaluate the effectiveness of the in-service programme facilitated by the tutors after their engagement with the tutor programme. The next chapter will report on the responses of teachers to the initial phase of the inservice programme and on their intentions to implement the Physical Education Curriculum.

#### CHAPTER SEVEN

# Towards Improved Programmes of Physical Education: Responses to the In-service Programme

#### Introduction

In this chapter the likelihood that improved programmes of physical education can be an outcome of teachers' experience of the in-service programme facilitated by tutors is examined. The aim of the chapter is to present the findings from this study related to the experience of tutors and teachers of the in-service programme. By way of background information, a short description of the in-service programme for teachers, designed by the tutors, is presented and the biographical details that teachers provided in the initial questionnaires are examined. A framework for the discussion of findings is provided by identifying the main constraints on provision for physical education discussed in the literature reported in chapter 3. Two further elements with respect to the in-service programme are discussed. One is related to the treatment of key considerations informing the teaching of physical education while the focus of the other is teachers' learning. Throughout the discussion that follows data gathered from questionnaires and interviews are used to provide evidence of tutors' views on the inservice programme and are supplemented by observation of the facilitation of the inservice programme by tutors. Further data on teachers' responses to the programme are discussed in light of the findings from a questionnaire and interviews with teachers.

# Background and Contextual Data

This section provides a description of the organization and facilitation of the Physical Education Seminar Day (which constituted the first phase of the in-service programme) and examines the biographical and contextual data provided by teachers in the first questionnaire completed by them (QST<sub>4TEA</sub>).

Physical Education In-service Programme: Seminar Day 1

This first phase of the in-service programme was undertaken during the academic year 2004-2005. It consisted of a day-long seminar facilitated by a tutor who

had undertaken the programme of professional development provided by the PCSP. The seminar provided an overview of the Physical Education Curriculum (Government of Ireland, 1999b) and content related to three strands. The various approaches and methodologies suggested in the curriculum were illustrated as the content was mediated. Each seminar was followed by a day dedicated to planning for implementation of the Physical Education Curriculum (Government of Ireland, 1999b), which was undertaken at school level but not facilitated by the tutors. The second seminar day (focusing on the remaining three strands) and the second day dedicated to planning were scheduled for the following academic year.

The PCSP tutors outlined the aims of Day 1 of the In-service Programme (the first seminar) that was presented to primary teachers on a national basis. The seminar day was designed (a) to provide teachers with an overview of the Physical Education Curriculum (Government of Ireland, 1999b) and more specifically with the aquatics, games and outdoor and adventure activities strands, (b) to provide opportunities for teachers to actively engage with a range of activities from the Physical Education Curriculum (Government of Ireland, 1999b), (c) to provide teachers with an overview of the key teaching methodologies recommended in the Physical Education Curriculum (Government of Ireland, 1999b), (d) to demonstrate to teachers the type of resources that can be used in a school to develop the strand units of the three strands outlined, and (e) to affirm teachers in their present practice and to encourage further development and planning with regard to physical education in their schools. Each seminar was organised at local level by the local Education Centre and a suitable venue identified. The venue could be a sports hall or a hotel room depending on the availability locally. The seminars were offered to clusters of teachers from a number of schools or to a whole-school group of teachers in the case of large schools and all seminars followed the same format. Observation of the in-service programme (OBS<sub>TF</sub>) indicated that there was a consistent format across the different venues in line with what the tutor group had planned. The duration of each seminar was five hours. There was a combination of practical and theoretical sessions throughout the day with a predominance of practical sessions. An outline of the content of the seminar is included in Appendix N.

In order to gather feedback on phase one of the in-service programme the views of tutors who had facilitated the programme and a group of participating teachers were sought. The views of the tutors (whose background was described in chapter 6) and teachers will be reported below but firstly it is important to examine the background of the sample of teachers chosen. As discussed in chapter 5, a group of 85 teachers was chosen by the researcher for the purposes of this research study because they were participating in the in-service programme facilitated by three tutors, who formed part of the sample group of tutors selected for further investigation as part of the design of this study. It was important to ascertain how these teachers were representative of the larger teaching population in terms of their background and teaching experience as well as their background in physical education.

Biographical information and contextual information were gathered from the sample of teachers using a questionnaire (QST<sub>4TEA</sub>). The biographical data provided by the sample of teachers studied and reports on their expectations for the in-service programme of physical education were examined. Forty-one of the teachers responded to the questionnaire, representing a 49% response rate. Eighty percent were female and 17% were male. Just over half of the respondents (54%) were under 40 years old and a majority (58%) had taught for less than twenty years. While they taught in a range of different school types, the largest grouping was in co-educational schools that accepted children from junior infants to sixth class (51%) while 34% taught in junior co-educational schools. A majority (63%) taught in urban schools. Sixty three percent of the teachers had completed a Bachelor of Education degree with a further 24% having a national teaching qualification (NT) and just one teacher had a Masters degree. Over half of the respondents (56%) reported that they had completed a course in physical education since the completion of their teaching degree while 48% had a coaching qualification.

# Physical Education in the Schools of the Teachers

Similar information was sought from the teachers as had been sought from the tutors about the specific provision for physical education in their schools (reported in

chapter 6). Data collected (QST<sub>4TEA</sub>) prior to their engagement with the in-service programme provided information on the school plan for physical education, facilities, time allocation, elements underpinning the teaching of physical education, the strand of the curriculum that was most emphasised in schools and the availability of records of pupil achievement. This provided some detail on their engagement with teaching physical education and on the possible constraints on their teaching of the subject as they embarked on the in-service programme.

While 12% of respondents reported that their school had not developed a written school plan, 44% reported that their school had no plan for physical education (this was comparable to the schools of tutors where 38% reported that they had no school plan for physical education). This highlighted the need for the in-service programme to provide a starting point for many schools to embark on planning for physical education at school level. Information from QST<sub>4TEA</sub> provided data on facilities for physical education in the schools of the teachers surveyed.

Just 34% of teachers reported that the time recommended for the teaching of physical education in the school plan was in line with the DES recommendation of one hour per week. Almost half of the teachers (46%) reported that between 31 and 45 minutes was the time allocated to physical education while 12% reported teaching less than 30 minutes. Emphasis on elements such as social development (75%) and healthy lifestyles (73%) was strong with less emphasis placed on skill development (56%) and development of knowledge and understanding (29%) in their programmes of physical education. Over two thirds of the teachers (69%) stated that the games strand was allocated most time in the teaching of physical education in their schools while games was also the most frequent extra curricular element provided in school (68%) with athletics as the second most frequent, offered by 14% of schools. These figures, related to provision for physical education in the *schools* of the sample of teachers, are lower than those recorded in the schools of tutors (80% of tutors provided games and 35% provided athletics).

Data provided by teachers in QST<sub>4TEA</sub> indicated that 17% of them worked in schools where records of pupil achievement in physical education were kept. This figure is comparable to Drewett's (2005) study, cited in chapter 6, which found that

20% of teachers recorded pupil progress. This increase of availability of data on assessment in comparison with the schools of tutors where 8% kept records of achievement might be related to the fact that the data from the group of teachers were gathered eighteen months later and data collection was taking place at a time when schools were actively involved in school planning and related issues linking with the implementation of in-service programmes. The issue of tutors' sensitivities to the need for more detailed assessment records was raised in chapter 6. It was likely that at least some of the teachers in this study reported the existence of records but interpreted this as simply recording a comment relating to achievement in physical education in general rather than providing a meaningful record of achievement in any of the specific areas of physical education. Forty one per cent of teachers in this study had records of the physical education content taught and 24% of schools made this record available to other teachers (this compares to the slightly lower figures in the schools of tutors where 35% of teachers kept records of content taught and 20% of these made records available to other teachers).

#### Teachers' Physical Education Practice

In the questionnaire administered to teachers prior to their engagement with the in-service programme (QST<sub>4TEA</sub>) teachers were given an opportunity to provide data on the level of responsibility for physical education that they assumed, the time they allocated to the teaching of physical education, their favourite strand, the teaching methods they employed and the kinds of supports they used for planning physical education. The data provided by the teachers on their own experience of teaching physical education are discussed below.

Responsibility for physical education within the school was undertaken by just 22% of teachers who had a special duties post with responsibility for physical education while 51% of teachers indicated that they supported colleagues in the teaching of physical education. This compared with 39% of tutors who had special duties posts for physical education and 96% who supported colleagues. The higher figures here for tutors are not surprising given that they were selected as tutors because of having additional experience in physical education. Information on the time allocation for physical education gathered from QST<sub>4TEA</sub> indicated that 73% of teachers taught

physical education once per week. Forty-eight per cent of the teachers taught between 46 and 60 minutes of physical education per week, 34% taught between 31 and 45 minutes per week while just 2% taught more than one hour (50% of tutors had reported teaching more than one hour per week). The time allocation was generally less than the allocation recommended by the DES (one hour per week) while it was significant that just 7% taught physical education twice per week. Games was identified by 46% of teachers as their preferred strand with dance at 9% representing their second preference. A majority of teachers (61%) had participated in competitive sport.

QST<sub>4TEA</sub> provided information on the strands taught by teachers. It was noteworthy that similar trends emerged on examination of the data provided by the sample of teachers to those that came to light on examination of the data provided by the tutors. Games and athletics were again the strands that dominated in the physical education programme with 88% of teachers reporting that they taught games very frequently or frequently with athletics at 62%. Dance and gymnastics were taught rarely or never by 49% and 54% of teachers respectively. Comparative figures for tutors were 53% and 66%. All of these figures emphasise the low status of dance and gymnastics in Irish primary schools. Aquatics and outdoor and adventure activities also rated poorly. Fifty nine per cent of teachers reported that they taught aquatics rarely or never. Given the small number of teachers who have a qualification in swimming teaching, it is likely that the teachers who described teaching aquatics were in fact reporting that aquatics was provided for their class rather than that they themselves taught aquatics. Data provided by the teachers indicate that 73% taught outdoor and adventure activities rarely or never, probably indicating that many teachers would be engaging with outdoor activities for the first time as part of the in-service programme.

An examination of the teaching methods used by the sample of teachers indicated that 34% of teachers used guided discovery methods of teaching frequently or very frequently in physical education, 68% used group teaching, 47% integrated physical education with other subjects and 85% reported that they used direct teaching very frequently or frequently. All of these figures are considerably below those reported by tutors with the highest discrepancy related to the use of group teaching: 68% of teachers in comparison with 97% of tutors. As only 20% of teachers in the INTO study (1996) reported using group teaching as a methodology both tutors and teachers

showed a considerable increase on this figure. Nevertheless, it would seem that considerable support in helping teachers to employ the variety of methodologies outlined in the Physical Education Curriculum (Government of Ireland, 1999b) is necessary.

Their own teaching experience was ranked as the most important influence on planning for physical education by 41% of teachers and as second most important by 24%. The influence of courses was ranked as the most important influence by 12% of teachers and as the second most important influence by 37% of teachers. The Physical Education Curriculum (Government of Ireland, 1999b) was ranked most influential by 24% of teachers yet 17% of teachers claimed that they were not influenced by it at all. This indicated a clear need to mediate the curriculum effectively as an important element of the in-service programme so that teachers would be influenced by the content and methodologies proposed as well as the underlying principles outlined to inform the teaching of physical education and the need for sustained support to ensure that teachers continue to use the curriculum as the basis for their teaching.

Teachers' Expectations for the In-service Programme of Physical Education

QST<sub>4TEA</sub> sought to identify the expectations of teachers prior to their engagement with the national in-service programme of physical education. A number of statements were provided representing possible expectations that teachers might have related to the programme (see Table 18 below). This information was valuable when analysing the effectiveness of the in-service programme facilitated by the tutors.

Teachers were asked to identify each statement that represented one of their expectations of in-service. They were then asked to rank order the *three* most important outcomes. The outcome identified by the majority of teachers (37%) as the most important outcome was learning how to teach practical activities to implement aspects of physical education.

Table 18
Ranking of Teachers' Expectations for the In-service Programme of Physical Education

# Teachers' Expectations ranked in order of importance to them

- I will learn how to teach practical activities to implement aspects of Physical Education
- 2. I will be exposed to a variety of teaching methodologies
- 3. I will gain an understanding of Physical Education
- 3. I will learn how to adapt programmes of Physical Education to cater for children with special needs

The second most important outcome identified by 27% of teachers was being exposed to a variety of teaching methodologies and the third most important outcome identified was gaining an understanding of the Physical Education Curriculum (Government of Ireland, 1999b). Only 5% identified changing how they teach physical education as the most important outcome and only 10% reported adapting programmes to cater for children with special needs as the most important outcome. The three most important outcomes identified by teachers above can be related to the literature on teaching of physical education in primary schools in Ireland where teacher competence has consistently been reported as a concern by teachers (McGuinness and Shelly, 1995; Deenihan, 2005). It is clear that issues such as teaching practical activities, using a variety of methodologies and gaining an understanding of the Physical Education Curriculum (Government of Ireland, 1999b) would form a fundamental basis for becoming more competent to teach physical education.

An open-ended question in QST<sub>4TEA</sub> sought to identify the key issues related to the introduction of the curriculum and to the three strands identified for treatment for the first day of the in-service programme. Teachers identified some common key issues across the three strands: (a) the importance of practical content being presented, (b) that content should be adaptable to their particular teaching environment, (c) the illustration of clear progression within the content treated, and (d) the provision of organisational guidelines. These issues were illustrated by comments such as "Practical suggestions for junior infants to second class, so we can build up a portfolio and see progression from infants up" (TEA1), "Practical ideas for this strand in our situation" (TEA30) and "lesson ideas and organizational advice" (TEA5). Another issue highlighted by teachers

was safety: "Control of children in large open areas" (TEA16) was an issue raised with respect to outdoor and adventure activities while many respondents identified treatment of safety issues with respect to aquatics as being important. Within games, particular reference was made to the gender issue with teachers urging that games suitable for boys and girls should be presented. This issue was also seen to be important in the introduction to the Physical Education Curriculum (Government of Ireland, 1999b).

Eight of the teachers surveyed highlighted the importance of the introduction in providing a brief overview of the curriculum. One teacher thought it was important to highlight "...the relationship of the strands to each other". Some teachers (TEA16), (TEA28) urged that the time allocated to each strand should be treated while one teacher raised the issue of equal time being spent on each strand (TEA23). An issue that was suggested for treatment within the introduction and within the games strand was the development of skills "skills to be attained by pupils on leaving primary school [should be treated]" (TEA18). The key issue of facilities and funding was raised repeatedly as an area that should be discussed with many teachers pointing to the lack of funding for aquatics and outdoor and adventure activities in particular. One teacher summarised her expected outcomes for the day of in-service as "...realistic, achievable [tasks] that take into consideration our small rural school multi-class situation," (TEA8) while another welcomed "any fresh idea" (TEA26) which could arise from the fact that in-service in physical education at national level had not been offered previously.

From observation of the tutor programme all of the issues raised by teachers had been treated during the tutor programme and had been identified as elements that merited consideration within the in-service programme. The challenge for the facilitators was how to treat these elements within the time constraints of the in-service programme. The effectiveness of the in-service programme in dealing with the issues raised by teachers prior to their engagement with the programme as well as other important elements related to enhancing the provision of improved programmes of physical education will be discussed in the next section.

# Barriers to Quality Programmes of Physical Education: a Framework for Discussion of Findings

The construction and delivery of quality physical education programmes was identified as a challenge for physical educationists

In the absence of a strong State commitment to the subject it is evident that the challenges facing physical educationists relate to their ability to construct and deliver quality physical education programmes. Such programmes will have to contribute to the promotion of 'all dimensions of human development' in the context of the underlying principles of pluralism, equality, partnership, quality and accountability which underpin Charting our education future (1995). (Duffy 1997, p. 183)

While the White Paper 'Charting our education future' cited above provides a focus when constructing quality programmes of physical education, findings from this study will be used to inform the discussion on the extent to which the tutor programme and the first phase of the in-service programme delivered by tutors helped to achieve this goal. Some of the constraints on provision for physical education in an Irish context which were discussed in chapter 3 are used to provide a framework for this discussion

- The issue of lack of teacher confidence and competence in teaching physical education will be discussed under the heading 'The Importance of Teacher Attitude and Confidence'
- The narrow range of content as well as the narrow range of methodologies
  used in the teaching of physical education have been a feature of the
  implementation of programmes of physical education. The likelihood of
  programmes of physical education encompassing a broader range of content
  and a wider range of methodologies after the in-service programme is explored
  under the heading 'Expanding Programmes Taught Using a Range of
  Methodologies'
- The issue of provision of time for teaching physical education will be discussed under the heading 'The Time Factor'

- The poor provision for planning programmes of physical education is discussed with reference to the likelihood of teachers engaging in better planning for physical education and it is linked with the concept of teachers critically reflecting on their practice under the heading 'Planning and Reflection Factors'
- The frequently cited poor provision of facilities and equipment as a constraint
  on teaching of physical education as well as the need for support for teachers
  in their teaching of physical education will be discussed under the heading
  'Obstacles and Challenges'.

Two other elements merit discussion with respect to the in-service programme. Firstly, how the key considerations outlined in the Physical Education Curriculum (Government of Ireland, 1999b) that should inform teaching of the Curriculum were conveyed throughout the programme and secondly, how teachers seemed to be learning. While much of the discussion below is related to how constraints on implementation identified above can be overcome, it must be acknowledged, however, that other constraints have also been identified: class size (McGuinness and Shelly, 1995) and poor pre-service training (Keating 1982; PEAI 1993; McGuinness and Shelly, 1995) for example. These were factors that were not investigated as part of this study but they will be discussed in the final chapter as elements that merit attention if quality physical education is to become a reality. The nomenclature used in previous chapters (outlined on pp. 140-142) to simplify the identification of the many data gathering instruments and periods is used again in this chapter.

Towards Improved Programmes of Physical Education for Children:
The Importance of Teacher Attitude and Confidence

The attitude of teachers, and in particular, their confidence levels are important considerations in providing quality physical education. Teachers have consistently reported a lack of confidence and competence to teach physical education (discussed in chapter 3). In one study (INTO, 1976) 64% of teachers sampled taught PE but of these, only 34% were satisfied with the way they taught it. Fontes and Kellaghan (1977) reported that one third of teachers in schools surveyed found physical education to be the most difficult subject in the curriculum to implement. Other studies have focused on

the teaching of physical education in primary schools (Keating, 1982; Deenihan, 1990; McGuinness and Shelly, 1995; Broderick and Shiel, 2000) and have highlighted low levels of satisfaction of teachers with their teaching of many of the elements of physical education. Such attention to this element of teaching of physical education by primary teachers prompted an examination of the effectiveness of the in-service programme in promoting more positive attitudes and in increasing confidence levels of teachers.

Firstly, tutors' views of teacher attitude were investigated by using a questionnaire which sought responses from tutors on their perceptions of how teachers might teach physical education after engaging with the in-service physical education programme. Secondly, a questionnaire was administered to teachers after their engagement with the in-service programme. Interviews with some tutors and teachers helped to provide further insight into the effect of the in-service programme on teachers' attitudes and confidence levels. A questionnaire (QST<sub>5</sub>) was administered to tutors after they had facilitated the in-service programme for a period of three months. At that point tutors would have provided in-service training for approximately 12,000 teachers. Tutors were asked to respond to a number of possible outcomes of the inservice programme in terms of the likelihood of these outcomes being achieved and their responses are presented in Table 19.

From the data presented in QST<sub>5</sub> it appeared that tutors (14) thought it 'very likely' or 'likely' that teacher attitude to teaching physical education would be more positive. When asked in interview (INT<sub>3</sub>) if they felt that teacher attitude to physical education had changed as a result of the programme one tutor described it as a process of "...whetting the appetite" for physical education (INT<sub>3</sub>MM). He had noted that immediately following delivery of in-service a group of teachers that he had encountered had opted into a course focussing on outdoor and adventure activities because of their interest in the area that had been introduced to them through the inservice programme. He described teachers' reactions as

...very, very enthusiastic. Feedback was very positive on the day. The fact that it was practical, the fact that they got ideas that were do-able, the fact that the ideas were coming from, we'll say, a person that had taught really, as well. (INT<sub>3</sub>MM)

Table 19
Tutors' Views of the Attitudes and Practices of Teachers After the In-Service Programme

| Views of attitudes   | Very<br>likely | Likely | Unlikely | Unsure |
|--|----------------|--------|----------|--------|
| Teachers' attitudes to teaching<br>Physical Education will be more<br>positive                                   | 12             | 2      | -        |        |
| Teachers will teach Physical Education more frequently   | 3              | 10     | 1        | •      |
| Teachers will be prompted to reflect<br>more on their teaching of Physical<br>Education                          | 6              | 6      | 1        | 1      |
| Teachers will plan their teaching of<br>Physical Education more carefully  | 3              | 8      | 1        | 2      |
| Teachers will teach elements of strands of the Physical Education programme that they have not taught previously | 10             | 4      |          |        |
| Teachers will employ a greater variety of teaching methodologies in their teaching of Physical Education         | 3              | 10     | 1        | -      |
| Teachers will integrate Physical<br>Education more frequently with<br>other subjects                             | 4              | 9      | 1        | -      |
| Teachers will attempt to differentiate within the Physical Education lesson                                      | 2              | 10     | 1        | 1      |

n=15

When interviewed (INT<sub>3</sub>) tutors highlighted the active nature of the day as a particularly successful aspect of teachers' engagement with the in-service programme and one that contributed to teachers feeling more positive towards the subject. This aspect had been a concern for them prior to facilitation of the in-service programme; they were concerned and had worked very hard to determine what level of activity was appropriate for such a disparate group. One tutor in describing the active nature of the day commented that

...activity makes people feel good...they get up, they give it a go or whatever. They actually start enjoying themselves. And for many people, they actually

haven't played games, or done any type of physical activity in...so many years and they actually enjoyed it. And they then were able to sit back and listen or talk among themselves, going "I never had this when I was a kid, I never had this much fun". You hear people saying "I've never thrown and caught a beanbag or a ball" or "I never really kicked a ball before". And they start to see how much fun it is and what they got out of it personally. And I think that was probably the biggest thing I saw, that it impacts them personally today. And they feel enthused, they may be more encouraged to go and try it with the children...(INT<sub>3</sub>LM)

A teacher who had participated in the in-service programme commented (INT<sub>TEA</sub> M): "My abiding thing: it was fun for people taking part". She went on to say that for people taking part who were reluctant or who don't actually teach a physical education class themselves "...they got involved in the games and it didn't put them off the day". Another related element was highlighted by a teacher (INT<sub>TEA</sub>S) who expressed the opinion that the day was "non-threatening" especially for people who don't exercise who might be expected to feel some pressure as they were exposed to physical activity.

Data gathered from teachers in QST<sub>6TEA</sub> shed further light on the issue of the active nature of the day. An open-ended question allowed teachers the opportunity to identify any factors that might enhance facilitation of the second day of the in-service programme (this questionnaire was administered after they had completed the first day of the programme). Comments such as "Enjoyed all practical application-hope it's another day like that" (TEA10), "I found the active participation in Day 1 great. This should also be a feature of Day 2" (TEAIS) and "More of the same. Good enthusiastic facilitator and lots of participation and fun" support the tutors' views that teachers welcomed the emphasis on active participation. Some teachers felt that even more active participation was necessary. Responses such as "More action for us-and less oral presentation from the facilitator" (TEA12) and "Get teachers involved...more action, less talk" (TEAR) might indicate that consideration of even more active involvement by teachers would benefit a follow-up programme. One of the teachers interviewed (INT<sub>TEA</sub>Michelle) believed that there was a "nice mix" between theory and practical work and reasoned that for a practical subject "...you need to be doing something but it doesn't have to be a high energy thing". It seemed to me from observation (OBS<sub>TF</sub>) that the active engagement with content was a key factor in teachers' learning and this view was supported by the comment by one teacher in an open-ended question: "It was a most enjoyable 'hands-on' day. Practical help delivered very well. Active participation is the key to encouraging people to implement this in their classes". (TEA32) Given that

just over half (54%) of the teachers surveyed were under 40 years of age it is significant that there was such widespread approval for the active nature of the first day of the inservice programme. Observation by the researcher confirmed this positive reaction by participants to the amount of physical activity demanded as they engaged with the programme.

It could be argued that enhanced understanding of physical education and the Physical Education Curriculum (Government of Ireland, 1999b) would form a fundamental basis for enhancing the confidence levels of teachers to provide quality physical education. This aspect was investigated through interviews with three of the tutors (INT<sub>3</sub>), an interview with teachers (INT<sub>TEA</sub>) and by using a questionnaire (QST<sub>6TEA</sub>) for teachers (completed by 35 teachers). Tutors referred to the understanding of physical education that teachers gained. One tutor described the teachers as coming from two distinct positions: one group from a 'sports mad' background and subsequently teaching a games dominated programme and the other group who have become disillusioned with physical education. He found that they "...certainly bought into the idea of the key messages of maximum participation, enjoyment and PE and activity for all...it was something that a lot of them commented on" (INT<sub>3</sub>MM). Another tutor commented on how part of the understanding that teachers were developing was linked to their general acceptance that physical education

...wasn't just about sport. Preparing teams, and running races, and swimming in galas, you know, and that type of thing. That this was very much physical activity for all and sampling ideas, and giving children a chance. And so many teachers, even if they hadn't taught PE a lot, bought into that" (INT<sub>3</sub>MJ).

The responses of the teachers, however, when asked in QST<sub>6</sub> if the in-service programme had enhanced their understanding of physical education were less positive. Only 25% reported that their understanding had been enhanced 'a lot' with a further 51% indicating that it had been 'somewhat' enhanced. In INT<sub>TEA</sub> one teacher (S) while suggesting that colleagues' understanding of physical education was enhanced by participation in the in-service programme cautioned that it was like the effect of the seminar day on any subject. She felt that the in-service programmes in all subjects were motivating but that the effect lessened over time: teachers are motivated to try new aspects but subsequently "...you fall back into your timetable". Responses were considerably more positive when asked if their understanding of the Physical Education

Curriculum (Government of Ireland, 1999b) had been enhanced with 42% indicating that their understanding had increased 'a lot' with a further 48% indicating that it had increased somewhat. This disparity probably indicates that while the emphasis in the inservice programme on mediating the Physical Education Curriculum (Government of Ireland, 1999b) was effective the issue of enhancing teachers' understanding of physical education in general merits further attention. It would be important that teachers would have an opportunity to explore what physical education is as they engage with content taught and methodologies used. Hence, the data gathered from the teachers indicated that the most significant factors in shaping their attitude to teaching physical education could be identified as their enhanced understanding of the Physical Education Curriculum (Government of Ireland, 1999b) and their satisfaction with the active nature of the day.

The significance of these factors points towards the importance of (a) maintaining the emphasis on active exploration of practical activities in in-service programmes of physical education, and (b) striving to enhance understanding of the curriculum itself. Garet et al. (2001) concluded that where active learning and a focus on subject content were features of professional development the likelihood of enhanced knowledge and skills is greater. Tutors, when interviewed (INT<sub>3</sub>), identified a further positive outcome of the in-service programme linked to the promotion of positive attitudes: the teachers were affirmed in their work. One tutor instanced the practice of teachers offering children opportunities to play playground games as a practice that teachers were already doing but didn't appreciate its significance in providing valuable educational opportunities for children. She felt that the increased understanding of physical education gained by discussion of these activities resulted in teachers feeling affirmed in their teaching (INT<sub>3</sub> LM). Another tutor described the impact of this affirmation on teachers' attitude to teaching physical education:

It affirmed the teachers. And for teachers, maybe that wouldn't be big into PE, at least if they're playing their playground games and they're running and they're throwing and catching bean bags and stuff like that. That (sic), I think they know that they're on the first rung. And when they're happy that they're on the first rung and that they're standing safely on the first rung...hopefully they'll be enthused by the whole thing and say, "Alright, now I know where the second rung is and the third, and I'll try and get up along the way" (INT<sub>3</sub> MJ).

A teacher in an interview (INT<sub>TEA</sub> Michelle) reported that "...all the things that we were introduced to were possible. There was nothing outrageous....even for people who aren't interested in sport" and indicated that this element was affirming for teachers as they didn't feel threatened by having to engage in content that was too demanding for them.

It was clear from interviews with tutors (INT<sub>3</sub>) that they linked teachers' enjoyment of the day, their increased understanding of the Physical Education Curriculum (Government of Ireland, 1999b) and the affirmation of some of their teaching as very positive aspects in terms of the likelihood of improved teaching of physical education by teachers. Tutors' belief that teacher attitude would be more positive could represent a first step in building teachers' confidence to teach physical education. One tutor summarised this issue when he described the day as a "...very, very positive challenge" for teachers and felt that for those who were reluctant to engage in activity initially it was "...the fear in their heads that was the problem" (INT<sub>3</sub>MJ). They feared that they were going to be challenged to play, for example, football but instead they were assigned tasks at a very appropriate level. He went on to say that

...teachers went back having enjoyed their PE day, with a positive approach to PE, because, I mean, if we want to get them to do PE at all, that's the way they have to be about it. It's only the start, but it certainly was more satisfying for me. (INT<sub>3</sub>MJ)

Relatively recent data on Irish primary teachers' personal involvement in sports indicate that almost 50% of children are taught by teachers who are themselves active in sports, while 30% are taught by teachers who coach children or adults outside of school (Broderick and Shiel, 2000). This would suggest that many teachers have a positive disposition towards sport. Hence, it would seem that if in-service education is tailored carefully to build on this positive attitude it is more likely that it will transfer to their teaching of physical education. One element of building on teachers' positive attitudes is the focus on building their competence to teach physical education. The importance of mediating the Physical Education Curriculum (Government of Ireland, 1999b) will be discussed below as one significant means of increasing competence levels of teachers.

Towards Improved Programmes of Physical Education for Children: Expanding Programmes Taught Using a Range of Methodologies

The Report of the Review Body on the Primary Curriculum (Government of Ireland, 1990b) identified the lack of detailed aims and objectives for physical education as one of the difficulties with the 1971 Curriculum for Physical Education. The Physical Education Curriculum (Government of Ireland, 1999b) and Teacher Guidelines (Government of Ireland, 1999c) outline content, methodologies and key considerations that can provide a framework for best practice in the teaching of physical education. Considerable emphasis is placed also on the importance of school planning in both documents, which will be discussed later. Observation of the tutor programme (OBS<sub>TF</sub>) over three days at three different venues (two urban, one rural) focused on how the content, methodologies and key considerations were mediated to teachers as well as on how teachers were learning. Questionnaires administered to tutors (QST<sub>5</sub>) after they had facilitated the tutor programme for a period of three months and to teachers (QST<sub>6</sub>) after engagement with the in-service programme sought to establish to what extent the content and methodologies had impacted on teachers.

Mediating the Content and Methodologies of the Physical Education Curriculum

The questionnaire (QST<sub>6TEA</sub>) administered to teachers after engagement with the in-service programme identified possible learning outcomes including some related to content (particularly content related to games, outdoor and adventure activities and aquatics that were treated during the first seminar day) and methodologies of the curriculum. Teachers were asked to state the extent to which the statements presented represented learning outcomes for them. Interviews with tutors and teachers attempted to probe possible learning outcomes further. The learning outcomes related to the content and methodologies of the curriculum are outlined in Table 20 below.

Table 20 Questionnaire Items Illustrating Possible Learning Outcomes

| Learning Outcomes   | %% |
|---|----|
| I learned how to teach practical activities to implement the games  | 94 |
| strand of the Physical Education Curriculum   |    |
| I learned how to teach practical activities to implement the outdoor and adventure activities strand of the Physical Education Curriculum | 83 |
| I learned how to teach practical activities to implement the aquatics strand of the Physical Education Curriculum                         | 31 |
| was exposed to a variety of teaching methodologies  | 80 |
| l learned how to adapt programmes of physical education to meet individual needs  | 60 |
| learned how to adapt programmes of physical education to cater for children with special needs  | 40 |

Evidence gathered from the interviews with tutors and teachers as well as the evidence from the questionnaires will be presented with a view to evaluating how the content and methodologies of the curriculum were mediated to teachers.

#### The curriculum content

With reference to the statements (QST<sub>6TEA</sub>) outlined in Table 20 above relating to the content of the curriculum, 94% of teachers indicated that learning how to teach practical games activities was a learning outcome for them and of these almost half (49%) claimed that it was a significant outcome for them. When interviewed (INT<sub>TEA</sub>) one teacher commented that for her the games content "...was really for refreshing, there was nothing new....I'm sure they were new for some people who were there" (Siobhán) but she emphasized how much she enjoyed the outdoor and adventure activities, an area that she hadn't taught extensively. As a teacher with less than five years teaching experience it was likely that she had already experienced a considerable amount of the games content at undergraduate level.

The second statement above refers to learning how to teach outdoor and adventure activities. This aspect was rated as a significant learning outcome by 83% of teachers. One teacher commented: "I loved the outdoor activities...It's something we had never done" (INT<sub>TEA</sub> Maeve) while another pointed out: "I had it in my head the idea that if you were doing outdoor and adventure activities you would have to be heading off, a lot of hassle" (INT<sub>TEA</sub> Michelle) whereas many of the activities presented were suitable for implementation in the school grounds.

The next statement outlined referred to the teaching of aquatics. Only 31% rated learning how to teach practical activities to implement the aquatics strand as a learning outcome for them. The emphasis in facilitating aquatics was on explaining policy and practice around the teaching of aquatics as the teaching of aquatics is generally not undertaken by the class teacher while just a small portion of time was devoted to outlining practical activities. Policy issues included supervision of children in changing rooms and safety issues with respect to water. This factor probably accounts for the lower ratings for aquatics. (The questionnaire asked respondents to indicate to what extent an outcome based on teaching practical activities to implement the aquatics curriculum represented a learning outcome for them.) During INT<sub>TEA</sub> one teacher (Siobhan) recounted how she had begun to adopt the policy related to teachers liaising with the swimming teacher that had been proposed as part of the in-service programme by speaking with the swimming teacher after lessons about grouping children and about meeting the particular needs of a child with special needs. From the observation of the researcher, this key message seemed to be mediated very clearly at each of the venues observed so it is not surprising that there is evidence of change of practice by this teacher. The issue of breadth of content that has been raised so often in the literature on physical education at primary level will be discussed below.

## Breadth of content.

As noted earlier, the content of programmes of physical education in Irish primary schools has been dominated by teaching of games. Evidence reported in chapter 6 of this study indicates that games was the strand taught most frequently by tutors in their teaching context with very little time allocated to dance and outdoor and adventure activities. The same trend was reported on p. 254 when the sample of

teachers in this study was surveyed. The Physical Education Curriculum (Government of Ireland, 1999b) outlines content in five other strands in addition to the content outlined for games and recommends that a wide variety of activities be taught. The recommendation by the National Task Force on Obesity (Government of Ireland, 2005b) to allocate more time to teaching of physical education was discussed in chapter 3. A further recommendation focused on increasing opportunities for physical activity that are appropriate to age, gender and ability (p. 88-89.) An examination of the likelihood of teachers teaching new content links with the recommendations for providing increased opportunities for physical activity as traditionally opportunities for physical activity have centred on games.

All of the tutors who responded (14) (QST<sub>5</sub>) believed that teachers would teach elements of strands of the physical education programme that they had not taught previously. Data gathered from teachers (QST<sub>6TEA</sub>) indicated that 74% of teachers reported that they would teach elements of strands that they had not taught previously. This finding was particularly encouraging given that tutors had undertaken to facilitate outdoor and adventure activities, for example, which traditionally teachers would rarely have taught (McGuinness and Shelly, 1995). Observation of the response of teachers to the in-service programme (OBS<sub>TF</sub>) indicated that they had gained a basic understanding of the key elements of a programme of outdoor and adventure activities and the main obstacle raised by them during the programme was the creation of the resources for implementation rather than any difficulty with the implementation of the strand itself.

It was apparent from interview data (INT<sub>3</sub>) that tutors also believed that new elements of the games strand would be taught by teachers. Observation by the researcher of the games module of the in-service programme and teachers' responses to it would suggest that teachers welcomed the elements of games that they had not taught previously such as the small-sided 3v2 games presented. Field notes based on the games module contain references to teachers commenting on the inclusive nature of the approach presented and how this approach could be incorporated into the new content that they proposed to teach.

It is difficult to ascertain to what extent aquatics as an element of content that was introduced to teachers would be implemented due to the issues surrounding

availability of pools and funding for instruction and travel to venues. What was clear, however, was that teachers were informed about the work that they could do in the classroom to support the programme outlined for implementation in the pool. It is an area that teachers indicated in the discussion about the teaching of aquatics that was possible for them to implement. One teacher interviewed (INT<sub>TEA</sub> Siobhán) indicated that she found it difficult to cover any more content related to aquatics without further support materials being made available. With regard to the teaching of new content, two issues were raised during an interview with teachers (INT<sub>TEA</sub>): (a) that safety and discipline issues provide obstacles to the teaching of physical education, and (b) that new content at senior level should focus on games "that would be socially useful to them in later time [life]" such as badminton, or tennis or aerobics. These issues merit discussion if further support programmes for teachers are planned.

#### Teaching methodologies.

While the data reported above shed light on the effectiveness of the in-service programme in mediating the content of the curriculum, considerable emphasis is placed within the Teacher Guidelines on the methodologies used in the teaching of physical education. Data gathered from tutors (QST<sub>5</sub>) revealed that a majority of tutors (13) (see Table 19, p. 263) believed that teachers would employ a greater variety of teaching methodologies after engagement with the in-service programme. This was significant in that many of the tutors had indicated that they had begun to employ a greater variety of methodologies themselves (INT<sub>1</sub>, INT<sub>2</sub> and INT<sub>3</sub>) as an outcome of their engagement with the tutor programme. In particular, they noted group teaching as a methodology that teachers would explore (INT<sub>3</sub>). In turn, the emphasis on presenting a variety of teaching methodologies was evident from observation of the in-service programme (OBS<sub>TF</sub>) where genuine efforts to portray clear examples of use of group teaching and guided discovery methods, for example, were apparent. In all, 37% of teachers acknowledged in QST<sub>6TEA</sub> that they had been exposed to a variety of teaching methodologies during the in-service programme with a further 43% claiming that they had been exposed to some extent. This evidence is encouraging given that research on teaching in primary schools in general provides evidence that there was little emphasis on, for example, group teaching, differentiation or integration (INTO, 1996). Evidence

from this study indicates that 80% of teachers intended to employ a greater variety of teaching methods as a result of participation in the in-service programme (QST<sub>6TEA</sub>).

### Integration and differentiation.

Discussion will now be focused on two specific elements outlined in the curriculum: integration and differentiation. The use of integration and differentiation are emphasized throughout the Physical Education Curriculum (Government of Ireland, 1999b) and indeed across all subjects in the primary curriculum. Possibilities for integration are identified throughout the Physical Education Curriculum at the foot of many pages while both integration and differentiation are discussed in the Physical Education Teacher Guidelines specifically in the context of school planning and classroom planning. Some exemplars of units of work that illustrate the principle of integration (Government of Ireland, 1999c, p. 18, 48-49) illustrating how physical education can be integrated with other subjects are provided and strategies for providing for children with different abilities are outlined (p. 38). Such emphasis prompted specific investigation of integration and differentiation throughout this study.

Data from QST<sub>5</sub> revealed that a majority of tutors, 13 of the 14 who responded, felt that teachers would integrate physical education with other subjects more frequently and a majority (12) believed that teachers would attempt to differentiate within the physical education lesson, possibly indicating that tutors were more aware of these concepts themselves. However, observation of the in-service programme by the researcher (OBS<sub>TF</sub>) would lead to the conclusion that these elements were not portrayed particularly strongly in the in-service programme and hence might constitute very challenging elements for teachers, some of whom would be undertaking planning and implementing a programme of physical education for the first time. It should be noted that McGuinness and Shelly (1995) reported that gymnastics, for example, was being taught by just 24% of teachers while athletics was taught by just 40%, hence many tutors would be teaching these strands for the first time. It was not surprising that data gathered from interviews with tutors (INT<sub>3</sub>) indicate that there was concern among tutors that integration with other subjects was a concept that only those more experienced in the teaching of physical education would explore. One tutor expressed the opinion that

...some of them will pick it up but for somebody who would be coming at PE from a very low level, a zero base of activity, it's going to take a while and it's going to take more input for them to really buy into the group teaching, the integration; being honest even as trainers how often when we were in our PE classes did we differentiate on a regular basis...how often did we do integration [sic]? (INT<sub>3</sub> MJ)

Nevertheless, 54% of teachers themselves reported in QST<sub>6TEA</sub> that they would integrate physical education more frequently with other subjects as a result of their participation in the in-service programme (initial data gathered prior to engagement with the inservice programme indicated that 47% of teachers integrated physical education with other subjects but information on the extent to which they integrated was not sought) and a further 29% of teachers were unsure. During INT<sub>TEA</sub> teachers (Siobhán, Maeve), spoke of plans they had to integrate outdoor and adventure activities, for example, with Geography and SPHE. This raises the issue that the concept of integrating physical education might become an option for those who were unsure of their ability to integrate physical education with other subjects if further support was given to them.

Differentiation is described in the Teacher Guidelines as "providing for different abilities" (p. 38) and some practical strategies are outlined to prompt use of a differentiated approach to teaching of physical education. Data gathered from QST<sub>6TEA</sub> indicated that while only 6% of teachers ranked 'adapting to individual needs' as the most important outcome for them, 14% did rank it as their second most important outcome. This lower ranking is to be expected in a situation where so many teachers were experiencing aspects of content for the first time. It is likely that planning for differing abilities, like integration, will happen only after teachers have become 'comfortable' with the content they are teaching. Nevertheless, observation of the inservice programme (OBS<sub>TF</sub>) showed that the issue of differentiation was raised during the in-service programme within the context of providing for children with special needs but there was little time devoted to any development of the concept. Considerable time would have needed to have been allocated to this important aspect of teaching physical education to really engage with it. From observation of the programme by the researcher, the need for challenging gifted children or coping with the very competitive child, for example, were areas that didn't merit attention. It is only within the context of the sustained support (Garet et al., 2001; Smylie, 2005; Armour, 2005a) that such a wide range of issues could realistically be treated.

The issue of meeting individual needs, especially with reference to the child with special needs was an issue that tutors identified very early in the programme. During a review of work undertaken soon after they embarked on facilitating the programme of in-service (Fieldnotes: 11/10/04) they highlighted the need for more time to be spent teasing out issues related to coping with children with special needs. Yet, they struggled to identify any period during the seminar day where they could afford it designated time. When reflecting on the extent to which the statement 'I learned how to adapt programmes of physical education to cater for children with special needs' represented a learning outcome for teachers having engaged with the programme, just 11% stated that it did (QST<sub>6TEA</sub>). When asked what they would like to see emphasized in the second day of the in-service programme, some tutors highlighted provision for special needs. Given the increasing number of children with special needs in mainstream schools where the majority of teachers are employed this is clearly an area that merits attention in future programmes of in-service.

The emphasis on meeting individual needs, particularly within the context of special needs, identified by tutors resonates with the findings of the NCCA Primary Curriculum Review Phase 1 Report (2005) which recommended that "Techniques for differentiating content...should be provided for teachers to enable them to cater for the range of learning needs and abilities represented by individual children" (p. 247). The DES report on the same phase of the in-service programme which focused on English, mathematics and visual arts (p. 57) also recommended that 'There is a need for additional guidance for schools on how to adapt the curriculum to meet the differing needs of individual pupils and groups of pupils, especially in multi-grade classes'. The fact that this issue has been identified as a cause for concern by bodies such as the NCCA and the DES should ensure that it will receive treatment in subsequent programmes.

Although only a minority of teachers reported above felt that there had been a lot of emphasis on meeting individual needs within the in-service programme, yet 69% indicated that they would attempt to differentiate within the physical education lesson. This figure seems quite high given the apparent lack of emphasis on the issue during the first day of the programme due significantly to the time constraints on tackling important issues such as this one in a meaningful way. One tutor in INT<sub>3</sub> however,

made the point that "differentiation is not exclusive to PE...they're things they have heard before and they know they should be doing it" (LM) and this wider application of the principle of differentiation should raise awareness of its application to physical education. When the issue was discussed with teachers (INT<sub>TEA</sub>) one teacher (S) suggested that knowing the children, "the personalities," provides you with the necessary background to, for example, extend children by offering them different challenges. Meeting individual needs did not appear to present particular problems to another teacher interviewed (Maeve) who felt that children can be challenged individually within physical education classes who might not be extended within a sports club setting where the emphasis is on competition rather than development of the individual child. Hence, it would seem that with further emphasis in subsequent administrations of in-service or in any further support of teachers it would appear that differentiation may be more widely adopted by the 31% of teachers who acknowledged that they were 'unsure' about attempting to differentiate within the physical education lesson.

Another methodology, group teaching, will be discussed below (p. 288) in the context of discussion of the key considerations of the curriculum where group teaching is linked to the consideration of promoting achievement by the child. A comment by a tutor (INT<sub>3</sub>) probably best summarises the possibility of adoption of methodologies in general "...it takes more than a day to actually really get teachers comfortable, really understanding all the different methodologies..." (MJ). While evidence from the literature would lead to questioning how much such a short programme could impact on teaching methodologies, some support is now available to teachers in the form of a support service (described on p. 282) provided by the PCSP and support materials (developed by the PSSI, 2006) closely linked to the content of the Physical Education Curriculum (Government of Ireland, 1999b). Each of these supports can provide guidance on appropriate methodologies. The significance of this support will be discussed in chapter 8. As well as the important issues of content and teaching methodologies that teachers needed to understand, a set of key considerations or principles were outlined in the Teacher Guidelines that merit attention in the context of the in-service programme. These are discussed below (p. 284).

Allocation of time for teaching physical education has been a contentious issue for a considerable time and is cited frequently as one of the constraints on provision of quality programmes of physical education. This issue was discussed in chapter 3 when the recommendation of the Report of the Review Body on the Primary Curriculum (Government of Ireland, 1990b) that more time be allocated to physical education, the recommendation of the Green Paper (Government of Ireland, 1992) advocating daily periods of thirty minutes of physical education, the failure of the White Paper (Government of Ireland, 1995) to endorse the proposal for increased allocation of time for physical education and studies such as those of McGuinness and Shelly (1995), Broderick and Shiel (2000), and Deenihan (1990, 2005) were described. The question of time was referred to the NCCA to make recommendations prior to the publication of the Physical Education Curriculum (Government of Ireland, 1999b). It advised the DES who published guidelines (Government of Ireland, 1999a) recommending that one hour per week be allocated to physical education, with an option of sometimes allocating additional time under a 'discretionary time' allocation to be shared among all twelve subjects of the curriculum. An NCCA report (NCCA, 2002) recommended that every opportunity must be availed of to encourage schools to allocate "a large proportion of the suggested discretionary time to physical education" (p. 6).

In order to improve physical activity levels of children, one of the recent recommendations by the National Task Force on Obesity (Government of Ireland, 2005b) reported above focused on providing two hours of physical education per week. Data were gathered on the frequency of teaching physical education and the duration of physical education lessons as part of the investigation into the background of tutors and teachers in this study. The time allocated by tutors to teaching it (reported in chapter 6) generally amounted to one hour per week or more, while just 50% of teachers in this study reported that they taught physical education for the recommended time of one hour. The likelihood of more time being devoted to physical education following the inservice programme will be discussed below.

One of the issues investigated in QST<sub>5</sub>, administered after tutors had spent a period of three months facilitating the in-service programme, concerned the frequency

of the teaching of physical education. A majority of tutors (13) thought it 'very likely' or 'likely' that teachers would teach physical education more frequently (QST<sub>5</sub>). Some discussion in the final interviews with tutors (INT<sub>3</sub>) also focused on whether teachers would teach more physical education as a result of participating in the in-service programme and two of the tutors interviewed felt that physical education would be taught more frequently. Another believed that teachers would teach at least the minimum amount of physical education each week and would be less inclined to omit sessions. (It is difficult to state definitively the numbers of physical education sessions not taught by teachers for a variety of reasons but failing to teach the required amount each week was a factor that tutors would have been aware of as they facilitated the inservice programme). They stressed, however, that facilities for teaching would continue to hinder many teachers with this goal. One tutor suggested that teachers need more help with planning lessons. It was felt that "...unless continuous support is there for teachers, at whatever level it can be given, I feel that in three or four years time, we'll certainly be back to the situation where it'll have been a one day wonder" (INT<sub>3</sub>MJ). The issues of improved facilities and support for teachers referred to here are discussed further in chapter 8.

Further evidence of the likelihood of teachers teaching more physical education is provided by teachers themselves and this gives cause for concern. Teachers were asked using a questionnaire (QST<sub>6TEA</sub>) if they would teach physical education more frequently having engaged with the in-service programme and only 29% of teachers indicated that they would teach it more frequently. As just 48% of these teachers reported that they taught between 46 and 60 minutes physical education per week (DES recommendation is one hour per week) and only 10% taught physical education more than once per week it would seem that time allocated for physical education generally falls short of the DES recommendation and is considerably below that recommended by groups such as the National Taskforce on Obesity (Government of Ireland, 2005b) discussed earlier. Discussion in the interview with teachers (INT<sub>TEA</sub>) centred on the restrictions imposed by the availability of facilities when attempting to teach any more physical education. One teacher described how "We have a very tight timetable" (Siobhán) while another (Maeve) added that outside of the scheduled time for use of the hall it wasn't generally possible to take additional classes, but that as the weather conditions improved more teachers do take classes for extra physical education. This, however, didn't appear to represent a significant addition to allocation of time for the

subject. It should be borne in mind, however, that allocation of more time for physical education does not necessarily mean that improved programmes of physical education will result. Another important factor is the content of the programmes discussed earlier.

# Towards Improved Programmes of Physical Education for Children: Planning and Reflection Factors

Considerable emphasis is placed on school planning for physical education within the Physical Education Curriculum (Government of Ireland, 1999b).

The school plan will cover the nature and scope of physical education, recognising the developmental and varying needs of the children and the availability of resources. When the physical education plan is being devised, all aspects of the curriculum and the extent to which it can be implemented need to be considered. (p. 8)

Evidence of poor levels of planning for physical education reported in this study with respect to schools of tutors and of teachers indicates that it is an area that merits specific attention. Planning at school level and planning at individual class level for physical education is an important consideration for teachers. Within the Physical Education Teacher Guidelines (Government of Ireland, 1999c) guidance is provided to schools on planning at school and at class level. As discussed earlier, since 1999, A DES initiative School Development Planning Support (SDPS, www.sdps.ie) has provided support for schools in planning for physical education.

When asked in a questionnaire (QST<sub>5</sub>) a majority of tutors (11) believed that teachers would plan their lessons more carefully after engagement with the in-service programme. Tutors' belief that it was likely that teachers would plan their physical education programme more carefully probably reflected the fact that the tutor programme had influenced them in their own planning and it was clear from observation of the in-service programme that tutors were prompting schools and teachers to plan their work collaboratively and individually. Eighty nine per cent of

teachers reported in a questionnaire (QST<sub>6TEA</sub>) that as a result of participation in the inservice programme they intended to plan their teaching of physical education more carefully. Given that 44% of their schools had not developed school plans for physical education, this finding could be viewed as a positive factor in the quest for provision of quality physical education programmes. In the open-ended question that allowed teachers to outline what they would like emphasized in Day 2 of the in-service programme, many teachers identified planning as an area for emphasis. It would seem from this evidence that teachers had a commitment to the concept of planning for physical education. Nevertheless, this commitment must be interpreted somewhat cautiously given the DES (2005) report on curriculum review after the initial phase of in-service had been undertaken. This report cautioned that the school plan had been undertaken by some schools because plans are obligatory rather than in response to the need to contextualise the curriculum for the school's requirements. Findings from the DES study show that the most effective plans result from a collaborative and consultative planning process, which influences significantly individual teacher's classroom planning. Where planning was effective, it was characterised by a close alignment between the approaches and content objectives outlined in the curriculum statements, whole-school plans and classroom planning (DES, 2005, p. 53).

Another critical element of improved teaching referred to in the literature is the concept of critical reflection (Schon, 1983, 1987; Brookfield 1986; Boud and Walker, 1991; Tennant and Pogson, 1995). This concept discussed in chapter 2 was developed in chapter 6 in the context of discussion of the work of tutors during the tutor programme, and is raised again at this point in the context of teachers' learning and in particular their planning. Data gathered in QST<sub>5</sub> indicate that a majority of tutors (12) believed that teachers would reflect more on their teaching of physical education while 80% of teachers themselves reported (QST<sub>6TEA</sub>) that they would reflect more on their teaching as a result of participation in the in-service programme. Given the importance of promoting critical reflection to achieve change, this evidence of willingness on the part of teachers to reflect more on their practice of teaching physical education is encouraging. However, further detail on the nature or emphasis of that reflection was not provided in either the tutor or the teacher questionnaire. Detail of this nature would be useful in a follow-up study.

## Towards Improved Programmes of Physical Education for Children: Obstacles and Challenges

Tutors and teachers alike identified two main factors that need to be addressed in discussion about the likelihood of teachers implementing improved programmes of physical education: (a) the need for further support, referring to the support service (cuiditheoireacht) that was being undertaken in other subjects as one element of support, and (b) the funding that is essential in schools to ensure that physical education can be taught. These two factors will be discussed below.

## Support for teachers.

Some suggestions emerged regarding the format that the support for teachers should take. The need for support with planning programmes of physical education identified by tutors was described in chapter 6. One concept, in particular, relating to the nature of support that would be useful was elaborated on in INT<sub>TEA</sub> by teachers. One teacher outlined the importance of allowing opportunities for peer tutoring by colleagues:

I would take your class and you watch for three or four [classes] because it gives the person the confidence...you do the lesson that they wanted to do, they watch you do it and then you say 'now, it's your baby, away you go...'(INT<sub>3</sub>, Michelle).

Another teacher (INT<sub>TEA</sub> Siobhán), agreeing with this approach, felt that it is important not to give teachers the option to supervise the class of a teacher who teaches the physical education programme for him/her, something that "happens all over the place" but rather to provide supervision for their class while they observe a few PE lessons and then "…let them take their own class for PE". In this way, she felt that "…you are not throwing them in the deep end". Her colleague (INT<sub>TEA</sub> Maeve) pointed out that where the expertise in a school didn't exist to undertake that level of guidance for colleagues, the "cuiditheoir" (support) service should provide similar support in terms of provision of a unit of work and demonstrating its application by a support teacher teaching a lesson from it. Limited use of outside "experts" emerged as another way of supporting teachers without the practice becoming "…handing over the class every week." (Siobhán)

A further emphasis in supporting teachers was proposed in the interview with teachers (INT<sub>TEA</sub>) when interviewees discussed the fear that teachers have relating to physical education. One teacher (Siobhán) proposed that the fear is caused by lack of structure of physical education classes emanating from the fact that children are not "...sitting down at their desks or are not contained in a classroom". This led to a discussion of safety and discipline issues and these were highlighted by the teachers as areas that teachers needed support with. The discussion also centred on the need for teachers to be "motivating" (Michelle) and "enthusiastic" (Siobhán) to combat some of the discipline issues faced by teachers.

The support service provided by the PCSP has begun supporting teachers with their teaching of Physical Education since September 2006. There are currently 14 teachers seconded from their teaching posts providing support to schools nationally. The nature of the support varies between offering 'once-off' visits to providing sustained support to individual schools over a period of time. A very positive feature of this support, is the consultation between the support personnel and the individual schools to identify the areas the school requires support with. This model provides a very logical and welcome follow-up to the seminar days facilitated by the tutors and the school planning days undertaken by the schools. It models best practice as described in chapter 3. However, the small number of support personnel providing support for approximately 26,000 teachers is a cause for concern in terms of supporting real change in the teaching of physical education at national level.

The main challenge it would seem is posed, however, by the amount of time available for the support of teachers in the form of professional development. The initial allocation of two days, approximately ten hours, for exploration of the breadth of content and methodologies proposed within the Physical Education Curriculum (Government of Ireland, 1999b) falls far short of the allocation of time to these elements within the tutor programme where the comparative number of hours was approximately 130 hours spent on treatment of content and methodologies. One can only conjecture that this would leave teachers in a weaker position to implement change than tutors enjoyed.

## Funding for Physical Education.

A second consideration identified by tutors and teachers alike in the quest for better teaching of physical education was the funding required for facilities. A lack of facilities for the teaching of physical education has been documented widely both nationally and internationally as a constraint in implementing curricula and programmes at both primary and second level (Hardman and Marshall, 2000; Deenihan, 2005; INTO, 2006; Fahey et al., 2005; MacPhail et al., 2005). One teacher in this study argued that "...given funding and under resourcing generally it seems ridiculous to include practically everything on a curriculum while the basics are not in a good state of repair i.e. halls, PE equipment, throughout the country" (QST<sub>6TEA17</sub>). Another aspect of funding for physical education was also highlighted as part of this study. Observation of the tutor programme and, in particular, the sessions focused on planning the in-service programme revealed the concern shared among tutors of the funding implications for the work that they were proposing that teachers should undertake. This was particularly evident when they presented the aquatics module as they acknowledged that it was not centrally funded and so presented particular problems to schools related to hiring of pools and transport. Field notes contain references to debate among teachers of this contentious issue at in-service venues. "Teachers were acknowledging that they had such a good swimming facility in a rural area. They highlighted the problem with funding, however. Children had to pay for instruction and transport" (Fieldnotes, 17/1/05).

Furthermore, in planning for outdoor and adventure activities, tutors were very aware of the need to suggest to teachers that the resources could be developed with minimal cost implications and that a portion of the work would not necessitate traveling off the school grounds. A third element of funding was raised in an interview with teachers (INT<sub>TEA</sub>) when teachers highlighted the need for resources: "...a book, something with practical ideas in it that you know works" (Maeve) and music for teaching of dance. The provision of support materials developed by the PSSI (Primary School Sports Initiative, 2006), published after this data gathering was undertaken, has probably met that need to some extent.

Key considerations informing the teaching of physical education at primary level were outlined in the Physical Education Teacher Guidelines (Government of Ireland, 1999c, p3). The key considerations in teaching physical education were described as: the importance of enjoyment and play; maximum participation by all children; the development of skills and understanding; a balance between competitive and non-competitive activities; a balance between contact and non-contact activities; providing opportunities for achievement for each child and providing activities equally suitable for girls and boys. The mediation of the key considerations was not explored directly in either the questionnaires (due to the constraints imposed by the length of the questionnaires) or in the interviews, although in the interviews with teachers some references to some of the considerations were made. Observation of the in-service programme (OBS<sub>TF</sub>) did, however, focus on how the key considerations outlined were conveyed throughout the programme. It would have been useful to elicit the views of teachers on this aspect of the in-service programme in a more comprehensive way and given the importance of these underlying considerations in underpinning a quality programme of physical education it is an aspect that merits attention in any further examination of in-service physical education programmes. Furthermore, it is important to bear in mind that it is only possible within the scope of this study to comment on how these messages were conveyed during this first day of the in-service programme. A detailed analysis of the effectiveness of the entire in-service programme in conveying these key considerations would give a more comprehensive picture of the effect of the in-service programme over time.

The importance of enjoyment and play; maximum participation by all children.

At each of the venues observed, tutors highlighted the key considerations by presenting them as a Powerpoint slide. They then prompted discussion on each of the considerations and throughout the day reminded teachers how certain activities linked with these concepts. Firstly, the concepts of promoting enjoyment and play as well as maximum participation seemed to be highlighted effectively by tutors as they prompted teachers to engage fully with the material. The activities selected by the tutors emphasized maximum participation, and organizational methods that were modelled

illustrated this principle throughout. This served to consolidate the concepts through engagement with the activities selected. The playground games introduced to teachers involved all participants and the issue of eliminating players from games was raised and debated with the principles of enjoyment and maximum participation highlighted as key to good teaching:

The playground game was used by Martin to illustrate maximum participation and discussion followed on how active children would be playing this. Teachers responded really enthusiastically to the playground games. They were challenged by the activity levels... one teacher commented on this...how she was finding out for herself what games she would select by engaging with them.. [Fieldnotes 17/1/05, rural venue]

A teacher interviewed (INT<sub>TEA</sub> Michelle) reported that she identified with the tutor who, in the course of presenting, recounted her early view of maximum participation as "15-a-side football" without any analysis of how active individual children were. She continued: "It has made me aware....after [the in-service programme] I was actually watching the level of participation that certain kids put in, there are an awful lot of kids who mightn't push themselves or might take a step back if you don't keep an eye on them". Having observed the tutor make this point, the researcher noted

Linda recounted her own lack of understanding of the concept of maximum participation during her own early years teaching where she organized children to play fifteen-a-side Gaelic Football within her physical education class. Some teachers appeared to identify with this straight away...I sense that this is a common practice in primary classes particularly in this area where this model is a feature of extra-curricular sport? [Fieldnotes, 18/1/04]

The emphasis on children being active throughout the physical education lesson was also debated at each of the venues observed linked with the issue of enjoyment. Further examples of playground games explored provided evidence of the high levels of enjoyment possible and the selection of games offered to teachers portrayed these messages without needing to spend too much time on discussion of the issues.

The development of skills and understanding.

The development of skills when teaching physical education, another consideration outlined in the Physical Education Curriculum (Government of Ireland, 1999b), was highlighted throughout the presentation by tutors when, for example,

games activities designed to highlight progression were demonstrated. Field notes contain references to tutors emphasizing the development of the skill of throwing as an example of how other skills such as kicking or striking might be developed.

Martin quoted the FUNdamentals (sic) approach advocated by Balyi and went on to demonstrate how the skill of throwing could be developed from throwing a beanbag in pairs to playing games of 3v1, 3v3 and court end ball. Teachers were very enthusiastic, volunteering to demonstrate the games. Some demonstrations were very competitive and Martin used this situation to remind teachers how the application of the skill in this competitive situation was a considerable step away from the initial pair activity using the beanbag. I thought he had made this point particularly well in a very short space of time focusing on one particular skill (throwing) and illustrating how it could be developed emphasizing the different stages. [Fieldnotes: 17/1/05]

One teacher interviewed (INT<sub>TEA</sub> Maeve), however, commented that while development of skills was "mentioned" she would like to receive guidance on "...what skills do we think a child should have at the end of a particular class in terms of ball and foot skills". She indicated that she would welcome more guidance on this element of skill development. The Physical Education Curriculum (Government of Ireland, 1999b) presents the development of skills by children hand in hand with the development of their understanding. One of the tutors observed (Fieldnotes 21/1/04) highlighted the development of understanding in a response to questioning by teachers, by comparing direct teaching with guided discovery learning and illustrating how using questioning enhanced children's understanding of concepts in games for example. The promotion of understanding and appreciation of activities was conveyed through the outdoor and adventure strand activities in particular where tutors emphasised the amount of discussion and problem-solving that was involved and within games when games practices were illustrated that highlighted the need for prompting children to think and make decisions. Field notes record many instances of teachers engaging in pair and group work who were prompted to discuss decisions made in the same way as children would be prompted to make decisions. For example, they engaged in an activity involving passing a ball that focused on developing a pattern of play that required understanding of the pattern as well as decision making. This was followed by another game:

Teachers played court end ball in groups of ten. They were encouraged to prompt children to think about how they might rotate the goalkeeper (after a

score?) and how they might counteract dominance by one player (passing back to the same person who sent the pass is not allowed). In the same way, teachers were challenged to think about where they might move to receive a pass. [Fieldnotes: 21/1/04]

A balance between competitive and non-competitive activities, contact and non-contact activities.

Another key consideration outlined in the Physical Education Curriculum (Government of Ireland, 1999b) concerned the balance between non-contact and contact activities and the balance between competitive and non-competitive activities. In the view of this observer the balance was very well illustrated. For example, field notes describe situations where teachers engaged in games activities where individual achievement was illustrated in non-competitive activities, using a 'beat your own record' approach and in some instances a selection of ball-handling games provided a good example of competitive activities, for example the 4v4 passing game where scoring was based on consecutive passes. Teachers appeared to welcome the balance offered: one teacher interviewed believed that "diluted major games" gave children opportunities to transfer skills and gave options to "a lot of people who came up through traditional sports, [where] the dread was: it was major games and we were going to have to be training a team..." (INT<sub>TEA</sub> Maeve).

Providing opportunities for achievement for each child and providing activities equally suitable for girls and boys.

The issue of provision of opportunities for achievement for each child, identified as a key consideration when implementing a programme of physical education in the Teacher Guidelines, will be discussed in relation to (a) content that forms programmes of physical education, and (b) the methodologies used that are conducive to meeting individual needs. Firstly, many studies discussed above (Keating, 1982; Deenihan, 1990; McGuinness and Shelly, 1995; Broderick and Shiel, 2000; Deenihan, 2005) have reported on the dominance of games in programmes taught in schools. Throughout the in-service seminar the emphasis was on offering a wide variety of content to children with a range of games, outdoor activities and aquatics activities treated. Enabling teachers to offer choice to children could already be identified as

forming an important element in meeting individual needs and presenting opportunities for achievement for children.

Secondly, while whole class teaching can be successful in meeting individual needs, given the issue of average class size, which was 24.3 in 2003/2004 (www.des.ie) and with some classes having more than 30 children there is a strong argument for using group teaching as a methodology to enhance learning by children. McGuinness and Shelly's (1995) study referred in particular to the constraint presented by large class size and group teaching is one means of promoting learning within large classes. The focus on group teaching throughout the day was evident. Fieldnotes contain references to this aspect of tutors' work at each of the three venues observed: "Group/Station teaching was really well explained and demonstrated. Extra activities were suggested that could be substituted for those that teachers engaged in. Martin discussed the selection of activities, appropriate for meeting different needs" (17/1/05), "...another fine explanation of station teaching. The group really engaged with the activities at each station. This was probably the point in the day where Linda could step back and observe how teachers were engaging with the idea of group teaching" (18/1/05). Another observation recorded at a different venue provided further evidence of the emphasis on group teaching:

Groups engaged with activities, they were very active. All but two of the group completed all of the tasks set. They went on to discuss so many aspects of group teaching....meeting different needs was one of the issues raised. [Fieldnotes 21/1/05].

In my view, the focus on group teaching in games and outdoor and adventure activities as a means of promoting individual achievement was very clear. Tutors interviewed (INT<sub>3</sub>) noted group teaching as a methodology that teachers would explore and while there is no further data available from this study to indicate teachers' likelihood of using group teaching more frequently it is likely that it was one of the methodologies that teachers are more likely to use due to its exposure in this part of the in-service programme and its relevance to the teaching context of so many teachers. This should enhance the opportunities provided for promoting individual achievement particularly within large groups.

The gender issue concerned with 'providing activities equally suitable for girls and boys' (Government of Ireland, 1999c, p. 3) was dealt with very briefly during the introductory session where it was raised as one of the key considerations but it was probably during the treatment of games that it was highlighted most. It was raised by each of the tutors in the context of how boys and girls might react to issues such as participation in certain sports and, in particular, participation in competitive activities.

Programmes based on these key considerations outlined above would provide a very sound basis for improved physical education for children. These elements appeared to have been mediated successfully in spite of the time constraints that impinged on what tutors could realistically achieve in the course of one day. It should be borne in mind that tutors had a second day of the in-service programme to provide opportunities for some more consolidation of these key considerations. Hence, the likelihood of teachers' implementation of these elements into their teaching of physical education should be enhanced considerably.

## How Teachers were Learning

The success of the in-service programme in mediating the content, methodologies and key considerations of the Physical Education Curriculum (Government of Ireland, 1999b) has been discussed above. A further factor that merits attention particularly in light of future in-service support related to any subject area is how the teachers were learning. Observation of the in-service programme (OBS<sub>TF</sub>) provided some insight into this aspect of tutors' practice. Tutors' belief that the active nature of the day was a positive aspect of the learning by teachers was discussed above (p. 263). This element of the teachers' learning was evident as they willingly engaged in the practical tasks set. For example, initially the games activities were presented and tutors engaged in a variety of activities that illustrated progression in skill development and team play. Aquatics games and orienteering activities provided many opportunities for active learning. From discussion with teachers at the venues for the in-service programme it was clear that they welcomed the change from more theoretical subjects to a subject such as physical education that was largely practical and immediately compared it to the in-service programmes for science and art where some of the time was spent engaging in hands-on activities. Field notes contain references to

conversations with teachers at each of the three venues where teachers explained that the physical education programme was building on that positive aspect of the facilitation of other subjects previously and they welcomed that emphasis.

While it was very clear on observing the programme that participants were active in the sense of engaging in physical activity, there was another dimension to their 'active learning'. The small amount of theoretical input that was presented to teachers provided material to enhance understanding of the practical activities but it was presented in a way that allowed some time for teachers to discuss and debate some of the issues raised. This led to a greater understanding of aspects of physical education that were new to many teachers, for example the encouragement of providing a broader programme of content and the possible links with other subjects when presenting an area such as outdoor and adventure activities. The role of the class teacher in the teaching of aquatics was another example of an issue that prompted considerable debate among teachers. While opportunities to engage teachers in debate varied across the three venues, attention to providing opportunities for discussion was generally appropriate given the necessity to treat three of the six strands of the curriculum in one day as well as providing an overview of the curriculum. Considering the time restriction imposed by these considerations the tutors made admirable use of questioning in the view of the researcher and prompted reflection whenever possible. Two examples of this recorded in fieldnotes are cited below

Questioning the teachers on 'why Physical Education' provoked interesting responses. One teacher spoke of the 'feel better' factor after children take part in PE. Other responses focused on the social development of the child, the confidence that children can gain from being good at aspects of PE ("they have something to show others that they can do and do well" commented one teacher), and the skills that they develop. Martin (the facilitator) prompted reflection on the health benefits...nobody had suggested this aspect and he had paused to allow for another contribution. He made the point well, then, by prompting teachers to list some of these benefits (suppleness, strength, aerobic fitness) and backing up the statements made with some relevant research e.g. Broderick and Shiel (2000) study of activity levels within PE classes. [Fieldnotes: 17/1/05]

A second example was illustrated within the time allocated to the outdoor and adventure strand

Matt (the facilitator) prompted tutors to reflect on some of the issues that might arise in implementing the orienteering activities that they had just experienced in their own school settings. Teachers spoke of the enjoyment factor, how this might appeal to some children who don't like games, safety issues and the workload involved in preparation of materials. He was very 'honest' in acknowledging the preparation involved but reassured teachers that after the first time teaching it, preparation time would decrease significantly. [Fieldnotes 21/1/04]

Their short final session encouraged teachers to reflect and plan both on a school and on an individual basis. The time allocated to this important element of teachers' work appeared to be very inadequate to convey a clear message to teachers. Nevertheless, it would have been impossible to allocate any more time without omitting some of the content that was covered that would be so crucial for teachers as they embarked on planning and the reference to planning was significant in signalling the work that was necessary to ensure that programmes of physical education could be built around the content treated. The additional support necessary to promote planning by teachers will be discussed in the final chapter of this study.

In terms of the overall facilitation of the in-service programme, it was significant that the tutors were well prepared for implementation at each of the venues and they contended with organisational issues with ease. Examples of issues that were challenging were the setting up of equipment, making smooth transitions from one type of presentation to another and being constantly aware of use of the physical space. The only insurmountable problem, presented at a particular venue where observation by the researcher was undertaken, was the difficulty with acoustics that presented a barrier to learning by the teachers at times throughout the day. Such a command, however, of organisational aspects probably contributed to enhanced learning by the teachers by ensuring that they gained maximum benefit from the time allocated to the seminar.

In conclusion, considering the time restrictions imposed it would appear from observation ( $OBS_{TF}$ ) and from the interview with teachers ( $INT_{TEA}$ ) that tutors conveyed the key considerations of the curriculum effectively and teachers' learning

was enhanced by the methodologies used by the tutors and by their professional approach to the organizational issues presented.

#### Conclusion

Discussion of teachers' willingness to change in the literature suggests that change is a complex process described as not always 'comfortable' (Day, 1999, p. 41). Nevertheless, Day (1999), Nias et al., (1992) and others discussed in chapter 2 believed that teachers were open to change particularly when supported in their practice. It is significant in discussing teachers changing their practice both in terms of content taught and methodologies employed to note that tutors were expecting that teachers would change aspects that they themselves had implemented for the first time as a result of their engagement with the tutor programme. From observation of the in-service programme this expectation of tutors seems likely to be realized for the following reasons: firstly, the content itself does not appear to pose significant problems to teachers or tutors when it is presented with supports. In this case, the support for teachers comes from two sources: the tutors who offered support through the in-service programme and continue to offer support through the support service (this will be discussed further in the final chapter) and the materials published by the PSSI (Primary School Sports Initiative) team (PSSI, 2006). Secondly, the content and methodologies are based on the proposals contained in the Physical Education Curriculum (Government of Ireland, 1999b) and Teacher Guidelines (Government of Ireland, 1999c). This constitutes the same content that undergraduate teachers at pre-service level have been largely engaging with since the publication of the curriculum in 1999. Hence, teachers with less than six years teaching experience have already visited many elements involved in the teaching of the Physical Education Curriculum (Government of Ireland, 1999b) and should be in a position to support others to some extent.

Evidence gathered from tutors and teachers as well as evidence gathered from observation of the in-service programme would suggest that improved programmes of physical education could result from the in-service programme. The views of many teachers on the in-service programme itself are well represented by comments such as "It was a most enjoyable hands-on no nonsense day. Practical help delivered very well. Active participation is the key to encouraging people to implement this in their

classroom." QST<sub>6TEA</sub> (TEA32). The programme met the main expectations identified by teachers prior to their engagement with it: they were satisfied that they learned how to teach practical elements of the curriculum, they were exposed to a variety of teaching methods and they gained an understanding of the Physical Education Curriculum (Government of Ireland, 1999b).

As well as meeting teachers' expectations for the programme, positive evidence emanated from investigation of key factors related to teachers' teaching of physical education such as their declared intention to expand programmes of physical education and to reflect more on their teaching and planning for physical education, based on their belief that they had increased understanding of the Physical Education Curriculum (Government of Ireland, 1999b). Effecting real change in the use of a variety of methodologies would appear to require more time allocated to teachers' professional development. A concern remains, however, based on the evidence from this study, that the time allocated to the teaching of physical education will not be increased by teachers and this may hamper efforts to provide more opportunities for children to achieve within physical education.

Many of the obstacles faced by teachers in teaching physical education, however, can be addressed by providing support to teachers, by increasing funding for facilities and equipment as well as funding aspects of aquatics and outdoor and adventure activities where necessary. The issue of time allocated to their professional development to capitalise on the support being offered by the support tutors under the direction of the PCSP as well as by other providers of professional development is an issue that will require consideration. Recommendations related to these conclusions with respect to support for teachers, and funding will be proposed in chapter 8.

## CHAPTER EIGHT

## Conclusions and Recommendations

#### Introduction

The main focus of this study was (1) to describe the development of a specific programme of professional development for the training of tutors with responsibility for supporting primary teachers in the implementation of the Primary Physical Education Curriculum (Government of Ireland, 1999b), (2) to evaluate its effectiveness in helping tutors to implement a national programme of in-service, and (3) to investigate teachers' views of the initial phase of the in-service programme and their intentions to implement the curriculum. As pointed out in chapter 1, however, the timing of the study preceded the implementation of the Physical Education Curriculum (Government of Ireland, 1999b). This allowed investigation of teachers' intentions to implement the curriculum but further research will be necessary to investigate the actual influence of the programme on implementation.

The research questions outlined in chapter 1 that underpin this study are

- Can a programme of professional development in physical education based on theoretical considerations centred on how adults learn and on how teachers change their practice be effective in preparing tutors to facilitate programmes of in-service to teachers?
- Can a subsequent programme of in-service designed and facilitated by these tutors for teachers in primary schools impact on teachers' attitudes to teaching physical education and on their intentions to implement the curriculum?

To evaluate the appropriateness and effectiveness of the programme of professional development, its impact on tutors' own teaching was examined and subsequently the impact on teachers of tutors' facilitation of the in-service programme for teachers was investigated. It is important to recall that the research design was based on a mixed method pragmatist theoretical framework that was informed by both postpositivism and constructivism. Data generated was based on strong a priori literature on adult learning and teacher change. However, as the study progressed the design was more informed by the constructivist framework, which allowed the study to

be more flexible in generating theories (grounded theory). Observation, questionnaire surveys and interviews were used to gather data. Hence, both quantitative and qualitative data were gathered from tutors and teachers. The principal findings and conclusions of the study are discussed below. Consideration is then given to the limitations and strengths of the study and the implications for continuing professional development in physical education are examined. Suggestions pertaining to areas for further study complete the chapter.

## Findings and Conclusions

The principal findings and conclusions of the study are discussed with reference to the research questions outlined above. The findings and conclusions with respect to the programme of professional development are presented first. Following that, findings and conclusions relating to the impact of the initial phase of the in-service programme on teachers' attitudes towards physical education and their intentions to implement the curriculum are presented. Finally, the constraints on teaching physical education are acknowledged with reference to the views expressed by teachers and tutors as part of the investigation.

## The Effectiveness of the Programme of Professional Development

A main focus of the study was an investigation into the effectiveness of the programme of professional development in preparing the tutors for implementation of the in-service programme for teachers. Findings are discussed with respect to (a) the extent to which the factors identified in the literature as being important in the design of programmes of learning seemed to contribute to the effectiveness of the programme, (b) the impact of the programme on the practice of tutors in teaching physical education, and (c) the effectiveness of the programme in preparing them to implement a programme of in-service education for teachers. The conclusions outlined are based on observation of the tutor programme and the teaching of tutors, as well as tutors' responses to the programme provided in interviews and questionnaires.

It should be noted from the outset that based on the results of the study outlined in chapter 6, tutors were satisfied with the programme. With that in mind the factors that were rated as significant by the tutors were: the relevance and adaptability of content; beginning with content that was familiar; the issue of content treated fostering critical reflection, innovation and change; the selection of particular methodologies and the role of facilitators in promoting learning.

The focus on content knowledge as a core feature of effective professional development (Garet et al., 2001) was discussed in chapter 2. With reference to the *content* of the programme, tutors reported that the content was relevant to their own teaching contexts and to the contexts of schools in general and that it related very closely to the content of the curriculum. Hence, they were prompted to adapt content, to teach new content and to begin to use a variety of methodologies. Tutors reported that they engaged in critical reflection related to content and methodologies frequently. The negative aspect of the treatment of content within the programme was the sheer amount of content covered, leading to tutors' sense that they were in danger of missing salient points as they struggled at times to cope with the volume of content presented.

With regard to a second key factor, the *methodologies* employed in the programme that were most successful were those that promoted active learning including group discussion and peer-guided learning. Active learning involving physical activity in the context of physical education was particularly important for them. There was some discrepancy in the findings related to the promotion of discovery learning when tutors rated this element as satisfactory but observation of the programme suggested that this was a type of learning that was not particularly evident. Some evidence emerged, however, that while the emphasis on active learning was welcome, there was a need to maintain the balance between active learning and allowing time for reflection.

The modelling of effective facilitation was another positive factor in the implementation of the programme. This element had been identified by Rogers (1969) and Cranton (1996) as an important factor in facilitation of programmes of learning and

a study of the early stages of the in-service programme for primary teachers in Ireland (Sugrue et al., 2001) found that the expertise of facilitators was judged to be 'of great importance' by the vast majority of primary teachers (81%). Hence, it was not surprising that this element had emerged as an influence on the tutor programme although due to the sensitivities involved the study did not set out to investigate the effectiveness of facilitators. Additional supports that were identified as useful by the tutors included the sharing of practice in review sessions as part of the programme and the dissemination of their own lesson materials that they developed in response to a request from the co-ordinator of the programme.

It can be concluded that relevant content and use of a wide variety of appropriate teaching methodologies significantly impacted on this programme of professional development. However, the study revealed that there needed to be more emphasis placed on (a) providing more differentiated sessions to meet individual needs, (b) avoiding overload, and (c) providing further treatment of facilitation skills to support tutors in facilitating a national programme of in-service. These factors merit even more attention in subsequent programmes of learning as they have the potential to enhance learning further.

## (b) Impact on the Teaching of Physical Education by Tutors

The data gathered in the study revealed that engagement with the tutor programme had impacted on many aspects of the teaching of physical education by tutors. Considering the emphasis in the Physical Education Curriculum (Government of Ireland, 1999b) and in the Teacher Guidelines (Government of Ireland, 1999c) on planning for physical education it was significant, firstly, that tutors reported improved planning of units of work as a result of their engagement with the tutor programme. Given the lack of emphasis on planning at school level evident from data provided by tutors prior to engagement with the tutor programme, reflection focused especially on planning should impact on the quality of programmes of physical education taught by tutors. Secondly, one of the main features of the teaching of physical education in Irish primary schools discussed in chapter 3 of the study was the narrow range of content offered to children within programmes of physical education (McGuinness and Shelly, 1995; Broderick and Shiel, 2000). Evidence provided by this study suggests that tutors

embarked on this programme having taught a programme dominated by games. The breadth of content taught by tutors as a result of engagement with the programme of professional development was significant and there was evidence, too that tutors were employing a wider variety of methodologies. While the emphasis on direct teaching as a dominant methodology was maintained (the predominance of direct teaching as a methodology across all curriculum areas was noted in a study undertaken by the INTO in 1996), tutors did report increased use of group teaching and guided discovery methods. Although the promotion of reading and examination of materials was considered a very important element of programmes of adult learning, particularly in prompting adults to become self-directed (Knowles et al., 1998), this aspect was not a strong feature of the programme described. Use of journals as a reading resource was the most significant change reported in terms of supports for teaching in this study, but this change may also have been attributable to other factors outside of the programme.

The development of the concept of communities of practice (Wenger, 1998) with its emphasis on collaborative learning and the development of teacher learning communities (specifically composed of teachers from the same school, Garet et al., 2001) has received much attention recently in discussion on teacher learning. This study investigated tutors' support of learning by their teaching colleagues. While most tutors supported teaching colleagues to some degree in their teaching prior to engagement with the programme, there was an increase in the amount of support they provided and a different emphasis was apparent in their support. The focus of the support included introducing new aspects of content that were treated on the programme to colleagues. The impact of the changes in their teaching on children's learning, the significance of the support from tutor colleagues in furthering their learning and the increased enjoyment they gained from teaching physical education were issues raised by the tutors themselves as outcomes of their engagement with the programme. Such findings point to the fact that there may be merit in investigating these factors in any further study of the effect of a programme of learning on tutors. It is possible, for example, that the fact that most of the programme of professional development was conducted as a residential programme was influential in cultivating group collegiality that was considered significant by tutors.

The study found that all tutor respondents were satisfied that the programme had prepared them well for facilitation of the in-service programme for teachers. They identified factors that were particularly important as (a) their knowledge of the content to be presented, (b) the benefit of the extended period that they spent teaching physical education in their own teaching contexts as they engaged with the programme, and (c) the time spent on planning for implementation. The acknowledgment that their subject knowledge was one of the main factors that contributed to their readiness to implement a programme of in-service education to teachers provides justification for the considerable amount of time that was spent re-visiting aspects of content regularly to consolidate work undertaken previously. This is a key point and has fundamental implications when considering the confidence and competence of the generalist primary teacher and what exposure to professional development they may need to teach better programmes of physical education.

The opportunities that the group of tutors had to link the work that they undertook during the programme of professional development with their own practice were significant for them. The two-year period spent engaging with the programme at various times while they continued to teach in a primary setting, allowed them opportunities to teach physical education to classes at different levels and to teach a broad range of content before they embarked on the implementation of the in-service programme. It was clear that the time spent on planning the in-service programme was another factor that ensured that they commenced implementation with high levels of confidence about their work in spite of the inevitable anxieties about presenting to groups of colleagues, in many cases for the first time. This commitment to planning also gave them a sense of ownership of the in-service programme for teachers that they were to facilitate. The experience of presenting their proposed in-service programme to a group of 'critical friends' prior to implementation was an aspect of their preparation that they welcomed while a suggestion that emerged was that liaison with tutors with experience of facilitating other subjects to teachers would have been useful too. Hence, from the evidence gathered from the tutors and from observing them engaging with the programme and teaching in their individual teaching contexts these three factors (the level of subject knowledge, transfer of learning to their teaching contexts and time

spent on planning for implementation of the in-service programme) were particularly important in preparing tutors effectively and share one common theme: time.

For providers of continuing professional development in physical education and probably for providers in other subject areas, sufficient time should be made available to engage with the subject. Evidence presented in chapter 6 indicates that treatment of content was allocated approximately 130 hours within the programme of professional development. This allocation of time is particularly important where the group of tutors selected are primary teachers, most of whom do not have a specialism in physical education. This group of tutors spent two years teaching their own classes while they engaged with the programme. Given that physical education is allocated just one hour per week in primary schools, it appeared that tutors needed this extended period of time to ensure that they had ample opportunity to transfer their learning into their teaching situation. Finally, within the programme of professional development approximately 65 hours were dedicated to preparing an in-service programme for teachers to be facilitated on one seminar day. It is likely that this was a significant factor that impacted on the quality of the programme offered.

# Responses of a Sample of Primary Teachers to the Initial Phase of the In-service Programme

Following on the tutors' engagement with the tutor programme, they then embarked on facilitating the in-service programme to teachers. Observation of the implementation of the first day of the in-service programme combined with evidence gathered from tutors and teachers pointed towards the provision of improved programmes of physical education. This belief that improved programmes of physical education would result is based on the following factors:

1. More positive teacher attitudes. Having facilitated the in-service programme for three months, tutors believed that teachers' attitudes to teaching physical education would be more positive after engagement with the programme while teachers commented on the active nature of the day, the 'fun' element of participation in activities and the 'non-threatening' aspect of the day as key to encouraging people to implement physical education. Teachers with more

positive attitudes will increase the likelihood of providing for the physical education needs of the child. A majority of tutors believed that teachers' understanding of physical education and the Physical Education Curriculum (Government of Ireland, 1999b) was enhanced by the in-service programme. While three quarters of teachers claimed that their understanding of physical education had been enhanced (a further 23% reported that their understanding had been enhanced 'a little'), nine tenths of teachers indicated that their understanding of the Physical Education Curriculum (Government of Ireland, 1999b) had been enhanced (only 2% reported no increase in levels of understanding). Having an understanding of the subject and the curriculum as well as having a positive attitude to the teaching of physical education would appear to be a very significant starting point in approaching the teaching of physical education with more confidence and in teaching better programmes of physical education

2. Increased levels of competence. Sugrue et al. (2001) reported that just one quarter of primary teachers believed that the experience of seminar days had added to their competence and skills to a significant level (this study was undertaken prior to the seminar days on physical education). However, the facilitation of the content and methodologies of the Physical Education Curriculum (Government of Ireland, 1999b) was considered in a very positive light by teachers. Most teachers reported, for example, that they learned how to teach practical activities to implement the games strand with 49% of teachers describing this as a significant learning outcome. There was a similar response to teaching of the outdoor and adventure activities strand where 83% rated this as a significant outcome. While there was a less favourable response to the learning outcome related to teaching practical aquatics activities (32%), this was probably accounted for by the fact that class teachers would mainly be concerned with policy and organizational issues related to the teaching of aquatics there was less emphasis on teaching practical activities in the programme. This increased level of competence in teaching physical education reported by teachers should help overcome the constraint related to levels of competence identified in many studies on teaching of primary physical education (McGuinness and Shelly, 1995; INTO, 1996; Deenihan, 2005). This is also important to note in the context of theorists such as Bandura (1997) who argue that self-efficacy is an important pre-requisite for change. That said,

however, the *perceived* increase in competence will most likely demand considerable support as teachers endeavour to implement change (this support is discussed further below).

The positive finding of this study does prompt questioning on the possible level of impact of a seminar of one day's duration. While the focus on subject knowledge directly related to the curriculum content was a new element for many teachers it would have built on the professional development in other areas that they had already been exposed to as part of the national in-service programme and this possibly accounted for the positive finding to some extent. Nevertheless, given that data provided by the *tutors* and *teachers* prior to their engagement with the programmes of professional development indicated that a narrow range of content was being taught by them, the challenge for *teachers* to implement such change on a national basis should not be underestimated. It would seem essential that teachers would be provided with further opportunities in many forms to extend their subject knowledge

3. Increased time devoted to teaching of physical education. There was positive evidence that some teachers would teach more physical education. Given, however, the considerable number of teachers (50%) who reported that they were teaching less than 45 minutes Physical Education per week and that only 7% taught physical education twice per week, a greater commitment to allocating at least the recommended time to teaching physical education is important. This increased allocation of time would seem to be critical if programmes of physical education are to be improved. Indeed, if the recommendations of the recent report from the National Task Force on Obesity (2005) about physical activity levels of primary school children were to be implemented this would provide a significant boost to opportunities for children to be exposed to a quality programme of physical education. It should be borne in mind, however, that while time allocated to a subject is a very important factor, it does not necessarily go hand in hand with provision of better programmes. The motivation and ability of the teacher to design and sustain a structured programme of physical education with a sound knowledge of subject content and appropriate methodologies are important elements in the provision of better programmes of physical education for the primary school child.

Related to the issue of time, however, is the consideration of the contextual factors that impact on the allocation of time within the school context. The poor status of physical education (Hardman and Marshall, 2000; Hardman, 2007) begs the question whether schools will consider physical education as a priority when deciding on the issue of allocating some of the available discretionary time to physical education. Its significance for the child will need to be highlighted in very powerful ways to influence the debate on time allocation. A further issue that can serve to 'block' the allocation of more time for physical education is the lack of facilities, both in terms of availability of space for teaching physical education (particularly restrictive for large schools where limited space has to be shared by many classes) and the lack of suitable indoor facilities (when weather conditions hamper teaching outdoors). For many schools this contextual factor seriously hampers their intention to allocate more time for physical education.

4. Greater commitment to physical education. Changes teachers reported they would implement were related to expanding programmes of physical education to include a wider variety of content and the use of an increased variety of methodologies. Findings related to the teaching of outdoor and adventure activities were particularly significant given the minority of teachers who taught this aspect previously. The findings related to differentiating content to meet individual needs were encouraging; 69% of teachers indicated that they would attempt to differentiate within the physical education lesson. The consistency of the message about the importance of differentiation across all subjects has probably helped considerably in raising awareness of its significance. Although there was only a slight increase (7%) in the numbers of teachers indicating that they would integrate physical education more frequently with other subjects, this may become a more dominant feature of teaching if teachers were given more support with this element of teaching. Considering the literature on physical education in primary schools discussed in chapter 3, these are key elements in providing improved programmes of learning in physical education. Other important issues that from observation of the in-service programme appeared to be well illustrated were the key considerations outlined within the Teacher Guidelines (Government of Ireland 1999c), although additional investigation of these issues within a further study would be useful. It is important to remember, however, that these findings relate to an investigation of teachers' intention to implement change. Further research is required to establish if any discrepancy

- exists between what teachers planned to implement and what they actually implement in practice
- 5. Improved planning and reflection on practice. Planning for physical education has been identified within the Physical Education Curriculum (Government of Ireland, 1999b) as a key factor in providing balanced programmes of physical education. The link between reflection and change was outlined in the review of literature (chapter 2). As a majority of teachers (80%) reported that the inservice programme had prompted them to reflect more on their teaching and to plan more carefully (89%), the likelihood of reflection leading to changes in practice and improved planning is increased. However, the DES (2005), among others, has advised that planning is best undertaken collaboratively to ensure a closer link between objectives, the school plan and class planning. The issue of time as a barrier to this collaboration has been pointed out by Duncombe (2005) as part of her study on teachers at primary level planning for physical education. Hence, time should be allocated to allow for collaborative planning at school level.

Such positive evidence from teachers who had undertaken the initial phase of the in-service programme provides the basis for an argument that there is an increased likelihood of teachers planning improved programmes of physical education. Some constraints, however, were identified by tutors and teachers and these focused on the need for further supports for teachers in teaching physical education and on the funding requirements that are essential in schools to ensure that programmes of physical education can be implemented. The constraints caused by poor funding for physical education, adding to the evidence provided already by studies such as those of Hardman and Marshall (2000) reporting on the international context, and Shelly and McGuinness (1995), Deenihan (2005), MacPhail et al., (2005) and Fahey et al., (2005) in an Irish context, point to the importance of providing the funding that schools and teachers need to ensure that all strands of the curriculum can be implemented. Recommendations will be outlined below that offer suggestions on how some of these constraints can be overcome. Firstly, however, some of the limitations and strengths of the study will be discussed.

Some aspects of the study need to be considered in terms of the limitations they imposed on the evaluation of the findings. Firstly, time constraints did not allow any consultation with the tutors prior to embarking on the tutor programme. As a result, although the survey questionnaire that they completed immediately prior to embarking on the tutor programme provided useful information on their views it was not possible to take them into consideration during the initial stages of the programme. Secondly, the fact that the DES did not agree to embrace the programme fully presented difficulties for evaluation of the programme. While the tutor programme designed by the researcher formed the basis for many of the presenters there were aspects included that were additional to it (e.g. a module on first aid, a module on provision for children with special needs) and a small number of facilitators chose to design and facilitate some elements without reference to the work of the researcher. Some difficulties were also encountered in liaising with individual presenters and communication with them focused largely on the content of the programme and less on discussion of the appropriateness of methodologies, for example. Thirdly, the fact that only a small sample of teachers were surveyed and interviewed should be borne in mind when considering the application of the findings to the larger population engaged in professional development. Fourthly, the investigation of teachers' response to the inservice programme was undertaken when teachers had engaged only with the first phase of the programme (one seminar day). Further investigations undertaken on completion of the in-service programme could give a more comprehensive picture of the impact of the complete in-service programme.

On the other hand, the design of a robust programme that can be modified for use in other contexts and in other subject areas is one of the strengths of this study. The programme has a strong practical and theoretical element. The programme's theoretical basis could inform the design of other programmes of learning in a variety of contexts. It would be particularly applicable to programmes in other subjects of the primary curriculum, particularly those with a practical emphasis such as drama or the visual arts. The variety of methods used to investigate its effectiveness allowed for triangulation of data that helps promote the validity of the findings of the study. The data gleaned from interviews with tutors and teachers can be supplemented with data

gained from observation of tutors in their teaching situations, as well as in the facilitation of the in-service programme, and data gathered from the questionnaire surveys. Finally, in the selection of subjects for the study the focus was on two groups of respondents: a group of tutors and a group of teachers, hence increasing the likelihood of valid findings.

#### Recommendations

The following recommendations are based principally on the findings of the study reported above but also on the literature of best practice in adult learning and continuing professional development:

- 1. Programmes of learning for support personnel (tutors) responsible for provision of continuing professional development for primary teachers should be informed by the theory of adult learning as well as the literature on teacher change, professional development and design of programmes of learning, thus helping to ensure that they adequately prepare tutors for facilitation of in-service programmes. Factors such as the selection of relevant and adaptable content, and the selection of methodologies that promote active learning including group work and peer-guided learning leading to the promotion of critical reflection and change, are important elements in the design of such programmes. Caffarella's Interactive Model of Programme Planning proved to be a very useful and effective model for planning this programme. Its use, possibly strengthened by using an evaluative framework as described in chapter 5 to facilitate evaluation of the programme, can enhance the planning process and indeed, ultimately, can impact on the quality of the programme that is implemented.
- 2. Although the following positive aspects of programmes of learning outlined within the review of literature were not wholly embraced as part of the tutor programme, there is merit in suggesting that they could further enhance programmes of learning:
  - Dialogue with learners before the programme commences, which was not feasible as part of this study due to the immediate commencement of the tutor

- programme following selection of the tutors, could help programme planning and ensure programmes meet the needs of the learners.
- Becoming self-directed learners involves reading and examination of
  materials. This study was only partially successful in promoting this aspect of
  learning. It is an aspect that might be further promoted by planning reading
  and discussion of readings within as well as outside of the programme.
- While this study did highlight that differences exist among learners, meeting individual needs was an area that was highlighted as meriting more attention. This was particularly important within this study where one of the key considerations of the Physical Education Curriculum (Government of Ireland, 1999b) was providing opportunities for achievement for each child. This principle transferred to programmes of learning for tutors in physical education might mean, for example, that individuals within groups would be provided with extra support in particular areas to ensure that each tutor is confident on embarking to facilitate programmes for teachers.
- Fostering discovery learning, although requiring considerable time to implement, should be investigated as a consideration in promoting better learning in any follow-up programmes of learning. Clarification of the focus and intended outcomes of critical reflection could be beneficial too in other programmes of professional development.
- While this study did not set out to investigate the influence or effectiveness of particular facilitators due to the sensitivities involved, the findings emphasise that tutors rated this aspect very highly. While they did gain from observing different facilitators there was evidence to suggest that some more time needed to be dedicated to aspects related to facilitation in preparation for becoming facilitators of learning by teachers. Further emphasis on discussion of aspects of facilitation with individual presenters could promote more effective facilitation.
- 3. Ample time (experience from this study suggests 200 hours approximately) needs to be allocated prior to and during facilitation of the programme for tutors to explore fully aspects of subject content and methods of facilitation as well as planning the in-service programme to be facilitated. In determining allocation of

time, allowance needs to be made for elements such as active learning and critical reflection throughout the programme of professional development.

Provision of ample time for professional development is particularly important where the preferred policy involves selection of non-specialist primary teachers as tutors in a particular subject area. This study found that tutors' confidence and competence to present to teachers was founded to a great extent on the confidence related to subject knowledge gained from engagement with the content elements of the programme of professional development and the sense of 'ownership' of the in-service programme gained from the amount of time spent planning the facilitation of the in-service programme collaboratively.

Additional factors that they considered important were timing of opportunities to present to 'critical friends' and the provision of opportunities for consulting with those involved in facilitation of other subjects.

- 4. All tutors selected to facilitate in-service programmes or indeed provide any other form of support for teachers, particularly in subjects with a small allocation of time within the curriculum (physical education is allocated just one hour per week of curriculum time) should engage with a programme of learning that spans a two-year period, hence allowing time for transfer of learning into their own teaching context. 'Review sessions' that provide tutors with opportunities to reflect on their teaching together and to share resources as part of this teaching experience were considered very beneficial by tutors in this study. Ultimately this opportunity to change their own practice enriches the experience they offer teachers in the in-service setting and increases the likelihood of tutors supporting implementation in a systematic way rather than promoting selective implementation of aspects of the curriculum which traditionally has led to a games dominated programme.
- 5. In the interest of capacity building related to primary physical education, it will be necessary to continue to provide on-going support for tutors' learning as they support teachers in schools and to enable them to support tutors who will be appointed for the first time. This might involve

- a. some 'face-to-face' sessions but exploration of other options such as online elements could also enhance their learning
- b. linking with subject specialists at second and third level, documented as a model of best practice in the literature on CPD, in order that their expertise can be used in a catalytic, empowerment way. Such practice could provide valuable support in areas such as Assessment for Learning (AfL) in physical education that has received little attention
- c. establishing communities of practice and promoting collaborative learning within these communities to support further learning by tutors and to possibly extend the impact of a quality programme of professional development to colleagues where tutors return to teaching situations.

It is important that tutors appointed for the first time to support teachers in implementing programmes of physical education should undertake a quality programme of learning to ensure that they have the confidence and competence to take on this responsibility.

- 6. This study pointed towards some of the supports that will be necessary to support teachers with the implementation of programmes of physical education:
  - a. While the initial training of teachers has not been a main focus of this study, some of the literature reviewed pointed to evidence that this phase of teacher development needs urgent attention. It is imperative that the issues surrounding time allocated to physical education at pre-service level as well as issues related to provision of quality programmes for student teachers be addressed. The experience of the teacher at pre-service level is a crucial factor in determining the nature and extent of the support required by the primary teacher as part of the process of their continuing professional development
  - b. The vast majority of Irish primary teachers have responsibility for teaching physical education but most also suffer from a lack of subject knowledge. Opportunities for further learning should be provided to support them in overcoming this constraint. This could help compensate

for the poor initiation in sport and physical activity of many primary teachers and would be of benefit to those whose participation in sport has provided valuable experience but whose subject knowledge may be lacking

- c. The 'one-size fits all' model of provision of in-service has been widely criticised in the literature. Nevertheless, teachers' positive response to the initial phase of the programme of in-service offered (which was of just one day's duration with provision of one further day at school level to plan for implementation) indicates that there may be a need to provide such days on an on-going basis as a means of enhancing subject knowledge and raising awareness of physical education within the curriculum on a national basis with other models explored (such as those outlined below) to sustain support for teachers. It would appear that the seminar as provided to these Irish primary school teachers did succeed in providing a basis for further work in physical education by teachers, particularly in that they had an initial positive experience of the subject. Relating workshops to the individual school context has in previous research shown to be effective in ensuring that content relevant to the school is treated and this is likely to be the case here also. Positive features of the in-service programme offered include its emphasis on practical exploration of the content of the curriculum underpinned by an emphasis on understanding the curriculum, building on the generally positive disposition of teachers towards sport and physical activity
- d. Reflection on the recent literature on establishing communities of practice and promoting collaborative learning within these communities (discussed above in the context of tutor learning) suggests that the impact of the in-service programme on teachers could be extended where such a climate of learning can be cultivated. This could be a very effective means of promoting teacher learning related to physical education. The allocation of time for this kind of learning needs to be addressed as well as allocation of time for collaborative planning at school level
- e. The direct support of curriculum leaders and/or subject specialists used to provide sustained support to teachers in teaching of physical

education, suggested by some tutors and teachers in this study, is likely to prove beneficial in supporting teaching of physical education and to avoid the scenario described best by one teacher: "...[while] all of the [seminar] days were motivating, the effect could be lessening over time" (INT<sub>TEA</sub>, Siobhán). While the DES is currently implementing such a policy of providing support, (albeit with a relatively small group of subject specialists, 14 in total, working on a nationwide basis and sharing responsibility for supporting implementation of SPHE) the importance of each specialist undertaking a quality programme of learning to ensure that they have the confidence and competence to support teachers cannot be overemphasised. The numbers of support personnel dedicated to supporting physical education should be such that real support can be provided to each teacher who requires it. The development of such specialist support with the primary teacher at its core should provide that level of specialist expertise that has been identified in the literature (Faucette et al. 2002) as crucial to the provision of quality programmes of physical education in primary schools

- f. Consideration of supports other than 'face-to-face' support is necessary: it is possible for example that illustration of teaching methodologies or review of student learning could best be achieved by means of video in a distance learning context. It would appear that materials such as the PSSI support materials (PSSI, 2006) represent the type of materials that teachers in this study considered important. Exploration of the development of other such materials is important to facilitate on-going support of teaching of physical education
- g. Allocation of time to physical education in the primary school needs to be reviewed. Where teachers have the confidence and competence to teach physical education and are competent to integrate aspects with other subjects, allocation of discretionary curriculum time (currently used mostly for English, mathematics and Irish, INTO, 2006) in addition to the time recommended specifically for physical education could enhance the provision of quality programmes of physical education for the child

- h. There are a number of considerations that need to be addressed urgently to overcome the constraint of inadequate funding outlined in this study:
  - the provision of a grant for physical education equipment in 2003 and again in 2006 went some way towards helping schools and teachers implement the Physical Education Curriculum (Government of Ireland, 1999b). This grant needs to be provided to schools on an annual basis as well as specific funding to provide for the costs incurred by schools in providing the aquatics curriculum in particular
  - the provision of indoor and outdoor facilities for schools is another
    aspect that needs urgent attention. While the attention given to this
    provision during the building phase of new schools is encouraging,
    many older schools require upgrades to their facilities to implement
    many elements of physical education
  - funding for the continuing professional development of teachers is
    crucial in maintaining the support for teachers as they implement the
    Physical Education Curriculum (Government of Ireland, 1999b).
     While investigation of the particular kinds of supports teachers
    require is necessary, some of the supports outlined above could be
    used but will require specific and substantial investment by the DES
    to ensure that the support provided builds on any support that they
    have already experienced.

There may be important lessons for other providers of CPD in examining the experience of provision for CPD for physical education as described in this study. The recommendations outlined above could be applicable to programmes of learning in many of the other subject areas particularly where the policy of selection of non-specialist primary teachers in a subject area is implemented. In this regard, based on tutors' responses to the tutor programme and their experience of facilitating the inservice programme as well as the responses of teachers to the in-service programme, it would seem that the PCSP policy of selecting non-specialist primary teachers to plan and facilitate a programme of in-service for teaching colleagues and providing them with a comprehensive tutor programme as preparation for the task (a) was effective in providing an in-service programme that was satisfactory for teachers, (b) constituted

recognition of the capabilities of primary teachers to undertake this task, and (c) was instrumental in developing capacity to provide further support for teachers after the inservice programme was complete. The long-term effectiveness of this policy, however, has not been established. The merits of support personnel at primary level working with subject specialists as discussed in (5) above would appear to represent a strong element in ensuring long-term effectiveness with regard to the policy of building capacity in primary physical education founded on extending the expertise of primary teachers to enable them to support their colleagues.

### Suggestions for Further Study

The following are some of the aspects related to this study that merit further investigation.

- The study was undertaken after teachers had engaged with just one day of the inservice programme. A follow-up study of teachers who have completed two years of in-service support provided by the PCSP should be undertaken to determine if the factors reported in this study that pointed towards provision of improved programmes of physical education remain constant over this extended period of time.
- 2. Further investigation should focus on the implementation of the Physical Education Curriculum (Government of Ireland, 1999b) by the sample of teachers in this study or indeed a wider sample of teachers to establish if the in-service programme led to provision of improved programmes of physical education and impacted on children's learning. This study could involve a focus on assessment in primary physical education, which has received little attention to date, as well as gathering the views of children on their experience of physical education.
- 3. An investigation into the personal gain experienced by tutors in facilitating programmes of in-service would contribute significantly to the literature on continuing professional development (CPD) while another aspect that merits investigation is the benefit to the tutor of teaching the content to teachers in enhancing their own learning.
- 4. A study of the impact of support provided by tutors to colleagues in a teaching context (as some tutors have returned to their teaching setting) would provide

- valuable information on the impact of a specialist/curriculum leader on programmes of physical education.
- 5. An investigation into the extent to which the quality of the work of tutors involved in supporting teachers can be enhanced further by working with others with particular expertise in physical education would ensure that the expertise of the primary teacher would always be central to the process of providing continuing professional development while opening up the possibility of benefiting further from specialist expertise.
- 6. Investigation of teachers' attitudes to teaching physical education after engagement with the in-service programme and after implementing programmes informed by their learning during the programme would provide useful data on the effectiveness of the model of in-service provided.
- 7. Further work is necessary to determine the nature and extent of on-going support required by teachers for their teaching of physical education in different contexts and at perhaps various stages of their careers.
- 8. Investigation of initial levels of confidence and competence of student teachers to enhance programmes of learning at pre-service level.
- 9. Investigation of other possible interventions, including ways of preparing more personnel for the task of supporting teachers, development of curriculum specialists/leaders within schools and investigation of extra-curricular programmes that might enhance and extend the physical education programmes offered to children.
- 10. Given the most recent research reporting on the positive influence of teacher learning communities, establishment of groups of teachers working in this way in physical education and evaluation of their work could provide a unique insight into professional development in physical education.

My study was centred on a theory-based programme built on a strong rationale that a programme based on theory (informed by literature on adult learning, teacher change, continuing professional development and design of programmes of learning) could have a significant impact on learning by a particular group of adult learners. The outcome of the implementation of the programme has provided further evidence supporting the theory of adult learning. More importantly, it has proven the feasibility of the concepts related to adult learning in the context of CPD in Ireland. My study has been a first reasonably successful attempt at incorporating some of these concepts and

theories into formal CPD in Ireland. This, ultimately, it could be argued, is where my thesis makes the greatest contribution.

The study described in this thesis can contribute to the growing body of research on continuing professional development for primary teachers with particular reference to supporting primary teachers in implementing programmes of physical education and in supporting primary teachers to become leaders of professional development for their colleagues. The approach embraced in this study cannot be regarded as an inherent part of the development of programmes of learning for primary teachers in an Irish context. Hence, this study represents a significant endeavour to explore the implications and effectiveness of a model built on strong theoretical foundations used in the context of Irish primary education. The argument being made here is that such an approach has the potential to significantly shape future programmes of professional development for primary tutors, curriculum leaders or indeed support personnel for any curriculum subject. The recommendations outlined should be addressed by all of those concerned with the promotion of quality physical education at primary level with a view to sharing the responsibility for providing for the needs of each child within programmes of physical education.

#### **EPILOGUE**

The foundation for maximising the potential of each child through physical education begins with the provision of quality programmes of physical education. The Physical Education Curriculum (1999) provides the initial foundation for such a provision. A physically educated child leaving primary school builds on that experience as he/she engages with a diverse programme of physical education at second level. On entering colleges of education student teachers need to be provided with opportunities to engage fully with the theory and practice of primary physical education. Programmes of physical education should be linked to those offered in other areas to ensure that beginning teachers have a real understanding of meeting the individual needs of each child in a variety of ways. Quality programmes of physical education can satisfy many of these needs. Hence, the role of professional development becomes one of consolidating and building on this firm foundation of quality school and third level physical education experiences, and continuing to motivate teachers to offer appropriate opportunities within physical education for each child. Building capacity for supporting teachers in physical education requires a commitment to the provision of quality support by tutors who have experienced appropriate, in-depth programmes of preparation. These programmes should be designed and implemented by those with subject expertise related to primary physical education working closely with primary teachers and with leaders in the field of physical education. In this way, the spiral of providing enjoyable physical education learning experiences for children in primary schools, for young people at second level, for student teachers and for primary teachers can become a reality.

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### Appendix A

## **Exemplars From the Tutor Programme**

#### **Exemplars From the Tutor Programme**

#### Exemplar 1:

#### Section A: The Physical Education Curriculum: Structure and Overview

This section is designed to provide an introduction to the aims and rationale of the Physical Education Curriculum.

#### The Aims and Rationale of the Physical Education Curriculum

Tutor programme methodology: Presentation. An overview of the Physical Education Curriculum will be presented to the tutors in order to establish clearly the starting point of this section of the tutor programme. The overview will be based on the introduction to the Physical Education Curriculum (1999), pp. 2-12.

**Tutor programme methodology: Group discussion.** The tutors will discuss the aims as outlined in the Curriculum (p. 10) and the rationale for physical education (p. 2). Objective: That tutors will understand this central element underpinning their work.

#### Exemplar 2:

## Section B: The Strands of the Curriculum: A Rationale Applied to the Athletics Strand

Tutor programme methodology: Presentation. The rationale for the athletics strand will be outlined as an illustration of the application of the overall rationale of the Physical Education Curriculum to one strand. The rationale for each of the strands is important to consider with reference to the rationale and aims described in the introduction. The athletics strand will serve as an example of how each strand contributes to the "physical, social, emotional and intellectual development of the child" (Physical Education Curriculum, 1999, p. 10).

Athletic activities contribute to the physical development of the child as he/she develops strength, speed, endurance and flexibility through participation in a wide variety of running, jumping and throwing activities. The child can engage in enjoyable experiences and gain a sense of achievement, as progress is attained and even in some instances measured and recorded. He/she can engage in activities where interaction is characterised by co-operation and where team spirit is essential in a group situation

such as in the performance of a good relay. Competitive activities with the emphasis on personal achievement can foster the self-esteem of the child and help promote positive attitudes towards participation – an essential outcome of participation in athletics. The development of the child's understanding and knowledge of athletic activities, events and competitions both as a participant and as a spectator is central to the aims of the programme. Opportunities are provided too for observation, discussion and analysis of athletic achievements – both personal achievement and the achievement of other children. Partner work as children practise a standing jump, for example, allows a child to receive or provide immediate feedback on performance and to discuss aspects of that performance. Athletics promotes the child's capacity to make decisions and solve problems as they select, for example, the best stance before throwing a beanbag or foam javelin. It encourages the child to maintain fitness and promotes a healthy lifestyle providing many opportunities for children to cope with challenges in a positive way. The child too learns many important safety practices and is encouraged to identify these practices as a spectator and implement safe practice as a participant.

Tutor programme methodology: Group task: Brainstorm: Groups of tutors will identify what contribution each strand makes to the development of the overall aims and rationale of the Curriculum, then check with reference to the Physical Education Curriculum. Use flip chart and record outcomes of discussion.

#### Exemplar 3:

#### Section B: The Strands of the Curriculum

This section of the programme is concerned with

- exploring a range of the content for each strand
- discussion and application of the teaching approaches recommended in the curriculum
- promoting the understanding and appreciation of strands of the curriculum

#### Part 1: Athletics

An outline of the treatment of the athletics strand is provided. This outline/framework presents the content and methodologies applied to the treatment of the athletics strand (Table A). A similar outline was designed for each section of the tutor programme.

#### Table A

#### Framework of the Athletics Module of the Tutor Programme

#### The Teaching of Athletics

#### Objectives:

- to introduce the tutor to the athletics curriculum for primary schools including the background to the teaching of athletics in an Irish context, its aims, rationale and content
- that the tutor will explore a range of athletic activities appropriate for an athletics programme in primary schools
- to enable the tutor to provide guidance on the implementation of an appropriate programme of athletics by teachers.

#### Elements of the tutor programme for athletics

- 1.0 The athletics curriculum: aims, rationale, content and teaching approaches Method (sample)
  - facilitator presents background and outlines learning outcomes
  - group brainstorms aims, rationale and teaching approaches
  - relate group contributions to content of curriculum
- 2.0 Exploration of a selection of running, jumping and throwing activities that meet the objectives of the curriculum at each class level *Method (sample)* 
  - tutors engage in activities presented by the facilitator
  - group discussion of activities focussing on tutors' experience of teaching any of these elements
  - opportunities are provided for peer-guided by tutors as they engage in group activities
- 3.0 Exploration of issues underpinning the teaching of athletics: teaching approaches, planning, assessment and evaluation *Method (sample)* 
  - Pair work: tutors examine teaching approaches suggested in the Teacher Guidelines and outline how they might be applied to the teaching of athletics
  - Group work: Tutors outline a unit of work for a particular class level incorporating running, jumping and throwing activities as well as activities that prompt increased understanding and appreciation of athletics by children
  - Tutors brainstorm methods of assessment that might be appropriate for use in assessing athletics
  - Tutors examine 'what' teachers might explore when observing children run, jump or throw: pair/group activity, using video material of children and athletes.

#### Part 2: Games

#### Tutor programme methodology: Presentation.

The facilitator will present a brief account of the status of games in Irish primary schools beginning with the history of games and sport, and leading to reference to studies outlined in chapter 3 of this study (McGuinness and Shelly, 1995; Broderick and Shiel, 2000) providing some data on the status of games teaching.

#### Tutor programme methodology: Group Discussion.

#### Objectives:

- to promote discussion on some of the major issues related to games particularly to the teaching of children's games.
- to prompt tutors to reflect critically on approaches to teaching of games to children.

The facilitator will prompt discussion of some of the aspects raised in the presentation above. The focus of the discussion will be tutors' own experience of the aspects raised: any points they wish to raise about the history of games or games teaching, their own observations of attitudes to competition for children, the approaches to games teaching adopted in their schools etc.

#### Tutor programme methodology: Group Activities

#### Objectives:

- to explore a range of games activities matching the objectives of the games strand
- to promote discussion throughout the activity sessions to ensure that tutors can

  (a) identify important teaching points, and (b) note the progression in activities to match the objectives at each class level.

Tutors will engage in a selection of games activities outlined in Table B below.

Aspects that might help with the assessment of games and safety aspects will be discussed also. As tutors engage in activities consideration will be given to the various teaching approaches that might be used to promote, for example, maximum participation or the development of understanding of games.

Table B
Development of the Ball-handling Sub-Unit of the Strand Unit 'Sending, receiving and travelling' for Junior Classes

| Strand sub-unit |   | Skills  |  |  |  |  |
|-----------------|---|---|--|--|--|--|
| Ball handling   | Organisation Individual, pair and group practice using beanbags | underarm and overarm<br>throw<br>catch<br>balance   |  |  |  |  |
|                 | Individual, pair and group<br>practice using a large ball       | target throw  throw/catch   |  |  |  |  |
|                 | Individual, pair and group<br>practice using a small ball       | throw/catch<br>bounce<br>under-arm throw<br>over-arm throw<br>downward (bounce) pas<br>roll/scoop |  |  |  |  |

## Tutor programme methodology: Group activity. Objective

• to explore the strand unit 'Creating and playing games' (Table C).

The various types of 3 v 1 passing games will be given considerable attention so that tutors will become familiar with options for developing these games. Games of bench ball and court end ball leading into the playing of basketball will be explored with particular emphasis on how they can be adapted to suit varying needs. Mini-basketball, Olympic handball and tag rugby will be explored with specific reference to the particular skills needed by children to play small-sided versions of the game.

Playground games (outlined in Table C) will be explored so that tutors will be able to advise teachers on the selection of such games.

Tutor programme methodology: Peer guided learning. Tutors are invited to present aspects of games teaching to peers, either adding to playground games or focusing on some sport adapted for children.

Table C
Creating and Playing Games: Sample Activities to Promote Creation and Playing of Appropriate Games

| Strand sub-unit/unit                     | Sample games                            |
|--|---|
| Playing games to develop ball-handling   | Frozen beanbag/ Scatter a beanbag       |
| skills                                   | Keep the basket full                    |
|  | Beat your record                        |
|  | Target roll                             |
|  | Step back hoop shoot                    |
|  | Hot ball                                |
|  | Passing relay                           |
|  | Dribble/ Dribble and shoot relay        |
|  | Under-arm/over-arm pressure throw       |
|  | Pass and follow/Three-headed monster    |
|  | Pass and duck                           |
|  | Shooting: 15's                          |
|  | 3 v 1 passing games                     |
|  | Bench ball/Court end ball               |
|  | Mini-basketball                         |
| Playing simple playground games          | Magic shoes                             |
|  | Call the number                         |
|  | The train                               |
|  | Fox and geese                           |
|  | Saucers and Domes                       |
| Creating games individually and in pairs | Throwing at a target, devising and      |
|  | applying rules and selecting the target |

#### Tutor programme methodology: Group task (Discovery learning).

Tutors will be encouraged to create games using simple equipment, devising simple rules and a scoring system in order to gain an understanding of how to promote this activity by children. Emphasis will be on applying ball-handling skills in the creation of the games. They will need to identify re-starts, specific techniques, awareness of specific roles and tactics. Each group will be challenged to record what guidance might be needed at each class level to promote the creation of games.

**Tutor programme methodology: Presentation:** The facilitator sets up a range of stations around the playing area and presents sample activities illustrating the development of skills using the station teaching organisational approach.

**Tutor programme methodology: Group Task:** Tutors are challenged to extend the range of activities suggested at each station. The work should be underpinned by the principle of differentiation.

#### Part 3: Gymnastics

Tutor Programme Methodology: Presentation: Objective: that tutors gain an understanding of the thematic approach proposed in the Curriculum (outlined in Table D as summary of presentation).

Table D
The Thematic Approach Applied to Gymnastics and Dance

#### A thematic approach.

Educational gymnastics can be taught using a *thematic approach* based on the principles of movement and this approach is outlined in the Physical Education Teacher Guidelines (pp. 74-77). "A theme is a category of movement within which the child is asked to explore specific movements" (Physical Education Teacher Guidelines, p. 75). The principles of movement inform the specific movements explored within each theme. The principles of movement are concerned with *what* the body can do, *how* the body moves, *where* the body moves and *with whom* or *with what* the movement is taking place. Similarly, a thematic approach can be applied to the teaching of dance where the principles of movement have been explored and the selection of a theme or themes provides a framework for creating dances that are informed by the principles of movement. Exemplar units of work are provided in the Teacher Guidelines to illustrate the use of themes.

**Tutor Programme Methodology: Brainstorm.** Tutors attempt to identify suitable themes for a class that is undertaking gymnastics for the first time.

Tutor Programme Methodology: Practical work in Gymnastics: Tutors engage in floorwork related to the theme of balance outlined in Table E below.

### Table E Balance

#### Balance (Supporting weight)

balance on large body parts
front, bottom, side, shoulders
balance on small body parts
hands, feet, knees
balance raising parts of the body high
balance with the hands, nose, feet, elbow, knees
as the highest body part

change levels, shape (curled, stretched, wide, narrow)

Objectives: to enable tutors to explore

- moving into and out of a balance with control
- showing variety in movement by using large and small bases for balancing
- linking balances
- simple partner work where the emphasis is on showing individual balances that are the same or contrasting.

Tutor programme methodology: Group discussion focusing on their own experiences of children and gymnastics in a school setting.

#### Part 4: Dance

**Tutor programme methodology: Presentation.** Facilitator begins with a brief outline of the theory of dance in education (main focus: learning *in* and *through* dance).

Objective: to introduce tutors to creative dance.

Tutor programme methodology: Group activities (Practical). Tutors engage in a range of individual, pair and group dance activities. Each of the activities outlined below is linked to the content of the Physical Education Curriculum (see Tables F and G).

Table F

An Outline of Some Dance Activities Related to the PE Curriculum

Activity 1: Exploration of body awareness and spatial awareness. The Physical Education Teacher Guidelines sample lesson on this topic (Exemplar 9, page 68) is explored by the tutors. They will begin by exploring the different parts of the body used in dance and their range of movement. The lesson uses the concept of 'magic dust' that lands on different body parts of the child. The child is encouraged to move around the space (incorporating aspects of spatial awareness) 'catching' the magic dust on different body parts. A short dance phrase is then created based on the stillness (the magic dust landing) and then stillness again (when the magic dust has floated away).

Activity 2: Exploration of body awareness and spatial awareness incorporating relationships. A further example will then be examined that could be used to introduce the same topic to a group of older children. It involves the concept of imagining a ping-pong ball on a part of the body and experimenting with it by tossing it high and catching it on another body part. The development of this activity into a dance is enhanced by the teacher establishing a rhythm with his/her voice and using appropriate music. Tutors should develop this activity into a short dance with a partner (exploring relationships in dance) and then combine pairs to form a group dance. The starting positions, the order of movement and the body parts to be used by each dancer need to be determined as the dance is developed.

Activity 3: Exploration of body awareness incorporating relationships. Exemplar 10 from The Physical Education Teacher Guidelines (p. 69) is then explored by the tutors. It is concerned with body awareness and the movement explored is referred to as body jiving. It leads from the exploration of different body parts by 'waking' them up and concludes by creating a body jive phrase or a sequence of movements to a rhythm involving use of different body parts. This exemplar also introduces tutors to relationships in dance as it involves simple partner work. It can be adapted for any age group.

Activity 4: Exploration of body awareness focussing on body shapes. The tutors explore how the body can create different pictures or shapes by arranging its various parts in different ways. Activities such as 'Freeze Frame' (musical statues) and mirror shapes will be explored as ways of encouraging children to be aware of different shapes. Different levels could be explored through these activities too. The tutors will then create partner phrases where they explore mirroring movement and aim to work in unison (introduced in the curriculum at first and second class level). This can be developed further to focus on contrasting shapes (introduced at third and fourth class levels).

Table G
Further Dance Activities Illustrating Concepts From the Dance Curriculum

Activity 5: Exploration of body awareness focussing on body actions. The tutors explore the way in which the body can move in space. This concerns travelling, turning, jumping and gesture. As tutors engage in travelling movements they are encouraged to identify different levels, pathways, directions and speeds that they can use. Partner work using 'follow the leader' activities and 'move and echo activities' (one person moves first, calls 'echo' and then the second person moves) illustrate progression in exploring body actions. Combining body action phrases while counting a beat leads on to partner or group body action phrases. Group body action phrases allow one pair of tutors to teach their phrase to the group and the group links the phrases together to form a dance of, for example, 32 counts.

Activity 6: Group discussion. Tutors discuss how appropriate the previous activities are to the development of body awareness, the clarity of the focus on body parts and any other ideas that they might use to help children to develop the concept of body awareness.

Activity 7: Activity combining work on aspects of body awareness. Tutors will create a short dance linking work on body parts (jives), body shapes and body actions, each to a count of 8 or 16. The complete dance is then performed exploring parts in unison, in canon and again in unison, illustrating tertiary form (which is introduced to fifth and sixth class children in the dance curriculum).

Activity 8: This topic is concerned with the use of stimuli to develop dance. Tutors will be asked to suggest some stimuli (auditory, visual, tactile or kinaesthetic) for use in dance and then will explore the theme of outer space that is developed as an exemplar in the Physical Education Teacher Guidelines (pp. 72-73). This exemplar uses a poem, photographs, children's rocket designs and balloons as stimuli. It uses a narrative form.

#### Exemplar 4:

## Section C: Issues Related to the Implementation of the Physical Education Curriculum

This exemplar is concerned with providing an outline of how assessment of pupil achievement is treated within the tutor programme.

#### Assessment of Children's Achievement in Physical Education

Tutor programme methodology: Presentation. The facilitator will present briefly on the purposes of assessment as outlined in the Physical Education Curriculum. Objectives: that tutors will gain an understanding of the rationale for assessment of children's learning in physical education as outlined in the Curriculum.

Tutor programme methodology: Group discussion: Is assessment in physical education 'doable' by Irish primary teachers: what, why and how of assessment. Tutors will attempt to identify what might be assessed in physical education, how it might be assessed and how results of assessment practices might be recorded.

Tutor programme methodology: Presentation and Group Discussion: The facilitator will examine further why assessment is necessary emphasising assessment for learning and assessment of learning. Self-assessment will be discussed and the practice of keeping learning logs will also be debated.

Tutor programme methodology: Group Discussion: Groups are encouraged to reflect on why assessment is necessary in the teaching of physical education. A task will then be set for tutors to identify what should be assessed in broad terms in physical education lessons with the aim of identifying aspects of skill development, social and personal development and development of the knowledge and understanding of the child. Recording of results of assessment will be discussed also. The groups will feed back the outcomes of their discussions to the full group of tutors.

Tutor programme methodology: Group Discussion: Other means of assessment that can integrate physical education with other subjects such as using quizzes, videos, projects, portfolios and drawings will also be discussed.

Tutor programme methodology: Group task: Observation of content recorded on video in dance, gymnastics and athletics followed by analysis by tutors: Content of a gymnastics lesson, a dance lesson and an athletics lesson will be examined by tutors. Tutors will be asked to identify what might be assessed in each of the lessons. Discussion by the group will focus on identification of common elements to be assessed. Further work will be undertaken to determine a method of recording the results of this analysis (p. 335).

Tutor programme methodology: Presentation and group discussion. Assessment in gymnastics: A sample of a record of achievement (Table H) will be presented to tutors. This sample illustrates a checklist that might be used to assess the achievement of a child who has completed a gymnastics unit of work. The unit of work is outlined in the Physical Education Teacher Guidelines (1999, p. 78). Observation by the teacher with the possible inclusion of a teacher-designed task will inform the assessment involved.

Table H
Assessment of a Unit of Work in Gymnastics: What to Assess

The child

Travels on feet and on hands and feet with control

Travels by rolling (a stretched roll, a tucked roll)

Rocks from back to feet with control\*

Balances with control\* on large body parts

Balances with control\* on small body parts

Balances and travels with control\* raising body parts high

Links two specific/given travelling movements

Links two travelling movements that s/he has created

Links a travelling movement with a balance (and a travelling movement)

Transfers actions above onto apparatus

Describes a movement that they have performed

Describes a movement that they have watched

Attempts all tasks with enthusiasm

Co-operates with others i.e. use space well/show awareness of space, take turns

(\*Control=responds to tasks set to vary direction, levels, shape, speed, effort)

**Tutor Programme Methodology: Group discussion:** Two further possible methods of recording assessment outcomes will be presented to tutors.

Table I illustrates a method of recording that allows for a comment to be recorded providing more detail on any aspects of the child's development. The skill development of the child is recorded using three categories described in the table. Aspects of social and personal development are noted using a numbering system to facilitate recording. Table J illustrates a rubric that allows recording of progression from weak (4), to moderately proficient (3), to proficient (2), and to highly proficient (1).

Table I
Recording Achievement Related to a Variety of Strands

Teacher Observation Points/Learning Outcomes for the Units of Work

- 1. Pass a ball using a variety of methods: chest pass, overhead pass, bounce pass
- 2. Complete a pass and move practice i.e. pass and follow
- 3. Shoot: roll a ball at a target
- 4. Run over hurdles
- 5. Run over hurdles using same lead leg
- 6. Run over and duck under obstacle
- 7. Show good co-ordination: hop, bounce, bounce sideways, bounce twice in hoop
- 8. Show control in stopping, landing
- 9. Move lightly on feet
- 10. Attempt all tasks with enthusiasm
- 11. Appear to enjoy the sessions
- 12. Co-operate with others i.e. use space well/show awareness of space, take turns
- 13. Answer questions readily
- 14. Work well in groups i.e. in co-operative games, at stations

Some children will not have made so Category 1 (working towards)

much progress

Most shildren will be shill

Most children will be able to

Some children will have progressed
further

Category 2 (achieved)
Category 3 (exceeded)

Name Social Cat. Cat. Cat. Comment Dev. 1 2 3 Tim 13,11 X Very receptive X Mary Very co-operative, fitness? Kate 12 X Not so keen on contact activities Can be 'giddy', noticed real 10,13 X Joe improvement late Feb.

Table J
A Rubric Facilitating Recording Levels of Progression

| Sean  | 1_ |   | 2 |   | 1 | 1 |    | 1_ |   | 1 | 2 | 2  |  |
|-------|----|---|---|---|---|---|----|----|---|---|---|----|--|
| Megan | 2  |   | 4 |   | 3 | 4 | 3_ | 4  | 2 | 1 | 1 | .1 |  |
| Laura | 3  | 2 | 3 | 2 | 4 | 4 |    | 3  | 2 | 3 | 3 | 3  |  |

**Tutor programme methodology:** Use of video in examining assessment. Table J will be used by tutors as they watch some video material of children engaging in athletics.

### Appendix B

### Questionnaires

# Questionnaire 1 (QST<sub>1</sub>) Section 1: Biographical Information

| Q1         | Are you  | female<br>male   |        |      |       | [ | ]                |  |
|------------|--|--|--------|------|-------|---|------------------|--|
| Q2         | Are you  | 25 years or under<br>26-30 years<br>31-40 years<br>41-50 years<br>51 years or over |        |      |       |   | ]                |  |
| Q3         | How long hav   | ve you been teaching? 0-4 years 5-10 years 11-20 years 21 years or more            |        |      |       |   | ]<br>]<br>]      |  |
| Q4         | School type  |  | Female | Male | Co-ed |   |                  |  |
|            |  | Junior<br>Senior<br>Junior/Senior  | [ ]    | [ ]  | [ ]   |   |                  |  |
| Q5         | School location                                      | on<br>Urban<br>Rural   |        |      |       | [ | ]                |  |
| Q6         | Total number<br>(including yo<br>Class teacher)      |  |        |      |       |   |                  |  |
| <b>Q</b> 7 | Your teaching  | g qualifications   |        |      |       |   |                  |  |
|            | N.T.<br>B.Ed.<br>M.Ed.<br>Grad.Dip.<br>Other (please | detail)  |        |      |       |   | ]<br>]<br>]<br>] |  |

#### Section 2: Your Background in Physical Education

| Q8  | Have you completed a course in Physical Education since the completion of your teaching qualification? (include summer/evening/weekend course, certificate, diploma, degree)  If yes, specify course and date | Yes<br>No |   | ] |
|-----|---|-----------|---|---|
| Q9  | Have you completed a course related to a particular sport or activi (e.g. aerobics)?  If yes, specify course and date   | ty Yes No | [ | ] |
| Q10 |   | Yes       | [ | ] |

| Q11 | What factors were most influential in shaping your interest in Physical Education? (tick as many as are appropriate)  Family Sports coach Physical Education teacher School attended College Work colleagues Other (please explain) |     |
|-----|---|-----|
| Q12 | What strand of the Physical Education curriculum are you most interested in teaching? (tick one strand)   |     |
|     | Athletics Dance Gymnastics Games Outdoor and adventure activities Aquatics  |     |
| Q13 | Have you participated in competitive sport?  Yes  No  If yes, specify what sport and to what level (e.g. school, college, club, inter-county, inter-provincial, international)  | [ ] |
| Q14 | Do you have a Special Duties post in your school that includes responsibility for Physical Education?  Yes No   | [ ] |

| Q15 | Physical Education?  Journals Books Websites  |     |  |
|-----|---|-----|--|
|     | Other (please explain)  |     |  |
| Q16 | Do you belong to a Physical Education Association?  Yes No  If yes, state which association | [ ] |  |

#### Section 3: Your School Profile for Physical Education

| Paragraph of the progress of t | [ ] [ ] [ ] Yes No [ ] [ ] [ ] |
|--|--------------------------------|
|  | Yes No                         |
| Q18 Has your school developed a plan for Physical Education?   |                                |
| If no, please explain  |                                |
|  |                                |
| If yes, please answer the following questions  |                                |
| Did you have a particular responsibility for designing the school plan for Physical Education?   | [][]                           |
| Is the plan informed by the Physical Education Curriculum?   | [][]                           |
| Does the plan suggest incorporating work from all strands of the Physical Education curriculum?  | [][]                           |
| Does the plan outline objectives for different class levels?   | [][]                           |
| Does the plan outline content for different class levels?  | [][]                           |
| Does the plan outline a dress code for children for Physical Education?  | [][]                           |
| Does the plan suggest any support materials e.g. resource packs that would inform the teaching of Physical Education?  | [][]                           |
| Does the plan include an outline of extra-curricular programmes?   | [][]                           |
| Does the plan include guidance for children with special needs?  | [][]                           |
| Does the plan outline the role of any outside personnel in the teaching of Physical Education? (includes coaches from a National Governing Body)   | [][]                           |

|     | (Continued from previous page)   |     |  |  |  |  |  |
|-----|--|-----|--|--|--|--|--|
|     | Outline any areas that you feel might be improved in the school plan   |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
| 010 | Indicate the facilities to subject or supplied to the supplied |     |  |  |  |  |  |
| Q19 | Indicate the facilities to which your school has access for teaching Physical Education and your view of how satisfactory the facilities are (rank in order 1= very satisfactory, 2= satisfactory, 3= unsatisfactory, 4= very unsatisfactory)  |     |  |  |  |  |  |
|     | Indoor area  | [ ] |  |  |  |  |  |
|     | Outdoor hard surface   | [ ] |  |  |  |  |  |
|     | Outdoor grass area   |     |  |  |  |  |  |
|     | Aquatics facility  |     |  |  |  |  |  |
|     | Other (please explain)   | [ ] |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
| Q20 | Indicate what equipment your school has for teaching Physical  |     |  |  |  |  |  |
|     | Education and your view of how satisfactory this equipment is (rank in order 1= very satisfactory, 2= satisfactory, 3= unsatisfactory, 4= very unsatisfactory)   |     |  |  |  |  |  |
|     | Equipment for athletics  |     |  |  |  |  |  |
|     | Equipment for dance  | [ ] |  |  |  |  |  |
|     | Equipment for gymnastics   | [ ] |  |  |  |  |  |
|     | Equipment for games  | [ ] |  |  |  |  |  |
|     | Equipment for outdoor  |     |  |  |  |  |  |
|     | and adventure activities   |     |  |  |  |  |  |
|     | Equipment for aquatics   |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |
|     |  |     |  |  |  |  |  |

| Q21 | Indicate how much time per week is recommended in your school plan for the teaching of Physical Education                       |           |           |          |        |         |
|-----|---|-----------|-----------|----------|--------|---------|
|     | Less than 30 minutes  |           |           |          | ſ      | 1       |
|     | 31-45 minutes   |           |           |          |        | 1       |
|     | 46-60 minutes   |           |           |          | ij     | i       |
|     | More than 60 minutes  |           |           |          | Ī      | j       |
| Q22 | In general, indicate what time per week is allocated to the teaching of Physical Education by teachers in your school           |           |           |          |        |         |
|     | Less than 30 minutes  |           |           |          | Г      | 7       |
|     | 31-45 minutes   |           |           |          |        | J<br>1  |
|     | 46-60 minutes   |           |           |          | ] [    | 1       |
|     | More than 60 minutes  |           |           |          | ]<br>] | j       |
| Q23 | In general, what emphasis is placed by the teachers in your school on the in the teaching of Physical Education in your school? |           |           |          | e fo   | llowing |
|     |   | A Lot     |           |          |        |         |
|     | Skill development   | [ ]       | [ ]       | [ ]      |        |         |
|     | Social development Development of knowledge   | [ ]       | l J       |          |        |         |
|     | and understanding of Physical Education   | г٦        | Гì        | Гĵ       |        |         |
|     | Promotion of a healthy lifestyle  | [ ]       | [ ]       | [ ]      |        |         |
| Q24 | Do all strands of the Physical Education cu<br>allocation of time over the school year?   | rriculum  | •         | Yes      |        | ]       |
|     |   |           |           | No       | Ĺ      | j       |
|     | If no, rank the strands in order of priority (  | l=most ti | me, 6=lea | st time) |        |         |
|     | Athletics   |           |           |          | ſ      | 1       |
|     | Dance   |           |           |          | Ĭ      | j       |
|     | Gymnastics  |           |           |          | Ī      | j       |
|     | Games   |           |           |          | [      | ]       |
| ļ   | Outdoor and adventure activities  |           |           |          | Ī      | ]       |
|     | Aquatics  |           |           |          | L      | J       |
|     |   |           |           |          |        |         |

| Q25 | Does your school offer an extra-curricular programme of physical activity?  Yes No If yes, please state what is offered as part of the programme (tick as many as appropriate)  Athletics Dance Gymnastics Games Outdoor and adventure activities Aquatics Other |       |
|-----|--|-------|
| Q26 | Indicate the percentage of children in the school that participate in the excurricular programme  Percentage of children   | ktra- |
|     | 1 sconage of smalen  |       |
| Q27 | Does your school keep records of children's attainment in Physical Education?  |       |
| _   | Yes<br>No  | [ ]   |
| Q28 | Does your school keep a record of the content covered in Physical Education by each class?   |       |
|     | Yes  | [ ]   |
|     | No   | [ ]   |
|     | If yes, is this record made available to the class teacher at the beginning of the school year?  |       |
|     | Yes  | [ ]   |
|     | No   | ( )   |

### Section 4: Your experience of teaching Physical Education

| Q29 | Identify the factors that inform your planning for teaching Physical Education (tick as many as are appropriate)  Your school plan The Physical Education Curriculum Books on Physical Education Physical Education Journals Courses attended Your own experience of teaching Physical Education Other (please explain) | ]           |
|-----|---|-------------|
| Q30 | How much time per week do you devote to the teaching of Physical Education?  Less than 30 minutes 31-45 minutes 46-60 minutes More than 60 minutes  | ]           |
| Q31 | How many times per week do you teach Physical Education?  Less than once per week Once per week Twice per week More than twice per week   | ]<br>]<br>] |

| Q32 | Indicate how frequently you teach each of the strands of the Physical Education |                       |                   |            |        |  |  |
|-----|---|-----------------------|-------------------|------------|--------|--|--|
|     | Curriculum  |                       |                   |            |        |  |  |
|     |   | Very Frequently       | Frequently        | Rarely     | Never  |  |  |
|     | Athletics   | [ ]                   | [ ]               | [ ]        | [ ]    |  |  |
|     | Dance   | [ ]                   | [ ]               | [ ]        | [ ]    |  |  |
|     | Gymnastics  | [ ]                   | [ ]               | [ ]        | [ ]    |  |  |
|     | Games   | [ ]                   | [ ]               | [ ]        | [ ]    |  |  |
|     | Outdoor and   |                       |                   |            |        |  |  |
|     | adventure activities  | [ ]                   | [ ]               | [ ]        | [ ]    |  |  |
|     | Aquatics  | [ ]                   | [ ]               | Ĺĺ         | [ ]    |  |  |
|     |   |                       |                   |            |        |  |  |
| Q33 | Indicate which teach lessons  | _ •                   | ~                 | •          | •      |  |  |
|     | Cd a d d:   | Very Frequently       | × 1 0 d = 0 = 1.7 | Rarely     | Never  |  |  |
|     | Guided discovery  | [ ]                   | []                | [ ]        | []     |  |  |
|     | Group teaching Integration with   | f ]                   | []                | [ ]        | [ ]    |  |  |
|     |   | r 1                   | f 1               | r 1        | . 1    |  |  |
|     | other subjects  | [ ]                   | [ ]               |            | [ ]    |  |  |
|     | Direct teaching   | [ ]                   | [ ]               | []         | [ ]    |  |  |
| Q34 | Identify your strengt   | hs as a teacher of    | Physical Educ     | cation     |        |  |  |
| Q35 | Identify your weakne  | esses (if any) as a t | teacher of Phy    | ysical Edu | cation |  |  |

| Q36 | Have you supported your colleagues in your school in teachin Physical Education? | _  |     |
|-----|--|----|-----|
|     |  | es | ŢŢ  |
|     | N  | 0  | [ ] |
|     | If yes, indicate how   |    |     |
|     |  |    |     |
|     |  |    |     |
| ı   |  |    |     |
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### Section 5: In-service education: your development and the professional development of teachers in Physical Education

| Q37 | What was your motivation for undertaking the post of Trainer for Physical Education?   |
|-----|--|
| Q38 | Outline why you think you were selected as a Trainer for Physical Education  |
| Q39 | If you have you delivered in-service Physical Education to primary teachers previously, outline the title, location and organiser of the course(s) |
| Q40 | What theoretical aspects of Physical Education do you expect to be addressed as part of this tutor programme?                                      |

| Q41 | What practical aspects of I as part of this tutor prograi               |                                 | on do you e   | xpect to be add   | ressed       |
|-----|---|---------------------------------|---------------|-------------------|--------------|
| Q42 | What aspects of Physical F tutor programme?                             | Education do you                | wish to be    | addressed as p    | art of this  |
| Q43 | To what extent do you thin the tutor programme?                         | k the following  Very important | factors are i | Important to the  | e success of |
|     | Venue Equipment Accommodation Content Support Materials (e.g. handouts) |                                 | []            | [ ]<br>[ ]<br>[ ] |              |

|    |  | Very | V    |        |            |            |                     |
|----|--|------|------|--------|------------|------------|---------------------|
|    |  | port |      |        | rtant<br>] | Unimp<br>[ | ortant<br>]         |
|    | Ability to use a wide variety of presentation methods effectively  | [    | ]    | [      | ]          | [          | ]                   |
|    | Ability to take into account individual differences among learners | [    | ]    | [      | ]          | [          | ]                   |
|    | Ability to establish a facilitative relationship with learners     | [    | ]    | [      | ]          | [          | ]                   |
|    | Knowledge of content   | [    | ]    | [      | ]          | (          | ]                   |
|    | Ability to relate content to children's needs and abilities        | [    | ]    | [      | )          | [          | ]                   |
|    | Ability to adapt content to varying teaching situations            | [    | ]    | 1      | }          | [          | ]                   |
|    | Sporting ability   | [    | }    | [      | ]          | {          | J                   |
|    | Physical Education teaching experience                             | ]    | ]    | [      | ]          | [          | ]                   |
|    |  |      |      |        |            |            |                     |
| 45 | Thinking ahead, what are the most im for Physical Education        | port | tant | issues | for y      | you in o   | delivering in-servi |
|    |  | _    |      |        |            |            |                     |
| Ì  |  |      |      |        |            |            |                     |

#### Section 6: The teaching of Physical Education

| Q46 | Outline the main developments that you would like to see in the <i>teaching</i> of Physical Education at primary level in the next 10 years |
|-----|---|
|     |   |
|     |   |
|     |   |
|     |   |
|     |   |
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|     |   |
|     |   |

Signed:

Date:

Thank you very much for completing this questionnaire. Your cooperation is much appreciated.

## $\label{eq:Questionnare 2} Question nare \ 2 \ (QST_2)$ Section 1: The content of the tutor programme for trainers

| Q1 | Indicate your overall level of               | f sa  | tisfaction        | wi | th the fol | lov | ing aspects   | of | the                  |
|----|--|-------|-------------------|----|------------|-----|---------------|----|----------------------|
|    | content in both weeks training               | ıg (ı | olease tick)      |    |            |     |               |    |                      |
|    |  |       | ery<br>tisfactory | Sa | tisfactory | Uı  | nsatisfactory |    | ery<br>nsatisfactory |
|    | Overview of Physical<br>Education Curriculum | ]     | ]                 | [  | ]          | ]   | ]             | [  | ]                    |
|    | Physical Activity and<br>Well-being          | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |
|    | Playground and co-<br>operative games        | [     | }                 | [  | }          | [   | ]             | [  | ]                    |
|    | Athletics                                    | [     | }                 | [  | ]          | [   | 1             | [  | }                    |
|    | Warm-up/Stretches                            | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |
|    | Health-related exercises                     | [     | J                 | [  | ]          | [   | ]             | [  | ]                    |
|    | PE at second level/PSSI                      | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |
|    | Dance  | [     | ]                 | [  | }          | [   | ]             | [  | ]                    |
|    | Aquatics                                     | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |
|    | Games  | [     | ]                 | [  | 1          | [   | ]             | [  | ]                    |
|    | Gymnastics                                   | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |
|    | Outdoor and Adventure<br>Activities          | [     | ]                 | [  | ]          | {   | ]             | [  | ]                    |
|    | Intercultural Education:<br>Music and Dance  | [     | ]                 | [  | ]          | [   | ]             | [  | ]                    |

| Q2 | Thinking about the content covered   | for  | each o                                 | of th | e stranc                                       | ds ii | n the firs                             | t tw | /0                           |  |  |
|----|--------------------------------------|--|--|-------|--|-------|--|------|------------------------------|--|--|
|    | weeks of the training identify what  | at you would like to be revisited, developed |  |       |  |       |  |      |                              |  |  |
|    | further and/or added in the next pha | ise (  | please                                 | ticl  | <b>(</b> )                                     |       |  |      |                              |  |  |
|    |                                      | ne<br>be                                     | Original content needs to be revisited |       | Original content needs to be developed further |       | New<br>content<br>needs to be<br>added |      | o further<br>ork<br>ocessary |  |  |
|    | Athletics                            | [  | }                                      | [     | ]  | E     | ]                                      | [    | ]                            |  |  |
|    | Dance                                | [  | ]                                      | [     | ]  | [     | ]                                      | [    | ]                            |  |  |
|    | Gymnastics                           | [  | ]                                      | [     | ]  | [     | ]                                      | [    | ]                            |  |  |
|    | Games                                | [  | ]                                      | [     | ]  | [     | ]                                      | [    | ]                            |  |  |
|    | Outdoor and Adventure Activities     | [  | ]                                      | [     | J  | [     | ]                                      | [    | ]                            |  |  |
|    | Aquatics                             | [  | ]                                      | [     | ]  | [     | ]                                      | [    | ]                            |  |  |

| Q3 | Please identify the amount of <i>time</i> that you feel each of the strands merits in subsequent training (please tick) |       |      |          |         |  |  |  |  |  |  |  |  |
|----|---|-------|------|----------|---------|--|--|--|--|--|--|--|--|
|    |   | A lot | Some | A little | No time |  |  |  |  |  |  |  |  |
|    | Athletics   | [ ]   | [ ]  | [ ]      | [ ]     |  |  |  |  |  |  |  |  |
|    | Dance   | [ ]   | [ ]  | [ ]      | [ ]     |  |  |  |  |  |  |  |  |
|    | Gymnastics  | [ ]   | [ ]  | [ ]      | [ ]     |  |  |  |  |  |  |  |  |
|    | Games   | [ ]   | [ ]  | [ ]      | [ ]     |  |  |  |  |  |  |  |  |
|    | Outdoor and Adventure Activities  | [ ]   | [ ]  | [ ]      | [ ]     |  |  |  |  |  |  |  |  |
|    | Aquatics  | []    | [ ]  | []       | []      |  |  |  |  |  |  |  |  |

| Q4 | Outline any aspects related to the <i>content</i> of the Physical Education curriculum (other than the strands outlined in Q2) that you think merit more input in subsequent training |
|----|---|
|    |   |
| Q5 | Please outline any other aspects of your experience of the content of the tutor programme that you might wish to comment on   |
|    |   |
|    |   |
|    |   |
|    |   |

| Q6 | Please indicate your level of agreem delivery of the training programme t  |   |              |    |      |    |                |   |                |
|----|--|---|--------------|----|------|----|----------------|---|----------------|
|    |  |   | ongly<br>ree | Αg | gree | Di | sagre <b>e</b> |   | ongly<br>agree |
|    | Trainers have been engaged in dialogue about the training programme itself – its aims, content and methodologies | ] | ]            | ]  | ]    | ]  | ]              | [ | ]              |
|    | Group discussion is encouraged   | [ | ]            | [  | ]    | [  | ]              | [ | ]              |
|    | The training programme allows for reading and examination of materials   | [ | ]            | [  | ]    | [  | ]              | [ | ]              |
|    | The training programme promotes peer-guided learning   | [ | 1            | [  | ]    | [  | ]              | [ | J              |
|    | The content of the programme is relevant to the contexts of schools  | [ | 1            | [  | ]    | {  | ]              | [ | ]              |
|    | The programme prompts me to innovate and change  | [ | ]            | ]  | ]    | [  | ]              | [ | ]              |
|    | The programme helps me to guide teachers in adapting physical education to their own context                     | [ | ]            | [  | ]    | ]  | ]              | [ | ]              |
|    | Active learning is a key feature of the training programme   | [ | ]            | [  | ]    | [  | ]              | [ | ]              |
|    | The training programme encourages discovery learning   | [ | ]            | [  | ]    | [  | ]              | [ | ]              |
|    | The training programme fosters critical reflection   | [ | J            | [  | ]    | [  | ]              | [ | ]              |
|    | Different learning styles are accommodated throughout the learning experience                                    | ] | ]            | [  | ]    | [  | 1              | [ | 1              |

|    | delivery of the tutor pro | gramme to dat | te | have most enha | nood tiio |
|----|---------------------------|---------------|----|----------------|-----------|
| ]. |                           |               |    |                |           |
| .  |                           |               |    |                |           |
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#### Section 3: Your teaching of Physical Education

| Q8  |   | Α   | lot                      | So | me       | A li | ttle                | No | ne            |
|-----|---|-----|--------------------------|----|----------|------|---------------------|----|---------------|
|     | How has the tutor programme for trainers influenced your planning for Physical Education? (please tick)   | ]   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
| Q9  | As a direct result of the tutor programme for trainers, please indicate your level of confidence to teach each of the strands of the curriculum to your class this year |     | ery<br>onfid <b>e</b> nt | Co | onfident |      | omewhat<br>onfident |    | ot<br>nfident |
|     | Athletics   | [   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
| l   | Dance   | [   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
|     | Gymnastics  | [   | ]                        | [  | }        | [    | ]                   | [  | ]             |
|     | Games   | ]   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
|     | Outdoor and adventure activities  | [   | ]                        | {  | }        | [    | ]                   | [  | ]             |
|     | Aquatics  | [   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
|     | <del></del>   | _   | <del></del>              | _  |          | _    |                     |    |               |
| Q10 | As a direct result of the tutor progra<br>you will incorporate the following to<br>Education during the next year?  | eac | hing me                  |    |          |      |                     |    |               |
|     | Eddedion during the next year.  | V   | Very<br>Frequently       |    | equently | R    | tarely              | ١  | Never         |
|     | Guided discovery  | [   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
|     | Group teaching  | [   | ]                        | [  | ]        | [    | ]                   | [  | ]             |
|     | Integration with other subjects   | [   | ]                        | [  | ]        | [    | ]                   | [  | . }           |
|     | Direct teaching   | [   | ]                        | ]  | ]        | [    | ]                   | [  | ]             |

| Q11 If available, to what extent would you use the follow teaching of Physical Education during 2002-2003? |   |                      |     |            |    |           | orts i | n your |          |  |
|--|---|----------------------|-----|------------|----|-----------|--------|--------|----------|--|
|  |   | Α                    | lot | So         | me | A         | little | No     | ne       |  |
|  | Physical Education journa   | ls [                 | }   | [          | ]  | [         | ]      | [      | ]        |  |
|  | Physical Education books  | [                    | ]   | ]          | ]  | [         | ]      | [      | ]        |  |
|  | Websites  | [                    | ]   | [          | ]  | [         | ]      | [      | ]        |  |
|  | Guidance from a specialist  | [                    | ]   | [          | ]  | [         | ]      | [      | ]        |  |
|  | Weekend/Evening course  | [                    | ]   | [          | ]  | [         | ]      | [      | ]        |  |
|  | Yes [ ] No [ ] If yes, specify in what area_                                    |                      |     |            | -  |           |        |        |          |  |
| Q13  | Please indicate your level of satisfaction overall with the tutor programme for | Very<br>satisfactory | Sa  | tisfactory | U  | nsatisfac | etory  |        | sfactory |  |
|  | Physical Education trainers<br>that you undertook in June<br>and August 02      | [ ]                  | [   | ]          | [  | ]         |        | [ ]    |          |  |

Thank you very much for completing this questionnaire. Your cooperation is much appreciated.

Date:

Signed:

Questionnaire 3 (QST<sub>3</sub>)
Section 1: The content of the tutor programme for trainers

| Q1(a) | Indicate your overall level content presented in Novem                 | of sa |                      |   |            | llo | wing aspect   | ts o | f the                |
|-------|--|-------|----------------------|---|------------|-----|---------------|------|----------------------|
|       |  |       | Very<br>Satisfactory |   | tisfactory | Uı  | nsatisfactory |      | ery<br>isatisfactory |
|       | Special Needs  | {     | ]                    | [ | ]          | [   | ]             | [    | }                    |
|       | NCCA Guidelines for<br>Special Needs                                   | [     | ]                    | ] | ]          | [   | ]             | ]    | ]                    |
|       | Assessment   | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
| Q1(b) | Indicate your overall level of content presented in August             |       |                      |   |            | llo | wing aspec    | ts o | f the                |
|       | Folk Dance (Irish)   | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Folk Dance   | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Creative Dance (2)   | [     | 1                    | [ | 1          | [   | ]             | ]    | 1                    |
| ,     | Aquatics (2)   | ĺ     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Gymnastics (2)   | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Physical Education<br>Equipment  | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Games (2)  | [     | 1                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Outdoor and adventure activities (2) (co-operative challenges)         | [     | ]                    | [ | ]          | ]   | ]             | [    | ]                    |
|       | Outdoor and adventure activities (3) (adventure trails and challenges) | [     | 1                    | [ | ]          | [   | ]             | [    | ]                    |
|       | Assessment (2)   | [     | ]                    | [ | ]          | [   | ]             | [    | J                    |
|       | Sport Initiative Panel   | [     | ]                    | [ | ]          | [   | ]             | [    | ]                    |

| Q2 | Thinking about the content covered date identify what you would like to added in the next phase (please tick) |                |                                       |                |  |   |                                    |    |                             |
|----|---|----------------|---------------------------------------|----------------|--|---|------------------------------------|----|-----------------------------|
|    |   | co<br>ne<br>be | riginal<br>ntent<br>eds to<br>visited | ne<br>be<br>de | Original content needs to be developed further |   | ew<br>Intent<br>reds to be<br>Ided | wo | o further<br>ork<br>cessary |
|    | Athletics   | ]              | ]                                     | [              | ]  | [ | )                                  | [  | ]                           |
|    | Dance   | [              | ]                                     | [              | }  | [ | ]                                  | [  | ]                           |
|    | Gymnastics  | [              | ]                                     | {              | }  | { | }                                  | [  | ]                           |
|    | Games   | [              | ]                                     | [              | ]  | [ | ]                                  | [  | ]                           |
|    | Outdoor and Adventure Activities  | [              | ]                                     | [              | ]  | [ | 1                                  | [  | ]                           |
|    | Aquatics  | [              | ]                                     | [              | ]  | [ | 1                                  | [  | ]                           |
| L  |   |                |                                       |                |  |   |                                    |    |                             |
|    |   |                |                                       |                |  |   |                                    |    |                             |

| Q3 | Please identify the amount of <i>time</i> to subsequent training (please tick) | hat you fee | el each of t | he strands n | nerits in |
|----|--|-------------|--------------|--------------|-----------|
|    |  | A lot       | Some         | A little     | No time   |
|    | Athletics  | [ ]         | [ ]          | [ ]          | [ ]       |
|    | Dance  | [ ]         | [ ]          | [ ]          | [ ]       |
|    | Gymnastics   | [ ]         | [ ]          | [ ]          | [ ]       |
|    | Games  | [ ]         | [ ]          | [ ]          | [ ]       |
|    | Outdoor and Adventure Activities   | [ ]         | [ ]          | [ ]          | [ ]       |
|    | Aquatics   | [ ]         | []           | [ ]          | [ ]       |

#### Section 2: The process of training

| Q6 | Please indicate your level of agreem delivery of the training programme t  |   |              |    |                 | _  |        |   | ;              |
|----|--|---|--------------|----|-----------------|----|--------|---|----------------|
|    |  |   | ongly<br>ree | Ag | <del>д</del> ее | Di | sagree |   | ongly<br>agree |
|    | Trainers have been engaged in dialogue about the training programme itself – its aims, content and methodologies | [ | ]            | [  | ]               | [  | ]      | [ | ]              |
| l  | Group discussion is encouraged   | [ | ]            | [  | ]               | [  | ]      | [ | ]              |
|    | The training programme allows for reading and examination of materials   | [ | ]            | [  | ]               | [  | ]      | ] | ]              |
|    | The training programme promotes peer-guided learning   | [ | ]            | [  | ]               | ]  | J      | [ | ]              |
|    | The content of the programme is relevant to the contexts of schools  | [ | ]            | [  | J               | [  | ]      | [ | ]              |
|    | The programme prompts me to innovate and change  | ] | ]            | [  | ]               | [  | ]      | [ | ]              |
|    | The programme helps me to guide teachers in adapting physical education to their own context                     | ] | ]            | [  | ]               | [  | ]      | [ | ]              |
|    | Active learning is a key feature of the training programme   | [ | ]            | [  | ]               | [  | ]      | [ | ]              |
|    | The training programme encourages discovery learning   | [ | ]            | ]  | ]               | [  | ]      | ] | ]              |
|    | The training programme fosters critical reflection   | [ | ]            | [  | ]               | [  | ]      | [ | ]              |
|    | Different learning styles are accommodated throughout the learning experience                                    | [ | ]            | [  | ]               | [  | ]      | ] | ]              |

| Q7   | Please comment on the aspects (if any) that you feel have most enhanced the delivery of the last phase of the tutor programme (comment on November 2002 and August 2003 separately) |
|------|---|
|      | (a) November 2002   |
|      |   |
|      |   |
| <br> |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      | (b) August 2003   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |
|      |   |

#### Section 3: Your teaching of Physical Education

| Q8  |   | A lot              | Some       | A little              | None             |  |
|-----|---|--------------------|------------|-----------------------|------------------|--|
|     | How has the tutor programme for trainers influenced your planning for Physical Education for the academic year 2003/2004 (please tick)                                  | [ ]                | [ ]        | [ ]                   | [ ]              |  |
| Q9  | As a direct result of the tutor programme for trainers, please indicate your level of confidence to teach each of the strands of the curriculum to your class this year | Very<br>Confident  | Confident  | Somewhat<br>confident | Not<br>confident |  |
|     | Athletics   | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     | Dance   | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     | Gymnastics  | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     | Games   | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     | Outdoor and adventure activities  | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     | Aquatics  | [ ]                | [ ]        | [ ]                   | [ ]              |  |
|     |   |                    |            |                       |                  |  |
| Q10 | As a direct result of the tutor prograyou will incorporate the following  |                    |            |                       |                  |  |
|     | Education during the next year?   | Very<br>Frequently | Frequently | / Rarely              | Never            |  |
|     | Guided discovery  | [ ]                | [ ]        | [ ]                   | [ ]              |  |
| ı   | Group teaching  | [ ]                | [ ]        | [ ]                   | [ ]              |  |

[]

[ ]

[ ]

[ ]

[ ]

[ ]

Integration with other subjects [ ]

Direct teaching

| Q11 | If available, to what extent would teaching of Physical Education du |               |   | supports in | your |
|-----|--|---------------|---|-------------|------|
|     |  | A lot         | Some                                    | A little    | None |
|     | Physical Education journals  | [ ]           | [ ]                                     | [ ]         | [ ]  |
|     | Physical Education books   | [ ]           | [ ]                                     | [ ]         | []   |
|     | Websites   | [ ]           | [ ]                                     | [ ]         | [ ]  |
|     | Guidance from a specialist   | [ ]           | [ ]                                     | [ ]         | [ ]  |
|     | Weekend/Evening course   | [ ]           | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] | [ ]         |      |
|     | Yes [ ] No [ ] If yes, specify in what area                          |               |   |             |      |
| Q13 |  | 3 as a direct |   |             |      |

| Q14 | If your answer to Q13 was Yes, please indicate your level of satisfaction with the new content that you introduced (please fill in a short description of the content in the left-hand column and tick the boxes) |                      |   |              |                           |                |             |                      |                   |
|-----|---|----------------------|---|--------------|---------------------------|----------------|-------------|----------------------|-------------------|
|     |   | Very<br>Satisfactory |   | Satisfactory |                           | Unsatisfactory |             | Very<br>Unsatisfacto |                   |
|     |   | [                    | ] | [            | ]                         | [              | ]           | {                    | ]                 |
|     |   | [                    | ] | [            | ]                         | [              | ]           | [                    | ]                 |
|     |   | [                    | ] | [            | ]                         | [              | ]           | [                    | ]                 |
|     |   |                      |   |              |                           |                |             |                      |                   |
| Q15 | As a direct result of the tutor methods in Physical Education  Yes [ ] No [ ]  If yes, please explain   |                      |   |              | mm <b>e di</b> d <u>;</u> | you            | modify yo   | ur i                 | tea <b>c</b> hing |
|     | it yes, please explain  |                      |   |              | _                         |                |             | _                    |                   |
|     |   |                      |   |              |                           |                |             |                      |                   |
|     |   |                      |   |              |                           |                | <del></del> |                      |                   |
|     |   |                      |   |              |                           |                |             |                      |                   |
|     |   |                      |   |              |                           |                |             |                      |                   |
|     | <del></del>   |                      |   |              |                           |                |             | -                    |                   |
|     |   |                      |   |              |                           |                |             |                      |                   |

| Q16 | Please indicate your level of satisfaction overall with the tutor programme for Physical Education trainers | Very<br>satisfactory | Satisfactory | Unsatisfactory | Very<br>Unsatisfactory |
|-----|---|----------------------|--------------|----------------|------------------------|
|     | that you undertook in<br>November 2002 and<br>August 2003   | [ ]                  | [ ]          | [ ]            | [ ]                    |

Confident Somewhat Not Very Q17 How confident do you feel about Confident confident confident the initial presentation you will make on the Physical Education [ ] [ ] [ ] [ ] Curriculum? Somewhat Very Confident Not Q18 How confident do you feel about Confident confident confident presenting on each of the strands of the Physical Education Curriculum? [ ] [ ] Athletics Dance [ ] ] 1 1 Gymnastics

[ ]

[ ]

[ ]

[ ]

[ ]

[ ]

[ ]

[ ]

[ ]

Section 4: Your work as a Physical Education trainer

Games

Aquatics

Outdoor and adventure activities

| Q19 | Indicate which aspects of presentation and facilitation skills you consider most important to your needs as a trainer for Physical Education | Very<br>important | lmportant | Unimportant |
|-----|--|-------------------|-----------|-------------|
|     | Presentation skills  | [ ]               | [ ]       | [ ]         |
|     | (use of voice, notes etc.) Use of technology and materials (overheads, data projector etc.)  | [ ]               | [ ]       | ( )         |
|     | Asking and answering questions   | [ ]               | [ ]       | [ ]         |
|     | Use of story/personal experiences  | [ ]               | [ ]       | [ ]         |
|     | Promoting participation  | [ ]               | [ ]       | [ ]         |
|     | Managing time  | [ ]               | [ ]       | [ ]         |
|     | Managing conflict  | [ ]               | [ ]       | [ ]         |
|     | Other (please list)  |                   |           |             |
|     |  | [ ]               | [ ]       | [ ]         |
|     |  | [ ]               | [ ]       | [ ]         |
|     |  | [ ]               | [ ]       | [ ]         |
|     |  |                   |           |             |

| Q20 | What other aspects might be addressed that would enhance your delivery of inservice? |
|-----|--|
|     |  |
|     |  |
|     |  |
|     |  |
|     |  |
|     |  |
|     |  |

Signed: Date:

Thank you very much for completing this questionnaire. Your cooperation is much appreciated.

# $\label{eq:Questionnaire} Question naire~4~(QST_4) \\ Section~1:~Biographical~Information$

| Q1         | Are you  | Female<br>Male   |        |                |               | [           | ] |
|------------|--|--|--------|----------------|---------------|-------------|---|
| Q2         | Are you  | 25 years or under<br>26-30 years<br>31-40 years<br>41-50 years<br>51 years or over |        |                |               | [           | ] |
| Q3         | 0-4 <u>5</u><br>5-10<br>11-20                        | ve you been teaching?<br>years<br>years<br>years<br>ars or more                    |        |                |               | [<br>[<br>[ | ] |
| Q4         | School type  |  | Female | Male           | Co-ed         |             |   |
|            |  | Junior<br>Senior<br>Junior/Senior  | [ ]    | [ ]<br>[ ]     | [ ]           |             |   |
| Q5         | School locati  | on<br>Urban<br>Rural   |        |                |               | <b>[</b>    | } |
| Q6         |  | of teachers in your sch  |        | source, Specia | l Class teach | er)         |   |
| <b>Q</b> 7 | Your teaching  | g qualifications   |        |                |               |             |   |
|            | N.T.<br>B.Ed.<br>M.Ed.<br>Grad.Dip.<br>Other (please |  |        |                |               |             | ] |

#### Section 2: Your Background in Physical Education

| Have you completed a course in <u>Physical Education</u> since the completion of your initial teaching qualification? (include summer/evening/weekend course, certificate, diploma, degree) |                         |               |
|---|-------------------------|---------------|
| If yes, specify course and year   | Yes<br>No               |               |
|   |                         | <u>-</u><br>- |
| Have you a formal coaching qualification in a particular s (e.g. Rugby Level 1, Basketball Foundation Level, GAA Foundation   |                         |               |
| If yes, specify qualification and year  | Yes<br>No               |               |
|   |                         | -<br>-<br>-   |
| Have you participated in competitive sport?   |                         |               |
| If yes, specify what sport and to what level (e.g. school, colle inter-county, inter-provincial, international)   | Yes<br>No<br>ege, club, |               |

| QII | What strand of the Physical Education curriculum are you $\underline{\mathbf{n}}$                    | <u>iost</u> |   |       |
|-----|--|-------------|---|-------|
|     | interested in teaching? (tick one strand)  |             |   |       |
|     | Athletics Dance Gymnastics Games Outdoor and adventure activities Aquatics                           |             | ] | ] ] ] |
| Q12 | Do you have a Special Duties post in your school that include responsibility for Physical Education? | des         |   |       |
|     |  | Yes         | Ĺ | 1     |
|     |  | No          | Ì | j     |
| Q13 | Have you supported your colleagues in your school in teaching Physical Education?                    |             |   |       |
|     |  | Yes         | [ | ]     |
|     |  | No          | [ | ]     |
|     | If yes, indicate how   |             |   |       |
|     |  |             |   |       |
|     |  |             |   |       |
|     |  | <del></del> |   |       |
|     |  |             |   |       |
|     |  |             |   |       |

### Section 3: Your experience with Physical Education

| Q14 | Rank order the factors that influence your planning for teaching Physical Education. (A rank of 1 should be given to the most important influence. Do not rank any factor that is not an influence) |                  |                  |
|-----|---|------------------|------------------|
|     | Your school plan The Physical Education Curriculum Books on Physical Education Physical Education Journals Courses attended Your own experience of teaching Physical Education                      | [ [ [ [          | ]<br>]<br>]<br>] |
| Q15 | How many times per week do you teach Physical Education?  |                  |                  |
|     | Once or twice per month Once per week Twice per week More than twice per week Other   | [<br>[<br>[<br>[ | ]                |
| Q16 | How much time per week do you devote to the teaching of Physical Education?   |                  |                  |
|     | Less than 30 minutes 31-45 minutes 46-60 minutes More than 60 minutes   | ]                | ]<br>]<br>]      |
| Q17 | Indicate how frequently you teach each of the strands of the Physical Education Curriculum over the course of the year    Very Frequently   Frequently   Rarely   Never                             | luca             | ation            |

| Q18 | Indicate the frequency with which you incorporate the following teaching methods |
|-----|--|
|     | into your Physical Education lessons   |

|                                 | Very Frequently | Frequently | Rarely | Never |
|---------------------------------|-----------------|------------|--------|-------|
| Guided discovery                | []              | [ ]        | [ ]    | [ ]   |
| Group teaching                  | [ ]             | [ ]        | []     | [ ]   |
| Integration with other subjects | [ ]             | []         | []     | []    |
| Direct teaching                 |                 | [ ]        | ſĵ     | 11    |

### Section 4: The Physical Education profile in your school

| Q19 | Has your school developed a school plan?   | Yes No In progress Review of existing plan             | [ ]                      |
|-----|--|--|--------------------------|
| Q20 | Has your school developed a plan for Physi   | cal Education?   |                          |
|     |  | Yes<br>No<br>In progress<br>Review<br>of existing plan |                          |
| Q21 | Indicate the facilities to which your school Physical Education and your view of how s (rank in order 1= very satisfactory, 2= satisfactory, | atisfactory the facilities a                           | are                      |
|     | unsatisfactory)  | Fortillator  | Level of                 |
|     | unsatisfactory)  | Facilities<br>present                                  | Level of satisfacion     |
|     | Indoor area Outdoor hard surface Outdoor grass area Aquatics facility Other (please explain)   |  | · <b>-</b> · · · · · · · |

| Q23 | Physical Education  Less than 30 minutes  31-45 minutes  46-60 minutes  More than 60 minutes   | youi  | rschoo | or spen | d teach             | шу   | [ [ | ]     |
|-----|--|-------|--------|---------|---------------------|------|-----|-------|
| Q24 | Indicate the level of emphasis placed by the following aspects of the teaching of Physic       |       |        |         | r schoo             | l on | the |       |
|     |  | A     | Lot    | Som     | e Li                | ttle |     |       |
|     | Skill development Social development Development of knowledge                                  | [     | ]      | [ ]     | [                   | ]    |     |       |
|     | and understanding of Physical Education Promotion of a healthy lifestyle                       | [     | ]      | [ ]     | ]                   | ]    |     |       |
| Q25 | Do you feel that all strands of the Physical an equal allocation of time over the school       |       |        | curric  | ulum g<br>Yes<br>No | et   | [   | ]     |
|     | If no, rank the strands according to the amoin your school( $l=most\ time$ , $6=least\ time$ ) | ount  | of tim | ie spen |                     | ch   | L   | J     |
|     | Athletics Dance Gymnastics Games Outdoor and adventure activation                              | vitie | es     |         |                     |      |     | ] ] ] |
|     |  |       |        |         |                     |      |     |       |

| Q26 | Does your school offer an extra-curricular programme of phy activity?                             | /sical    |   |        |
|-----|---|-----------|---|--------|
|     | uchivity:   | Yes<br>No | ] | ]      |
|     | If yes, please state what is offered as part of the programme (many as appropriate)               | (tick as  |   |        |
|     | Athletics Dance Gymnastics Games Outdoor and adventure activities Aquatics Other (please explain) |           |   | ]      |
| Q27 | Does your school keep records of children's attainment in Ph                                      | ıysical   |   |        |
|     |   | res<br>No | [ | ]      |
| Q28 | Does your school keep a record of the content covered in Phy<br>Education by each class?          | ysical    |   |        |
|     | ,   | res<br>No | [ | )<br>] |
|     | If yes, is this record made available to the class teacher at the beginning of the school year?   | ;         |   |        |
|     | ,   | ∕es<br>√o | [ | }<br>] |
|     | - 1 -   |           |   |        |

### Section 5: Your expectations for the in-service programme of Physical Education

| Please tick each statement that represents one of your expectations of in-service of Physical Education. (You do not need to tick all statements).  |   |
|---|---|
| I will gain an understanding of Physical Education I will gain an understanding of the Physical Education curriculum I will learn how to teach practical activities to implement aspects of Physical Education I will learn how to adapt programmes of Physical Education to meet individual needs I will be exposed to a variety of teaching methodologies I will receive guidance on planning my Physical Education programme |   |
| I will change how I teach Physical Education I will learn how to adapt programmes of Physical Education to cater for children with special needs  | []  |
| For each statement of expectation in Q 29, rank order the <i>three</i> most important outcomes for you. Use the italicised letters to identify the statement  [ ] Most important [ ] Second most important [ ] Third most important   |   |
|   | I will gain an understanding of Physical Education I will gain an understanding of the Physical Education curriculum I will learn how to teach practical activities to implement aspects of Physical Education I will learn how to adapt programmes of Physical Education to meet individual needs I will be exposed to a variety of teaching methodologies I will receive guidance on planning my Physical Education programme I will change how I teach Physical Education I will learn how to adapt programmes of Physical Education to cater for children with special needs  For each statement of expectation in Q 29, rank order the three most important outcomes for you. Use the italicised letters to identify the statement  [ ] Most important [ ] Second most important |

| Q31              | Day 1 of the In-service Programme will focus on an introduction to the curriculum and an introduction to three strands: Games, Aquatics and Outdoor and adventure activities |
|------------------|--|
|                  | Outline the key issues that you would like to see treated under each of the headings below   |
|                  | Introduction to the curriculum   |
|                  |  |
|                  | Games  |
|                  |  |
|                  | Aquatics   |
|                  |  |
|                  | Outdoor and adventure activities   |
|                  |  |
|                  |  |
| Siame de         | Data   |
| Signed:          | Date:  |
| Thank y apprecia | ou very much for completing this questionnaire. Your cooperation is much ated.   |

### Questionnaire 5 (QST<sub>5</sub>)

Section 1: The content of the tutor programme for trainers during 2004

Q1(a) Indicate your overall level of satisfaction with the following components of the content presented in March 2004 (please tick)

|  |   | ery<br>tisfactory | Sa | tisfactory | Uı | nsatisfactory |   | ery<br>nsatisfactory |
|--|---|-------------------|----|------------|----|---------------|---|----------------------|
| Games: theory and teaching approaches    | [ | ]                 | [  | ]          | [  | 1             | [ | ]                    |
| Games: using a station teaching approach | ] | ]                 | [  | ]          | [  | ]             | [ | ]                    |
| Games: Creating games                    | [ | ]                 | [  | ]          | (  | ]             | [ | ]                    |
| Games: PSSI experience                   | [ | ]                 | [  | ]          | [  | ]             | [ | ]                    |
| Children and Exercise (1)                | [ | ]                 | [  | ]          | [  | ]             | [ | 1                    |
| Children and Exercise (2)                | [ | ]                 | [  | ]          | [  | ]             | [ | }                    |
| Planning for games                       | [ | ]                 | [  | ]          | ]  | ]             | [ | ]                    |
| Assessment                               | ſ | 1                 | ſ  | 1          | ſ  | 1             | ſ | 1                    |

Q1(b) Indicate your overall level of satisfaction with the following components of the content presented in June 2004 (please tick)

| Outdoor and adventure   |   | Very<br>Satisfactory |   | Satisfactory |   | Unsatisfactory |   | Very<br>Unsatisfactory |  |  |
|---|---|----------------------|---|--------------|---|----------------|---|------------------------|--|--|
| activities: practical<br>activities (i.e. land-based,<br>water-based) | [ | ]                    | [ | ]            | [ | ]              | [ | }                      |  |  |
| Outdoor and adventure activities: presentation on the PSSI experience | [ | ]                    | [ | ]            | [ | ]              | [ | ]                      |  |  |
| Outdoor and adventure activities: presentation on camping             | Į | ]                    | [ | ]            | [ | ]              | [ | ]                      |  |  |
| Planning for Outdoor and adventure activities: group work             | [ | }                    | [ | ]            | [ | ]              | [ | ]                      |  |  |
| Games: organisation and management, key issues                        | 1 | ]                    | [ | 1            | [ | ]              | [ | ]                      |  |  |
| Planning for Games: group work  | [ | ]                    | [ | ]            | [ | J              | [ | J                      |  |  |
| Aquatics: Presentation  | [ | ]                    | [ | ]            | [ | ]              | { | ]                      |  |  |
| Planning for Aquatics: group work                                     | [ | ]                    | [ | ]            | [ | ]              | [ | ]                      |  |  |
| Aquatics (practical pool-<br>based session)                           | ] | ]                    | [ | ]            | [ | ]              | ] | J                      |  |  |

| Q1(c) | Indicate your overall level of satisfaction with the following components of the |
|-------|--|
|       | content presented in September 2004 (please tick)                                |

|   |   | ery<br>tisfactory | Sa | tisfactory | Ur | nsatisfactory | Ve<br>Un | ery<br>asatisfactory |
|---|---|-------------------|----|------------|----|---------------|----------|----------------------|
| Planning for outdoor and adventure activities: group work | [ | ]                 | [  | ]          | [  | ]             | [        | ]                    |
| Planning for games: group work                            | Ţ | ]                 | [  | ]          | [  | ]             | [        | ]                    |
| Planning for aquatics: group work                         | [ | ]                 | [  | ]          | [  | ]             | [        | ]                    |
| Presentation Skills                                       | [ | 1                 | [  | ]          | [  | ]             | [        | ]                    |
| First Aid   | [ | ]                 | [  | ]          | [  | ]             | [        | ]                    |
| Presentation: Busy Breaks and Action for Life             | [ | ]                 | [  | ]          | ]  | ]             | [        | ]                    |
| 'Critical Friends' Day                                    | ] | ]                 | [  | ]          | ]  | ]             | [        | ]                    |

Q1(d) Indicate your overall level of satisfaction with the following components of the content presented in October 2004 (please tick)

|   | Very<br>Satisfactory |   | Şa | tisfactory | Ur | nsatisfactory | Very<br>Unsatisfactory |   |  |
|---|----------------------|---|----|------------|----|---------------|------------------------|---|--|
| Presentation: Manual<br>Lifting                       | ]                    | ] | [  | ]          | [  | ]             | [                      | ] |  |
| Presentation: Aquatics                                | ]                    | ] | [  | ]          | [  | ]             | [                      | ] |  |
| Review of In-service presentation to date: Group work | [                    | ] | Ţ  | ]          | [  | ]             | [                      | ] |  |

Q1(e) Indicate your overall level of satisfaction with the following components of the content presented in **December 2004** (please tick)

|   |   | ery<br>tisfactory | Satisfactory |   | Unsatisfactory |   |   | ery<br>Isatisfactory |
|---|---|-------------------|--------------|---|----------------|---|---|----------------------|
| Special Education Needs (NCCA)  | [ | ]                 | [            | ] | ]              | ] | [ | ]                    |
| Special Education Needs:<br>Activities and case study                       | [ | ]                 | [            | ] | ]              | ] | ] | ]                    |
| Physical Education at post-<br>primary and primary levels:<br>common issues | [ | 3                 | [            | ] | [              | 3 | [ | ]                    |
| Special Education for children with physical disabilities                   | [ | ]                 | [            | ] | [              | ] | [ | ]                    |
| Review of in-service presentation to date                                   | ĺ | ]                 | [            | ] | [              | ] | ( | ]                    |

| Q1(f) | Please comment on any other aspects of your experience of the overall tutor programme in 2004   |
|-------|---|
|       | (a) Presentations related to strands  |
|       |   |
|       |   |
|       | (b) Sessions focussed on planning for delivery  |
|       |   |
|       |   |
|       | (c) Sessions focussed on facilitation skills, first aid etc.  |
|       |   |
|       |   |
|       |   |
| 02    |   |
|       | Please indicate your overall level of satisfaction with the tutor programme for<br>Physical Education trainers that you undertook in 2004 |
|       | Very Satisfactory Satisfactory Unsatisfactory  [ ] [ ] [ ]  |

### Section 2: The process of training

Q3 Please indicate your level of agreement with the following statements about *your* engagement with the tutor programme that you have undertaken (please tick)

|   | Strongly Agree<br>Agree |   | ree | Dis | sagree |   | ongly<br>sagree |   |
|---|-------------------------|---|-----|-----|--------|---|-----------------|---|
| Trainers were engaged in dialogue about the training programme itself – its aims, content and methodologies | [                       | ] | [   | ]   | [      | ] | [               | ] |
| Group discussion was encouraged   | {                       | ] | [   | ]   | [      | ] | [               | ] |
| The training programme allowed for reading and examination of materials                                     | [                       | J | [   | ]   | [      | ] | [               | ] |
| The training programme promoted peer-guided learning  | ]                       | ] | [   | ]   | [      | ] | [               | ] |
| The content of the programme is relevant to the contexts of schools   | [                       | ] | ]   | ]   | [      | ] | [               | ] |
| The programme prompted me to innovate and change  | [                       | ] | [   | }   | [      | ] | [               | ] |
| The programme helped me to guide teachers in adapting physical education to their own context               | ]                       | ] | [   | ]   | {      | ] | [               | ] |
| Active learning was a key feature of the training programme   | [                       | ] | [   | ]   | [      | ] | [               | ] |
| The training programme encouraged discovery learning  | ]                       | ] | [   | ]   | [      | 1 | [               | ] |
| The training programme fostered critical reflection   | [                       | ] | [   | ]   | [      | ] | [               | ] |
| Different learning styles were accommodated throughout the learning experience                              | [                       | ] | [   | ]   | [      | 1 | [               | ] |

## Section 3: Your facilitation of Physical Education to teachers

| Q4 | Indicate your overall le preparing you for facili    |                  |                  |                          |                  |
|----|--|------------------|------------------|--------------------------|------------------|
|    | Very Satisfactory                                    | Satisfactory [ ] | Unsatisfactory   | Very Unsatisfactor       | у                |
| Q5 | Please indicate your ove<br>of content planned for p |                  |                  |                          | pecific elements |
|    |  | Very<br>Confi    | Confider<br>dent | nt Somewhat<br>Confident | Not Confident    |
|    | Introduction to the curriculum                       | [ ]              | [ ]              | [ ]                      | [ ]              |
|    | Games  | [ ]              | [ ]              | [ ]                      | [ ]              |
|    | Outdoor and adventure activities                     | [ ]              | [ ]              | [ ]                      | [ ]              |
|    | Aquatics   | [ ]              | [ ]              | [ ]                      | [ ]              |

Q6 Read each statement below. Comment on the extent to which you think that teachers are likely to modify their practice after participation in the in-service programme of Physical Education

|   |   | ery<br>ely | Li | kely | Ur | nlikely | Ur | sure |
|---|---|------------|----|------|----|---------|----|------|
| Teachers' attitudes to teaching<br>Physical Education will be more<br>positive  | [ | }          | [  | ]    | [  | ]       | ſ  | ]    |
| Teachers will teach Physical Education more frequently  | [ | ]          | [  | ]    | [  | ]       | [  | ]    |
| Teachers will be prompted to reflect more on their teaching of Physical Education   | ] | ]          | [  | ]    | [  | ]       | [  | ]    |
| Teachers will plan their teaching of Physical Education more carefully  | [ | ]          | [  | ]    | [  | ]       | [  | ]    |
| Teachers will teach elements of<br>strands of the Physical Education<br>programme that they have not<br>taught previously | [ | ]          | [  | ]    | [  | ]       | {  | ]    |
| Teachers will employ a greater variety of teaching methodologies in their teaching of Physical Education                  | [ | ]          | [  | ]    | [  | ]       | [  | ]    |
| Teachers will integrate Physical Education more frequently with other subjects  | [ | ]          | ]  | ]    | [  | 1       | [  | ]    |
| Teachers will attempt to differentiate within the Physical Education lesson   | [ | ]          | [  | ]    | [  | ]       | [  | ]    |

Signed: Date:

Thank you very much for completing this questionnaire. Your cooperation is much appreciated.

# $\label{eq:QST6} Question naire \ 6 \ (QST_6)$ Section 1: Day 1 of the In-service programme of Physical Education

| Q1         | of Physical Education. Please indicate the extent to which the states  |   |     |     |    |      |   |        |     | er | vice |
|------------|--|---|-----|-----|----|------|---|--------|-----|----|------|
|            | represents a learning outcome for you.   | A | lot | Soi | me | what | A | little | Not | at | all  |
| (a)        | I enhanced my understanding of Physical Education  | [ | ]   |     | ]  | ]    | [ | ]      | [   |    | ]    |
| (b)        | I enhanced my understanding of the Physical Education curriculum   | [ | ]   |     | ]  | J    | [ | ]      | ]   |    | ]    |
| (c)        | I learned how to teach practical activities to implement the <i>games</i> strand of the Physical Education curriculum                            | [ | ]   |     | ]  | ]    | Į | ]      | [   |    | ]    |
| (d)        | I learned how to teach practical activities to implement the <i>aquatics</i> strand of the Physical Education curriculum                         | [ | ]   |     | ]  | 1    | [ | ]      | [   | -  | ]    |
| (e)        | I learned how to teach practical activities to implement the <i>outdoor and adventure</i> activities strand of the Physical Education curriculum | [ | ]   |     | [  | ]    | ] | ]      | ]   |    | ]    |
| (f)        | I learned how to adapt programmes of<br>Physical Education to meet individual<br>needs   | [ | ]   |     | ]  | 1    | [ | ]      | [   | -  | )    |
| (g)        | I was exposed to a variety of teaching methodologies   | [ | ]   |     | [  | ]    | [ | ]      | ]   |    | ]    |
| <b>(b)</b> | I received guidance on planning my<br>Physical Education programme   | [ | ]   |     | [  | ]    | [ | ]      | [   | -  | ]    |
| (i)        | I learned how to adapt programmes of<br>Physical Education to cater for children<br>with special needs   | [ | ]   |     | [  | ]    | Į | ]      | [   |    | ]    |
| Q2         | For each statement of outcomes in Q1, rand important outcomes for you. Use the italici statement  [ ] Most important                             |   |     |     |    |      |   |        |     |    |      |
|            | [ ] Second most important  |   |     |     |    |      |   |        |     |    |      |
|            | [ ] Third most important   |   |     |     |    |      |   |        |     |    |      |

|     |   | Yes | No            | Un      |
|-----|---|-----|---------------|---------|
| (a) | teach Physical Education more   |     |               |         |
|     | frequently  | [ ] | [ ]           | [       |
| (b) | reflect more on your teaching of  |     |               |         |
|     | Physical Education  | [ ] | []            | [       |
| (c) | plan your teaching of Physical  |     |               |         |
|     | Education more carefully  | [ ] | [ ]           | ]       |
| (d) | teach elements of strands that you hav  | e   |               |         |
|     | not taught previously   | [ ] | []            | [       |
| (e) | employ a greater variety of teaching  |     |               |         |
|     | methods   | [ ] | [ ]           | [       |
| (f) | integrate Physical Education more   |     |               |         |
|     | frequently with other subjects  | [ ] | [ ]           | [       |
| (g) | attempt to differentiate within the   |     |               |         |
|     | Physical Education lesson   | []  | []            | [       |
|     |   |     |               |         |
| Q4  | Please comment on any aspects of Day 1 of that you think have not been covered in Q |     | vice of Physi | cal Edu |
|     |   |     |               |         |
|     |   |     |               |         |

### Section 2: Day 2 of the In-service programme of Physical Education

|   | Please identify any factors that might enhance facilitation of Day 2 of the Inservice programme of Physical Education when athletics, dance and gymnast |  |                         |  |  |  |  |  |  |  |  |
|---|---|--|-------------------------|--|--|--|--|--|--|--|--|
|   | will be treated   | of the state of th | ionos, danos ana gymnas |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
|   |   |  |                         |  |  |  |  |  |  |  |  |
| d | d:  | Date:  |                         |  |  |  |  |  |  |  |  |

Thank you very much for completing this questionnaire. Your cooperation is much appreciated.

## Appendix C

## **Cover Letters for Questionnaires**

## Cover Letter for Questionnaire QST<sub>1</sub>

St. Patrick's College, Drumcondra, Dublin 9.

June 18th 2002

Dear

I am conducting a study of the programme of training for trainers in Physical Education. This study is being conducted as part of the requirement for the award of a Doctorate in Education that I am undertaking in St. Patrick's College/Dublin City University.

An initial questionnaire is being sent to teachers who have been selected as Physical Education trainers with the Primary Curriculum Support Programme. I would be very much indebted to you if you would find the time to answer it as fully as possible. I am aware that this is a very busy time for you so the questionnaire is designed to keep writing to a minimum.

The information you provide will be treated with the utmost confidentiality. I would be most grateful if you would return the completed questionnaire to the address on the envelope provided before June 24<sup>th</sup>.

I look forward to hearing from you.

Yours sincerely,

Frances Murphy

# Cover Letter for Questionnaire QST<sub>2</sub>

| St. Patrick's College, Drumcondra, Dublin 9.  |
|---|
| October 3 <sup>rd</sup> , 2002  |
| Dear,   |
| Thank you for providing me with such valuable information in the first questionnaire that you returned to me as you began the training programme for Physical Education trainers.   |
| In the second questionnaire I hope to get some feedback on your experience of the tutor/trainer programme to date. To help focus the questionnaire I have divided it into three sections. Section 1 emphasises the content of the programme, Section 2 focuses on the process of learning that occurs as you engage with the content and Section 3 focuses on the teaching of Physical Education that you are currently undertaking. I have enclosed a summary of the timetable of the June and August training weeks to facilitate your completion of the questionnaire. |
| I would really appreciate if you would find the time to complete the enclosed questionnaire as fully as possible and return it to the address on the envelope provided if possible by November 17 <sup>th</sup> , 2002. The information you provide will be treated with the utmost confidentiality.  |
| I look forward to meeting you during the review days in Athlone. In the meantime, best wishes with your teaching.   |
| Yours sincerely,  |
| Frances Murphy.   |
|   |

# Cover Letter for Questionnaire QST<sub>3</sub>

| St. Patrick's College, Drumcondra, Dublin 9.  |
|---|
| October 10th, 2003  |
|   |
| Dear,   |
| Thank you for providing me with more information in the second questionnaire that you returned to me almost a year ago.   |
| In the third questionnaire I hope to get feedback on your experience of the tutor/trainer programme to date, in particular the phases delivered in November 2002 and August 2003, and its effectiveness in preparing you for delivering the in-service programme. This questionnaire is divided into four sections. Section 1 emphasises the content of the latest phase of the programme and Section 2 focuses again on the process of learning that occurs as you continue to engage with the content. Section 3 focuses on the teaching of Physical Education that you undertook during the last academic year and that you are currently undertaking while Section 4 is concerned with a new aspect of my investigation, your work as a trainer. I have enclosed a summary of the timetable of the training weeks (November 2002 and August 2003) to facilitate your completion of the questionnaire. |
| I would really appreciate if you would find the time to complete the enclosed questionnaire as fully as possible and return it to the address on the envelope provided if possible by November 7 <sup>th</sup> , 2003. The information you provide will be treated with the utmost confidentiality.   |
| I look forward to meeting you during the next phase of training. In the meantime, I hope your teaching goes well for you.   |
| Yours sincerely,  |
| Frances Murphy.   |

## Cover Letter for Questionnaire OST<sub>5</sub>

| St. Patrick's College,     |
|----------------------------|
| Drumcondra,                |
| Dublin 9.                  |
|                            |
| January 7 <sup>th</sup> 05 |

•

Dear ,

I wish to thank you for your co-operation to date with my research on the in-service of Physical Education. The data that you have provided have been very valuable. As I approach the final phase of my data collection for my research I enclose a final questionnaire. The purpose of the questionnaire is to gather information on the last phase of training and on your views about the delivery of the in-service programme to date. I would appreciate your co-operation in returning the questionnaire. I have enclosed a stamped envelope to facilitate the return of the questionnaire. The information provided will be treated in confidence in any reporting of the work.

Yours sincerely,

Frances Murphy.

## Cover Letter for Questionnaire OST4

St. Patrick's College, Drumcondra, Dublin 9. 12/12/2004

#### A chara,

I am lecturing in Physical Education in St. Patrick's College, Drumcondra. As part of my work, I am undertaking research work leading to a Doctorate in Education involving the Department of Education Trainers for Physical Education. This work involves gathering data on their experience of the training programme and on their delivery of the in-service programme. The data are gathered by means of questionnaires, interviews and observation.

I wish to extend my work by gathering responses from teachers on their teaching of Physical Education and on the in-service programme of Physical Education. I am enclosing a questionnaire that I have designed in order to gather information from you before you embark on the first day of the in-service programme for Physical Education. A further questionnaire will follow in order to gather information on your response to the in-service programme. I would be very grateful if you would complete the enclosed questionnaire. The data collected will form a very important part of my work on inservice in Physical Education. The information received will be treated in confidence in any reporting of the work. In a small number of cases I may wish to interview respondents in order to clarify aspects of responses. Signing the questionnaire would facilitate this process but it is not essential to do so.

I have enclosed envelopes for the responses and would appreciate if you could return them to me at your earliest convenience. Please do not hesitate to contact me if you require any further information.

Thank you.

Yours sincerely,

Frances Murphy

## Reminder Letter for Questionnaire QST4

St. Patrick's College, Drumcondra, Dublin 9.

07/01/05

Dear Principal (insert name here),

I wrote to you in December enclosing questionnaires on the in-service of Physical Education. Thank you for distributing these in your school.

At this point, I would really appreciate if you would remind any teachers who have not yet returned their questionnaires to me to return them as soon as possible as the questionnaire is designed to gather some relevant information before you embark on the first day of the in-service programme for Physical Education (scheduled for your school during the week of the 17<sup>th</sup> of January). I am enclosing some extra copies to facilitate return by teachers who may not have responded yet. However, as the respondents had the option of returning the questionnaire anonymously it is possible that questionnaires have been returned by all of your staff.

The Primary Curriculum Support Programme and the Dept. of Education have kindly agreed that I can observe the programme of in-service of Physical Education in which your school will participate. I look forward to meeting you on that day.

Please do not hesitate to contact me if you require any further information. Thank you for your co-operation.

Yours sincerely,

Frances Murphy. (tel.xxxxxx (h), xxxxxx (w), frances.murphy@spd.dcu.ie)

## Cover Letter for Questionnaire OST<sub>6</sub>

St. Patrick's College, Drumcondra, Dublin 9.

01/02/05

Dear Principal (name inserted here)

Sincere thanks for your work on my behalf in your school. I am busily working my way through the huge amount of data gathered from the responses to the first questionnaire.

Enclosed is the second questionnaire for each teacher in your staff. This questionnaire is designed to gather responses to the in-service programme from staff in your school. I would appreciate if you could distribute this questionnaire to the staff as before. The information received will be treated in confidence. It is not important for the purposes of my research if teachers return this new questionnaire without having sent the first questionnaire back to me.

Please convey my thanks to the staff in your school for their co-operation with me in this research. I thoroughly enjoyed the day in XXXXXX and found the response to the programme very encouraging.

Yours sincerely,

Frances Murphy
Lecturer in Physical Education

## Appendix D

## Administration of Questionnaires

#### Administration of Questionnaires

An account of the administration of each of the questionnaires is provided below.

The first questionnaire (QST<sub>1</sub>) was administered in June 2002 and was designed to

- (d) document the teaching experience of the tutors with particular reference to physical education
- (e) establish the views of tutors about physical education in the primary school and their own teaching of physical education and
- (f) record their expectations for the tutor programme for tutors.

The questionnaire was divided into six sections to facilitate respondents in providing the required information and to aid the work of data analysis afterwards. Each section had the following headings:

Section One: Biographical Information

Section Two: Your Background in Physical Education

Section Three: Your School Profile for Physical Education

Section Four: Your Experience of Teaching Physical Education

Section Five: In-service Education: Your Development and the Professional

Development of Teachers in Physical Education

Section Six: The Teaching of Physical Education

Section one was designed to obtain data on variables such as the size and type of school in which respondents worked and respondents' gender, age and teaching experience. Section two was designed to gather information on courses in physical education attended by the respondents, the factors that influenced their interest in physical education, their participation in sport, their level of responsibility for physical education in their school, the sources they use to extend their knowledge of physical education and their membership of Physical Education Associations.

Section three was constructed to elicit information on physical education in their school under the broad headings: the school plan, facilities and equipment, time allocation, coverage of the curriculum, extra-curricular provision and recording attainment. This section was focussed on the contextual setting of the respondents and provided

information on whether the respondent was working in an environment that promoted a quality physical education experience.

Section four was designed to elicit information on the respondents' planning for physical education, the time and frequency of their teaching of physical education and the individual strands of the Physical Education Curriculum, the teaching methods they employed, their strengths and weaknesses as a teacher of physical education and the support they offered colleagues in their teaching. This section was designed to identify the 'starting point' of the tutors in terms of their teaching of physical education that would allow comparisons at a later stage of their training in order to assess the impact of the tutor programme on their teaching.

Section five was constructed to gather data on their motivation for undertaking the post of trainer of physical education and their experience in delivering in-service training. This section also sought to identify what tutors expected would be delivered in their tutor programme and what they wished to be delivered. Questions were designed too to prompt tutors to identify what qualities of facilitators they considered important to the success of the tutor programme. An open-ended question sought information on the issues that they considered important in delivering in-service education.

The final section presented the respondents with one open-ended question on the developments that they would like to see in the teaching of physical education. This was included in order to allow teachers an opportunity to comment freely on their vision of primary physical education.

The questionnaire used a combination of pre-coded and open-ended questions to gather the required information. In the case of pre-coded questions respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. A number of questions had an 'other' category with a space provided for elaboration reducing the risk of respondents being restricted by the pre-coded nature of the question. A Likert type scale ranging from 'very frequently' to 'never' and from 'very satisfactory' to 'very unsatisfactory' was used to assess variables. While most of the factual questions were pre-coded, a number of open-ended questions were included when responses could not be established in advance. For example, an open-ended question was used to allow tutors to describe their motivation for undertaking the post of Trainer for Physical Education. It was felt that open-ended responses "might contain the 'gems' of information that otherwise might not have been caught in the questionnaire" (Cohen et al, p .255).

To test the suitability of the questionnaire a pilot study was carried out in May 2002. Seven teachers were selected to be involved in the pilot study. Six of these teachers had a particular knowledge of physical education. Two of the teachers were included in the main study and so were completing the questionnaire as tutors about to embark on the tutor programme. Completed questionnaires were returned to the researcher within a week and the responses were assessed in consultation with the teachers involved. A small number of amendments were made to the questionnaire, details of which are provided below.

The amendments made to the pilot questionnaire focussed on two broad areas (1) the clarity of some questions, and (2) the amount of space left for responses. The question about facilities for physical education in the respondent's school was not clear enough as respondents expressed a need to respond more specifically. For example, a respondent might consider facilities for games satisfactory but facilities for gymnastics unsatisfactory and the question required them to provide an overall statement of satisfaction with facilities for physical education. The amendment involved listing individual facilities such as an indoor area or an outdoor hard surface and the question that followed listed equipment for each of the individual strands instead of a general statement of equipment for physical education. The layout of the questionnaire was changed to allow more spaces for responses especially for open-ended questions such as the question asking respondents to identify issues in delivering in-service for physical education.

#### The administration of the questionnaire.

The questionnaire was mailed in June 2002 to the 26 tutors who were appointed as PCSP Trainers for Physical Education. They were located in schools in Dublin, Meath, Cork, Wexford, Galway, Limerick, Mayo, Westmeath, Donegal, Kildare, Roscommon and Tipperary. These tutors were all practising primary teachers although ten of the tutors were out of their teaching situation on a temporary basis while they delivered other aspects of in-service training.

The response rate.

The PCSP had received confirmation of acceptance of the posts of Trainer in Physical Education in early June as interviews had been held in May. They made the mailing lists of tutors available in mid June. As a result, respondents were asked to complete the questionnaire and return it within one week so that as many tutors as possible would respond before the tutor programme began. By the June 24<sup>th</sup> deadline approximately half of the questionnaires had been returned. Further questionnaires were returned during the last week of June when the tutors began the tutor programme bringing the total at that point to nineteen. A letter was sent with a second questionnaire on August 15<sup>th</sup> to the tutors who had not returned questionnaires. As a result six more questionnaires were returned. This represented a 96% response rate. All of the questionnaires were selected for analysis.

The second questionnaire (QST<sub>2</sub>) was administered in October 2002. It was designed

- (d) to obtain feedback on the experience of the tutor programme that had been offered to tutors in June 2002 and in August 2002. Both parts of the tutor programme were held for a duration of one week
- (e) to establish the needs of trainers for the next phase of the training programme and
- (f) to gather information on the effect of the training programme on planning for teaching physical education during the academic year 2002/2003.

The questionnaire was divided into three sections that broadly matched the aims outlined above. Each section had the following headings:

Section One: The Content of the Tutor Programme for Trainers

Section Two: The Process of Training

Section Three: Your Teaching of Physical Education.

Section one was designed to gather information on the level of satisfaction among tutors on the content of the tutor programme presented in two parts (June 2002 and August 2002). Questions were constructed to establish what areas of content they felt needed to be revisited or developed further and in what areas presentation of new content was merited. Respondents were also asked to identify areas that needed no further work and to outline any aspects related to the areas of content that needed treatment.

Section two was constructed to gather information on the delivery of the tutor programme with one question focusing on how the principles of adult learning were

being reflected in the tutor programme. Respondents were asked to indicate which aspects of the delivery of the tutor programme enhanced the programme.

Section three was designed to gather data on the influence of the tutor programme on their teaching in the context of their own class during the next academic year. Questions focussed on the content they felt confident to teach as well as the teaching methods they would employ. Respondents were asked to identify what supports they would welcome in their teaching of physical education and whether they would support colleagues in their teaching. A final question sought to establish their overall level of satisfaction with the tutor programme that they had experienced.

The questionnaire was shorter than the previous questionnaire administered to the tutors. It used a combination of pre-coded and open-ended questions to collect the data required. As in the first questionnaire respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. A Likert type scale was again used ranging from 'a lot' to 'none', from 'very satisfactory' to 'very unsatisfactory', from 'very confident' to 'not confident', from 'strongly agree' to 'strongly disagree' and from 'very frequently' to 'never'. Closed questions asked respondents to comment on the content and delivery of the programme and these were followed by open-ended questions that prompted respondents to comment freely or expand on their previous statement with respect to these aspects of the programme. The questionnaire ran to a total of seven pages.

#### The administration of the questionnaire.

The questionnaire was mailed in October 2002 to the same group of 26 tutors that had received the first questionnaire. The questionnaires were administered at this time to avoid putting pressure on teachers during the beginning of term that tends to be a very busy time for them. Due to the lapse in time since completion of the tutor programme an outline of the content of the tutor programme delivered in June 2002 and August 2002 was also included to facilitate completion of the questionnaire.

By the November 24<sup>th</sup> deadline approximately three quarters of the questionnaires had been returned. Further questionnaires were returned during the next phase of the tutor programme which took place in mid-November. A letter was sent with a second questionnaire on December 10<sup>th</sup> to the tutors who had not returned questionnaires. No further replies were received. This represented a 92% response rate. All of the questionnaires were selected for analysis.

The third questionnaire (QST<sub>3</sub>) was constructed to

- obtain feedback on the tutor programme delivered over a two-day period in November 2002 and over a period of one week in August 2003
- 2. gather data on the effect of the tutor programme on the teaching of tutors during 2002/2003
- 3. gather information on the effect of the tutor programme on their planning of physical education programmes for 2003/2004
- 4. establish the needs of tutors for the next phase of the training programme and
- 5. gather information about their readiness to undertake the post of trainer.

The questionnaire was divided into four sections. Each section had the following headings:

Section One: The content of the tutor programme for trainers

Section Two: The process of training

Section Three: Your teaching of Physical Education

Section Four: Your work as a Physical Education Trainer.

Section one was designed to gather information on the level of satisfaction among tutors with the content of the tutor programme presented in two parts (November 2002 and August 2003). Questions were constructed to establish what areas of content they felt needed to be revisited or developed further and in what areas presentation of new content was merited. Respondents were also asked to identify areas that needed no further work. These questions replicated those administered in the second questionnaire in order to provide a clearer picture of the levels of satisfaction with the new elements of the programme and with those elements that had merited further treatment.

Section two was constructed to gather information on the delivery of the training programme and the same question was used as in the previous questionnaire to establish

how the principles of adult learning were being reflected in the tutor programme. This question set out to establish if there had been any further cognisance of the principles of adult learning as the programme progressed. Respondents were again asked to indicate which aspects of the delivery of the tutor programme enhanced the section of the programme that they had experienced since the administration of the last questionnaire. Section three was designed to gather data on the influence of the tutor programme on their teaching in the context of their own class during the next academic year. Questions focussed on the content they felt confident to teach as well as the teaching methods they would employ. A new aspect of inquiry focussed on what content they had taught in the previous year that was influenced by the tutor programme and any modifications to their teaching methods that had occurred as a direct result of their engagement with the tutor programme. Respondents were again asked to identify what supports they would welcome in their teaching of physical education and whether they would support colleagues in their teaching. A final question sought to establish their overall level of satisfaction with the tutor programme that they had experienced to date. Section four was constructed to explore how confident the trainers felt about delivery of an in-service programme and to establish the extent to which the programme needed to address aspects of presentation and facilitation skills.

The questionnaire used a combination of pre-coded and open-ended questions to collect the data required. As in the previous questionnaires respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. Closed questions asked respondents to comment on the content and delivery of the programme and these were followed by open-ended questions that prompted respondents to comment freely or expand on their previous statement with respect to these aspects of the programme. The selection of closed questions allowed comparison between responses in this questionnaire with those in the previous questionnaire. A Likert type scale was used in a total of thirteen questions providing data on satisfaction rates with content and process aspects of the tutor programme as well as data on the confidence levels of tutors as they approached time for facilitation of the in-service programme. The questionnaire ran to a total of eleven pages.

The administration of the questionnaire.

The questionnaire was mailed in October 2003 to 24 tutors that had received the previous questionnaires. Two members of the original group of 26 tutors had taken up new posts and were no longer involved as trainers. As with the previous questionnaire the mailing was delayed until October to avoid putting pressure on teachers at the beginning of the new school year. A disadvantage of the questionnaire was that it was asking teachers to reflect on a part of the programme that had taken place almost a year previously in November 2002. This section of the programme was of two days duration and was due to be followed by another phase in January 2003. However, the DES postponed this phase of training until August 2003 as part of their budgeting arrangements and because of increasing pressure from schools to allow time for consolidation of work already introduced. As a result of these delays there was the considerable time lapse between tutors completing a part of the programme and completing this questionnaire. In order to facilitate completion of the questionnaire a summary of the content of the tutor programme delivered in November 2002 and August 2003 was included with the questionnaire.

#### The response rate.

By the November 7<sup>th</sup> deadline approximately 80% of the questionnaires had been returned. A letter was sent with a second questionnaire on December 1<sup>st</sup> to the tutors who had not returned questionnaires. A total of twenty two responses were received, representing a 92% response rate. A difficulty arose with the completion of this questionnaire, as some respondents had not completed the entire training programme in August 2003 and as a result the respondents could not fill some sections of the questionnaires. This was unavoidable as trainers received very late notification from the Department of Education and Science that training would take place during that time. All of the questionnaires were selected for analysis.

Two questionnaires were administered to a sample of teachers during the course of this study. The first questionnaire to teachers (QST<sub>4TEA</sub>) was administered in December 2004 and was designed to

- (d) document the teaching experience of the teachers with particular reference to Physical Education
- (e) determine the profile of physical education in their schools and
- (f) record their expectations for the in-service programme of physical education.

The questionnaire was divided into five sections so that teachers could respond easily and accurately and to facilitate data analysis afterwards. Each section had the following headings:

Section One: Biographical Information

Section Two: Your Background in Physical Education

Section Three: Your Experience With Physical Education

Section Four: The Physical Education Profile in your School

Section Five: Your Expectations for the In-service Programme of Physical

Education.

Section one was designed to obtain data on variables such as the size and type of school in which respondents worked and respondents' gender, age and teaching experience. Section two was designed to gather information on courses in physical education attended by the teachers, coaching qualifications obtained by teachers, the strand that they were most interested in teaching and their level of responsibility for physical education in their school.

Section three was designed to provide information on their teaching of physical education with a particular focus on the teachers' planning for physical education, the time and frequency of their teaching of physical education and the individual strands of the Physical Education Curriculum, and the teaching methods they employed.

Section four aimed to obtain information on physical education in their school with particular reference to: the school plan, facilities and equipment, time allocation, coverage of the curriculum, extra-curricular provision and recording attainment. This section was focussed on the contextual setting of the respondents and provided information that indicated whether a teacher was working in a setting where a broad and balanced programme of physical education could be provided.

Section five was constructed to gather data on their expectations for the in-service programme of physical education. A series of statements was provided listing possible

expectations and respondents were reminded that they did not need to tick all statements. They were then asked to rank the three most important outcomes. An openended question sought information on the key issues related to the elements of the curriculum that were to be treated on Day 1 of the In-service Programme.

The questionnaire was similar in many aspects to the first questionnaire administered to tutors in that it sought to obtain similar biographical and contextual information about the group of teachers. The questionnaire used a combination of precoded and open-ended questions to gather the required information. In the case of precoded questions respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. Two questions had an 'other' category, in the case of one of these questions a space was provided for explanation reducing the risk of respondents being restricted by the pre-coded nature of the question. A Likert type scale ranging from 'very frequently' to 'never' was used to assess variables. Five of the questions involved rank ordering. While most of the factual questions were pre-coded, a small number of open-ended questions was included when responses could not be established in advance. The document ran to a total of ten pages.

The Pilot Study.

A pilot study was carried out in November 2004 to test the suitability of the questionnaire. Five teachers were selected to be involved in the pilot study. One of these teachers had a particular knowledge of physical education. Responses to the questionnaire were assessed in consultation with the respondents involved when the completed questionnaires were returned to the researcher. There was no amendment to the content necessary but one amendment was made to the spacing of the tick boxes in one particular question to improve clarity.

The administration of the questionnaire.

The questionnaire was mailed in December 2004 to a sample of 85 teachers. They were located in schools in Dublin, Meath and Clare. They were all teachers who would participate in the in-service programme facilitated by three of the tutors who formed part of the sample group of tutors whose selection has been described in chapter

five. The principal in each of the schools selected was requested by letter (see Appendix D) to distribute the questionnaires among the staff as it was not possible to acquire a list of teachers' names in advance due to ethical issues surrounding confidentiality. Teachers who were willing to be interviewed for the purposes of the research were asked to indicate their willingness by signing the questionnaire.

The response rate.

Respondents were asked to complete the questionnaire and by January 9<sup>th</sup> thirty five questionnaires had been returned. A letter was sent with a second questionnaire on January 4<sup>th</sup> to the teachers who had not returned questionnaires. Further questionnaires were returned during the third week of January before the teachers attended their seminar day for physical education bringing the total to forty one. This represented a 49% response rate. All of the questionnaires were selected for analysis.

The second questionnaire to teachers (QST<sub>6TEA</sub>) was administered in February 2004 and was designed to

- (a) identify the learning outcomes for teachers of the first day of the in-service programme in physical education and rank them in order of importance
- (b) identify the nature of the intended modifications in practice, if any, reported by teachers as a result of their participation in the in-service programme
- (c) identify any factors that teachers believe might enhance the second day of the physical education programme.

The questionnaire, considerably shorter than the previous questionnaire administered to teachers, was divided into two sections. The sections were titled

Section One: Day 1 of the In-service Programme of Physical Education
Section Two: Day 2 of the In-service Programme of Physical Education
Section one was designed to identify possible learning outcomes from Day 1 of the Inservice programme and to determine the most important of these outcomes for teachers.
It also sought to identify intended modifications in teachers' practice of teaching
physical education. Scope was provided for teachers to comment on Day 1 of the Inservice Programme. Section two was designed to identify any factors that might
enhance Day 2 of the In-service Programme.

A series of statements was provided listing possible outcomes from Day 1 of the In-service programme and respondents were asked to indicate the extent to which the statement represented a learning outcome for them. They were then asked to rank the three most important outcomes for them. A further list of statements related to possible modifications in practice was provided and teachers were asked to respond by ticking a box. An open-ended question provided teachers with the opportunity to comment on any aspects of Day 1 of the In-service Programme. A final open-ended question provided teachers with the opportunity to identify any factors that might enhance facilitation of Day 2 of the In-service Programme.

The questionnaire used a combination of pre-coded and open-ended questions to gather the required information. In the case of pre-coded questions respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. A Likert type scale ranging from 'a lot' to 'not at all' was used to assess variables and one question asked respondents to rank order. One question was open-ended (described in the preceding paragraph). One of the questions in the questionnaire was similar to a question posed to the tutors in the fourth questionnaire administered to them. The tutors were asked to comment (question 6 of QST<sub>5</sub>) on the extent to which teachers were likely to modify their practice after participation in the in-service programme while teachers themselves in QST<sub>6</sub> (question 3) were asked to indicate any modifications that they intended to apply to their teaching. The resulting comparison of results is reported in chapter seven. The document ran to a total of three pages.

#### The Pilot Study.

A pilot study was carried out in January 2005. Five teachers were selected to be involved in the pilot study. All of these teachers had already participated in the inservice programme facilitated by different tutors at different venues. Responses to the questionnaire were assessed in consultation with the respondents involved when the completed questionnaires were returned to the researcher. No amendment to the content was necessary but one amendment was made to the font style of particular words in one

question to ensure that respondents were able to identify which strand of the Physical Education Curriculum was being highlighted of three possible options.

The administration of the questionnaire.

The questionnaire was mailed on February 1<sup>st</sup> to the sample of 85 teachers who had previously received QST<sub>4</sub>, located in schools in Dublin, Meath and Clare. The principal was again asked to distribute the questionnaires in each school. Each questionnaire was accompanied by a covering letter on headed notepaper of the Education Department, St. Patrick's College, Dublin. The letter stated the purpose of the research and requested the teachers' co-operation in completing the questionnaire. Confidentiality was assured. A copy of the letter is contained in Appendix C. A stamped envelope with the researcher's address was provided to each teacher to return completed questionnaires.

The response rate.

Respondents were asked to complete the questionnaire and by February 20<sup>th</sup> twenty four questionnaires had been returned. A letter was sent with a second questionnaire on March 1<sup>st</sup> to the principals in the schools concerned requesting that teachers who had not returned questionnaires would do so. Eleven more questionnaires were returned bringing the total to thirty five. This represented a response rate of 42%. All of the questionnaires were selected for analysis.

The final questionnaire for tutors (QST<sub>5</sub>) was constructed to

- obtain feedback on the tutor programme delivered on four different occasions from March to December 2004
- 2. gather information about tutors' readiness to undertake the post of trainer
- 3. gather information about the levels of confidence of tutors to present the content planned for implementation during the first day of the in-service programme for teachers
- 4. ascertain the views of tutors on the extent to which they thought teachers would modify their practice after participation in the in-service programme.

The questionnaire was divided into three sections. Each section had the following headings:

Section One: The Content of the Tutor Programme for Trainers During 2004

Section Two: The Process of Training

Section Three: Your Facilitation of Physical Education to Teachers.

Section one was designed to gather information on the level of satisfaction among tutors with the content of the tutor programme presented during 2004. Areas of content included those sessions that focussed on first aid and manual lifting which were considered important for tutors directly before they embarked on facilitating the programme as well as those more directly related to the games, aquatics and outdoor and adventure activities strands of the Physical Education Curriculum that were outlined in the tutor programme. A final question sought to establish their overall level of satisfaction with the tutor programme that they had experienced.

Section two was constructed to gather information on the process of training that tutors were engaging with and in particular to what extent the principles of adult learning were reflected in the tutor programme that they had undertaken.

Section three was designed to gather data on the influence of the tutor programme in preparing tutors to facilitate physical education to teachers. It sought to explore how confident the tutors were in relation to the specific elements of the content that they were facilitating at that time. A new line of enquiry was undertaken in the final question of the questionnaire where the views of tutors on the likelihood of teachers modifying their practice after participation in the in-service programme were sought.

The questionnaire used predominantly pre-coded questions but an open-ended question allowed tutors scope to comment on any aspects of the overall tutor programme in 2004. As in the previous questionnaires respondents were asked to choose from a number of alternative answers by placing a tick in the appropriate box(es) provided. A Likert type scale was again used ranging from 'very satisfactory' to 'very unsatisfactory,' from 'strongly agree' to 'strongly disagree', from 'very confident' to 'not confident' and from 'very likely' to 'unlikely'. The questionnaire ran to a total of eight pages.

The administration of the questionnaire.

At this point, a total of ten tutors had undertaken new posts and were no longer involved as trainers leaving sixteen tutors who had received the previous questionnaires. The questionnaire was mailed to them in January 2005 when they had completed the tutor programme that extended from March to December 2004. In order to facilitate

completion of the questionnaire a summary of the content of the tutor programme facilitated during 2004 was included with the questionnaire.

The response rate.

Fourteen questionnaires were returned before the end of January representing a response rate of 87%. A letter was sent with a second questionnaire on February 1<sup>st</sup> to the tutors who had not returned questionnaires. No further questionnaires were returned.

# Appendix E Piloting of Interviews

#### **Piloting of Interviews**

#### The Pilot Interview (INT<sub>1</sub>)

A pilot interview was carried out using a video recorder as well as a mini-disk player. This was followed by a further pilot interview with a different interviewee using a mini-disk player only. The analysis of the pilot interviews revealed that changes were necessary on three aspects of the interview: the organisation of the interview, the technique of interviewing and the content focus of the interview. These amendments were necessary to improve the depth of the data that the interview yielded.

First, in regard to the organisation of the interview it became clear that a timetable of the initial weeks of the tutor programme would be a helpful tool for the interviewee in helping them to recall the aspects of the week that they were referring to. Over-reliance on written notes by the interviewer to the detriment of really listening to the interviewee was another drawback of the pilot interview, it was necessary to become more familiar with the content of the questions and areas for probing. Quinn Patton (2002) emphasised the importance of improving listening skills when he stated that "evaluators must learn how to listen when knowledgeable people are talking" (p. 341). This practice of careful listening became a priority for the researcher prior to undertaking further interviews. Familiarity with the questions was an important element of improving listening skills.

Second, the technique of interviewing needed to be improved. The main difficulty arose in responding to the statements made by the interviewee. Probing was not sufficient and many opportunities were lost to gather more valuable data or to elicit a clearer response from the interviewee. A further challenge was the task of avoiding asking leading questions. For example, an opening question referred to the positive evaluations of the tutor programme gathered from the questionnaire data which may have led the respondent to agree with the statement where a less subjective question might have evoked a somewhat different response.

Finally, in regard to the content focus of the interview there was an overemphasis on questioning the respondents on the content presented. Given the planned focus on how adults learn, the respondents were not prompted sufficiently to comment on this process. For the second pilot interview, a draft of the timetable for the tutor programme was presented to help the interviewee recall the content of the programme immediately prior to interviewing. The author was considerably less reliant on the written notes for the interview, which allowed better opportunities to listen more carefully to responses. However, the same difficulties with the technique of interviewing and the content focus of the questions arose and led to significant changes in approach before the next interviews.

Following further analysis of the pilot interviews the author worked on ways of improving the depth and focus of the respondents' answers. First, it was decided to draft more probes to each question to ensure that opportunities were not lost to clarify the views of the respondents. Second, two pieces of documentation were presented to the interviewee prior to interview

- 1. a written account of the aims of observing the tutor programme for trainers as well as the process of learning that tutors were engaging with and
- 2. a written report of two sample sessions from the two weeks tutor programme that had taken place prior to the interview.

This approach was adopted for two reasons. Firstly, the first piece of documentation referred to was used, as there was a time lapse between the first phase of the programme undertaken in June and August 2002 and the interviews, which were undertaken in January 2003. While this presented difficulties for the interview process, it did allow tutors time to transfer what they had learned from the tutor programme to their teaching situation and provide information on this aspect of their work. Secondly, while the content presented as part of the tutor programme was an element that tutors could recall with relative ease, largely because they transferred it to their own teaching situations and were dealing with the content on a daily basis, the process elements needed highlighting. Tutors appeared to benefit from seeing the process elements emphasised as they were then able to comment more specifically on how they perceived these elements were applied in practice. The written report of the sample sessions compiled by the researcher was used merely to prompt interviewees to reflect on the process that they had been engaged in. To ensure that this process became a real focus of the interview the written account of the two sample sessions featured references to the

process of learning outlined in italicised print. For example, instances of 'active learning', 'group discussion', 'questioning' and 'presentation' were highlighted in this way. A copy of this account is included in Appendix G. While this could be interpreted as over-emphasising particular methodologies, it was identified as one way that might help the interviewee focus on the process of learning that they were experiencing. In advance of the interview, the author emphasised that these documents should in no way preclude the respondents from commenting on any aspects of the programme not referred to in this account. The documents were used in order to "creatively adapt qualitative methods to specific situations and purposes anything that comes to mind-and works-as a way to enter into the world and worldview of others" (Quinn Patton, 2002, p. 396). Use of the documents allowed the researcher to begin the interview by asking for reactions to incidents and processes as a substitute for straight questions.

A third pilot interview was conducted with the same respondent as the first pilot interview. The analysis of this interview was undertaken and the interview was deemed to be a good deal more satisfactory. It was observed by a colleague who judged that it was satisfactory because the difficulties with the organisational aspects, the technique of interviewing and the content focus had each been addressed and resolved satisfactorily.

## Appendix F

### Letters to Interviewees

#### Letters to Interviewees

St. Patrick's College, Drumcondra, Dublin 9.

August 13th, 2002

Dear

Sincere thanks for returning the questionnaire that I sent to you as part of my research on the training programme for Physical Education trainers. I have received very valuable information from my initial analysis of the questionnaire data.

I am planning to conduct some interviews with trainers in August and in September to collect more data. The Department of Education has agreed that during the academic year 2002-2003 I can observe a small number of trainers as they teach Physical Education. In addition, I would like to interview them about their experience of teaching Physical Education having undertaken the first phase of the tutor programme for trainers.

I would be delighted if you would agree to be interviewed by me and allow me to observe your teaching of Physical Education on a few occasions during the next academic year. While I appreciate that this will place demands on your time it will provide me with further very valuable information. Your participation in any aspect of this work is, of course, entirely voluntary. The information provided by you will be treated with the utmost confidence and will not be made available.

I would appreciate a reply from you at your earliest convenience. I am available at xxxxxx (w) xxxxxx (h). Alternatively, my home address is at the top of this letter. My e-mail address is frances.murphy@spd.ie

Thank you in advance for your co-operation.

Yours sincerely,

Frances Murphy.

St. Patrick's College, Drumcondra, Dublin 9.

Oct. 5th 2003

#### Dear

I hope you are settling into the new year at school and that your PE teaching is going well for you. I am writing to outline my research plans for the next period. Since September I have been collating data gained from the questionnaires completed to date (thanks for filling them in again!) and from the interview and classroom observations that I conducted in January/February last year.

#### I am now proposing to

- (a) Visit you to observe you teaching PE on approximately two occasions between now and June 04
- (b) Interview you on one occasion between now and June 04.

With regard to (a) above I would like you to suggest two occasions where I could visit you. Where possible, I would like to see you teach two different strands. This would provide me with rich data on the teaching of PE by trainers. Where this is not possible I can still benefit from the two observation sessions as I will be continuing to note the 'process' aspects of teaching as well as the actual content aspects. There is no need to be specific about the date or time of the visits at this stage, I would merely welcome an indication of when you think is a good time so that I can 'pencil' it in.

With regard to (b) I am tentatively suggesting a focus group interview (i.e. 2-6 people together) rather than interviewing each of you separately at this point. This type of interview generally yields interesting data and having studied responses to questionnaires and interview texts there are a number of very interesting 'themes' emerging. I will outline these in advance and I think a discussion between a number of trainers could be really interesting on these issues. The logistics of this will be difficult but if there was even a slight chance of you coming together as a group I will work on that. An alternative might be to arrange a xxxxxx venue and a xxxxx venue (I realise that this would not be ideal for all of the group but hopefully we can overcome this difficulty).

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I am acutely aware of the time constraints on each member of the group so I will do my

utmost to facilitate this to suit your diary.

I have deliberately chosen to write to you with these proposals in order to give you time

to think about what I have outlined here. Within the next fortnight I intend to phone you

to see how these proposals suit you. Alternatively, I will consider any other proposals

you might have.

A need may arise for me to review further plans I have to complete my research if the

decision of the PCSP with regard to plans for next year is not forthcoming in the near

future. I am not aware of any decisions on the provision of inservice for Physical

Education.

I would welcome any queries or suggestions (tel. xxxxxx) about my proposal outlined

above. Thanks for giving your time to read this, I know that it's quite 'longwinded'!

Yours sincerely,

Frances Murphy.

## Appendix G

Interview 1 (INT<sub>1</sub>)

#### Interview 1 (INT<sub>1</sub>)

Individual interviews: January 2003

#### Support Documentation for Interview 1 (INT<sub>1</sub>)

The following document was presented to each tutor in advance of the interview. The purpose of this practice was to prompt them to reflect on *how* they were learning as well as *what* they were learning. In the pilot interviews, this focus on the process of learning was proving difficult to achieve. The development of the framework in Table A was in response to this difficulty.

Table A

#### Background to the Interview

Two of the aims of my observation of the Training Programme for trainers were

- To gather information on the content of the programme: its suitability and relevance to the trainers
- To analyse *how* the trainers were increasing their understanding and knowledge of the teaching of Physical Education

The content of the programme and the process of learning were observed with reference to the considerations outlined below

- Adult learners should be engaged in dialogue about the programme itself
- The programme should reflect the principles of adult learning thus allowing for reading, examination of materials, peer-guided learning, concrete experience and a consideration of the readiness of the adult to learn. This implies that the experience and expertise of the adult should be utilised to its maximum
- The programme should prompt the trainer to reflect on his/her role as a facilitator helped by exposure to good models of facilitation throughout the programme
- The programme should adopt multi-sensory approaches to learning such as the use of video, task cards, demonstrations, brainstorming and discussion as well as direct teaching
- The programme should prompt discovery learning where trainers are provided with opportunities to devise new materials and new methods
- The programme should promote critical reflection
- The programme should prompt trainers to adapt and innovate, beginning with imitation
- The programme should treat content familiar to trainers first
- The programme should encourage trainers to become innovators of new practice
- The programme should be evaluated and appraised.

## A report of some of the tutor/training programme for Physical Education Trainers

The following represents a short description of two sample sessions from the two weeks training to date (June and August). The sessions related to health-related exercise, aquatics, dance, gymnastics and outdoor and adventure activities could have been documented in the same way. It is my intention merely to prompt interviewees to reflect on the process that you have been engaged in. The focus in my description is therefore, on the *process* of learning, how trainers actually gained in understanding and knowledge of the Physical Education curriculum.

Note: the italicised print is used to help outline this focus.

Week 1: June 2002 Venue: Mt. Sackville

Tuesday morning: Athletics (1)

The classroom-based presentation on athletics began with an introduction to what the tutor programme for trainers should promote. Reflecting the principles of adult learning the programme would present opportunities for active learning and group discussion for example and should meet the needs of individual trainers in their own particular teaching context. The programme should also prompt trainers to reflect, adapt and innovate.

The classroom based *presentation* on the aims, rationale and content of the athletics strand of the curriculum allowed for some *brainstorming* by trainers of the aims of athletics. Trainers had no difficulty in outlining what athletics might contribute to the development of the child. Emphasis in the responses was on linking athletics with the primary aims of the physical education curriculum.

Trainers actively engaged in a selection of running (sprinting) and throwing activities in the gym. Throwing activities explored were all related to javelin practices (shot put and discus activities remain to be explored). These activities prompted some discussion focussing on class organisation and suitability for different age groups. The tutors were prompted to focus on specific teaching points for activities and some tutors displayed knowledge of many of the key points. Others required much practice and possibly need further sessions to ensure that they have a full grasp of teaching points and progression in athletics.

#### Tuesday afternoon: Athletics (2)

This session focussed on further running activities such as hurdling and relays as well as jumping activities. All of the session involved *active participation* by trainers. There was some opportunity for discussion and questioning.

The technique of relay running for example prompted very interesting *debate* with trainers offering different opinions on how it might be presented as well as much *peer-guided learning*. Trainers seemed to gain an understanding of the difference between the downsweep and upsweep techniques of baton passing. A

video analysis of each technique appeared to help with the differentiation between techniques. Hurdling was explored with much enthusiasm by trainers and the progression involved in teaching it was grasped by the group.

#### Wednesday morning: Athletics (3)

This session focussed on continuous running activities involving active participation by trainers. Groups of tutors were presented with sample activities (outside on track) and were asked to organise and present the activities to their peers. Much peer-guided learning occurred as trainers presented content and debated the tasks undertaken. The trainers were very creative in their interpretation of the tasks and made very good use of the school location where they were working. They debated adaptation of tasks and showed a good understanding of the activities.

A classroom-based session focussed on planning a school programme of athletics and on exploration of teaching approaches for athletics with a focus on group teaching. A presentation on assessment of athletics was followed by a group task where trainers were presented with a case study of pupil self-assessment and teacher-designed tasks related to a hurdling activity. Tutors were challenged to devise similar methods of recording achievement related to javelin and long jump activities. This exploration of assessment succeeded in opening the debate on why athletics should be assessed, what should be assessed and what forms of assessment would be most useful. However, it would seem that trainers would welcome more analysis of assessment. This was followed by a short presentation on evaluating an athletics programme.

#### Week 2: August 2002

Venue: St. Mary's Galway Monday afternoon: Games

The emphasis in the initial development of playground games, invasion games, net games and fielding games was on *direct teaching* and this didn't allow for much discussion. (The session was held outdoors and it was quite warm). This *content* appeared to be *familiar* to trainers and served as a useful starting point.

Much group discussion was incorporated into the last session on games. (This session was held indoors in a cool and spacious gym). Here trainers discussed animatedly and at length the development of skills such as rolling and throwing and catching. There was a considerable amount of questioning used by the facilitator in this session eliciting a variety of responses from trainers. Trainers, for example, during this session suggested all of the key teaching points for the skills.

#### Tuesday: Games

The second day of training began (indoors in the gym) with the group actively engaged in games activities with an emphasis on footwork, ball handling and defence. Another very active session emphasising tactics such as use of space, defence and attack in the context of the small-sided game (3 v 1, 4 v 2 etc.) followed. Another very lively group discussion took place on the introduction of small-sided games with trainers debating the stages at which children could confidently explore these games as well as the application of these games to a wide variety of sports. Issues raised included organising and playing these games in a class context.

Discussion again was a feature of the introduction of advanced passing practices with many trainers commenting on some of the practices and suggesting adaptations and modifications. The presentation of a sample skill requiring to be taught in distinct stages (lay-up shot in basketball) prompted a very animated discussion and much questioning by trainers. This session also included some peer-guided learning as some trainers who were proficient in this skill guided others towards its mastery. (It appeared that more work was needed on this skill development: some trainers displaying mastery of the skill had difficulty breaking down the skill which they will need to teach it, others had difficulty adapting to each stage but with practice showed an ability to present it very clearly).

A classroom presentation focussed on the development of understanding and appreciation of aspects of physical education. An initial presentation that included some of the historical and social issues concerned with physical education was followed by a brainstorming session. This challenged the trainers to think of ways of extending work in physical education into the classroom. Trainers engaged with this most enthusiastically and some very innovative ideas were put forward.

Trainers working in groups undertook the final presentation in the games module. This session was a striking example of active learning by trainers who presented activities on selected topics (such as ball carrying) with an emphasis on progression in the teaching of skills. Task cards were used to focus groups on their specific task. The expertise of the group was used very effectively in this session. This session also allowed for the examination of materials with each group selecting their own equipment. A short discussion allowed trainers the opportunity to outline their needs in any further sessions. Some very interesting suggestions were put forward by trainers including the need for a short session on each of the main sports in primary schools with an emphasis on techniques specific to these sports.

#### Interview Schedule

Note: the themes are outlined in italicised print and the questions to interviewee are in normal print. Possible 'probes' are outlined under some questions using bullet points.

Application of principles of adult learning

What is your reaction to the principles of learning that I've outlined that you've just read there?

- Has there been sufficient emphasis on active learning?
- Have you been prompted to reflect critically on aspects of your learning?
- Did you have sufficient opportunity to learn from your peers?
- Was there sufficient opportunity for group discussion?

Relevance and adaptability of content

Was there an aspect of content that you found particularly useful?

- Was the content relevant
- Were you able to adapt it to your own context?
- Did you teach any new elements of content?

The impact of the tutor programme on trainers' planning for teaching PE to their classes

Did the tutor programme influence your planning for teaching PE to your class?

The needs of trainers in further weeks: aspects to be revised, needing more input Can you identify any particular elements of strands that you would like to re-visit? What new aspects would you like to see included?

Can you identify an aspect of the programme that you are most enthused about so far?

## Appendix H

Interview 2 (INT<sub>2</sub>)

## Interview 2 (INT<sub>2</sub>) Individual interview (one) and one focus group: March 2004

As the group had not taken part in a focus group interview previously, I began by outlining some of the characteristics of a focus group interview (Table A)

#### Table A

A focus group interview....

an interview: not a problem-solving session, not a decision-making group, not primarily a discussion

in a focus group participants get to hear each other's responses and to make additional comments beyond their own original responses as they hear what other people have to say

**need not agree** or reach any consensus useful for identification of themes rather than in-depth analysis of subtle differences

high quality data in a social context where people can consider their own views in the context of the views of others; interactions among participants enhance data quality; group members influence each other by responding to ideas and comments in the discussion

comfortable, often enjoyable! interviewer as moderator

Note: the themes are outlined in italicised print and the questions to interviewee are in normal print. Possible 'probes' are outlined under some questions using bullet points.

Evaluation of your own development particularly in past year re: PE

What changes do you perceive in yourself as a result of your involvement in the programme?

#### Probe:

- Can you identify any breakthroughs for you in your teaching? Can you remember any moment/class/child response where you felt something significant was taking place? Have you been prompted to think about this/reflect on its significance?
- Did you manage to adapt material or content to suit your own school setting or did you find that your context was too far removed from the experience presented in the tutor programme?
- Did you read any relevant articles, journals or books recently that were related to your tutor programme experience? PCSP pack/independent sources?
- Have you presented new content during this academic year or is there any content that you repeated and modified in any way?
- Have you used any new methodologies or used any particular methodology more frequently this year?

Ascertain the level of satisfaction with the content of the programme

How has the content of the programme so far met your needs?

Ascertain the level of satisfaction with the process of the tutor programme and its effect on tutors' attitude to children learning

As you are aware I have been examining the process of training that you have been engaged in. The data, that I have gathered from the questionnaires that the group as a whole has completed, have provided some information on how individuals have responded to the various methods used throughout the programme. One of the aspects, for example, that some respondents felt merited more time was group discussion. Others expressed a desire for more input from 'experts'.

How has the balance between presentations and other methods of facilitation such as group discussion, active learning and peer-guided learning suited your style of learning?

You were recently 'polled' on your views with reference to the selection of strands for the next academic year. Did you welcome that opportunity to become involved in the decision-making process or would you have a preference for letting the decision making to others?

What insights, if any, have you gained into your own learning as you engage with the training programme?

Has the tutor programme prompted you to think about how children in your class learn? (this theme emerged during some of the initial interviews).

Ascertain the level of readiness for training teachers in Physical Education

As we approach the implementation of the inservice in Physical Education, what are the aspects of delivery that you feel comfortable with?

To gather opinions on what kinds of support the tutor programme needs to offer trainers before the first phase of delivery (2004/2005)

What are the aspects that you feel you need more support with?

Probe: Do you think you will need support with content matter?

How important are facilitation skills for you?

Will you need more support with the use of some of the methodologies

in the curriculum before you treat them with teachers?

## Appendix I

## Interview 3 (INT<sub>3</sub>)

#### Interview with Teachers (INT<sub>TEA</sub>)

#### April 2005 Focus group of teachers

Note: the themes are outlined in italicised print and the questions to interviewees are in normal print. Possible 'probes' are outlined under some questions using bullet points.

As the group had not taken part in a focus group interview previously I began by outlining some of the characteristics of a focus group interview (Table A)

#### Table A

A focus group interview....

an interview: not a problem-solving session, not a decision-making group, not primarily a discussion

in a focus group participants get to hear each other's responses and to make additional comments beyond their own original responses as they hear what other people have to say

**need not agree** or reach any consensus useful for identification of themes rather than in-depth analysis of subtle differences

high quality data in a social context where people can consider their own views in the context of the views of others; interactions among participants enhance data quality; group members influence each other by responding to ideas and comments in the discussion

comfortable, often enjoyable! interviewer as moderator

Overall impressions of the in-service day for PE

What were your overall impressions of the In-service Day for Physical Education?

- did you enjoy?
- were you happy with the balance between theory and practice?
- was the 'pace' of the day suitable for teachers?

Responses to the content facilitated

Can you comment specifically on your experience of any of the three strands on the inservice day?

#### Probe:

- Games
- Aquatics
- Outdoor and adventure activities

Did you use any of the material subsequently in your lessons?

#### Probe:

- Which strands?
- Did you teach any different strand?

Impact on your understanding of PE or the PE curriculum?

Did the experience of the day help promote your understanding of PE or indeed the Physical Education Curriculum?

Did the experience help raise the levels of understanding of your colleagues?

Your subsequent reflection on your work in Physical Education

Were you prompted to reflect more on your teaching of Physical Education or to plan more carefully?

- Did this involve using the curriculum as a guide?
- Could any other elements be covered or any approach used that might prompt you to plan/reflect more on how you teach PE and what you teach in PE?

Impact on content taught: Any new elements taught?

Have you taught any new elements of strands since the In-service Seminar Day?

- If yes, what?
- If no, what might help you to do this?

Frequency of teaching PE

Have you taught PE more frequently?

- How did you incorporate it into your school day?
- What might prompt teachers to do so?

Integration as a key methodology....

Were you prompted to integrate PE with any other subject since the Seminar Day?

- More guidance needed?
- How did it work for you?

Did the Seminar Day help you to place more emphasis on differentiation and meeting individual needs?

Expectation for next seminar day?

What would you like to see emphasised in the next in-service day?

- Were you comfortable with the levels of activity required?
- Have you any anxieties about safety issues that might be treated?

Teachers who don't teach a lot of PE....

 Would you have any advice to offer to trainers who are speaking to teachers who don't teach much Physical Education?

## Appendix J

## Interview 3 (INT<sub>3</sub>)

#### **Interview 3**

## Interview 3 (INT<sub>3</sub>) Schedule June/July 2005 Focus group of tutors (2) and one individual interview

Note: the themes are outlined in italicised print and the questions to interviewee are in normal print. Possible 'probes' are outlined under some questions using bullet points.

Your reaction to facilitating Phase 1 of in-service

Overall, can you describe your experience of facilitating the in-service programme?

- Can you identify the most successful aspect(s) of the facilitation throughout the year?
- What were the most difficult/challenging aspect(s) of the facilitation throughout the year?
- Have you gained from the experience?

Your confidence/level of readiness to undertake the task of facilitation during 2004/2005

- How 'prepared' did you feel as a result of engaging with the training programme?
- How confident did you feel facilitating the planned content?
- Was the time spent on planning the day adequate and appropriate?

How teachers reacted to the day of PE

Do you think the Seminar Day enhanced teachers' understanding of PE?
 How?

Have you any examples from teachers?

- Do you think the programme impacted on their understanding of the various methodologies outlined in the curriculum e.g. group teaching? Integration?
- Did you think the programme impacted on their understanding of differentiation?

The impact of the day's in-service on the teaching of PE

Do you think teachers will teach PE more frequently?

Do you think teachers will reflect more/plan more...have you any evidence of this?

Do you think teachers will teach elements they had not taught...did you get any sense of this from teachers throughout the year?

Were you aware of any anxieties shown by teachers?

#### Views on/hopes for Phase 2 2005/2006?

- What are the key aspects of this year's seminar that you would like to see retained?
- Is there any aspect you would approach differently?
- What changes would you expect in teachers' attitudes/responses?

## Appendix K

Letters: Permission to Undertake the Study

#### Letters of Permission to Undertake the Study

St. Patrick's College,
Drumcondra,
Dublin 9.

May 31st, 2002

Re: Approval for research on in-service of Physical Education at primary level

Dear Colm,

I wish to seek your approval to engage in research on the in-service of Physical Education in primary schools.

I am lecturing in Physical Education in St. Patrick's College of Education, Drumcondra, having worked as a primary teacher with a special interest in the development of Physical Education. I am Education Officer for Physical Education with the National Council for Curriculum and Assessment. I now wish to undertake research leading to a Doctorate in Education.

The first part of this research has already been undertaken. I have designed a tutor programme for the Physical Education trainers drawing on a wide literature review. The Primary Curriculum Support Programme design team are currently examining this programme and their response so far has been positive.

My research will now go on to assess the impact of this tutor programme on the trainers who are selected to deliver the in-service programme of physical education and on the teachers who attend the in-service. This part of the research will involve two stages. First the research will focus on the trainers themselves, their responses to the training programme and its impact on their teaching. Then the response of a sample of primary teachers to the programme will be examined.

The research methods will involve questionnaires, in-depth interviews and sustained observation of the work of trainers as they teach in school settings and as they deliver programmes of in-service. Questionnaires and interviews will also be used to gather information from the sample of teachers.

As far as I am aware this is the first research of its kind undertaken in Ireland involving in-service that draws on theoretical literature to provide a practical programme of inservice. My aim is that my work will provide a model for the professional development of teachers.

| I have discussed my work briefly with Ms Áine Lawlor (National Co-ordinator, PCSP) |
|--|
| and would be delighted to discuss my work with you. Enclosed is an outline of a    |
| rationale for my study and a work plan for my research.                            |

I look forward to hearing from you.

Yours sincerely,

Frances Murphy.

St. Patrick's College,
Drumcondra,
Dublin 9.
September 19<sup>th</sup> 2004

Ms. Marie McLoughlin,
National Co-ordinator,
Primary Curriculum Support Programme.

Re: Research on the in-service of Physical Education at primary level

Dear Marie,

As I embark on the final phase of my research on in-service of Physical Education at primary level I wish to inform you of my progress to date and to outline my plans for the completion of data collection. I enclose the letter that I received from An t-Uas. Colm Ó Ceallacháin of the In-Career Development Unit in July 2002 granting me approval to engage in this research as well as my letter seeking this approval.

My work began by drawing up a tutor programme based on a wide literature review. My research focussed on the tutors/trainers initially evaluating their response to the tutor/trainer programme that they were undertaking and then evaluating its impact on their teaching. The research involved questionnaires, in-depth interviews and sustained observation of the work of trainers as they undertook their training and taught in school settings.

The final phase of my research will involve observation of the work of trainers as they deliver programmes of in-service. Questionnaires and interviews will also be used to gather information from a sample of teachers and from the trainers themselves to evaluate their response to the in-service in Physical Education.

In order to complete this research I am seeking the continued co-operation of the PCSP in providing me with the schedule (with details of the venue for training and the schools involved) of three of the trainers. (names inserted here) have constituted a focus group for my research (three other trainers who have now resigned were also part of this group) and I now wish to observe these three trainers as they deliver the programme of in-service. I have discussed my plans with them to observe training days and they have

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welcomed my suggestion. I will of course liase with them in advance of my visits and I will seek the permission of the schools involved. In addition, I plan to administer a short questionnaire to the teachers in these schools before they participate in the in-service programme and then after they have completed the programme, and I may wish to interview a small sample of these teachers.

The PCSP has facilitated my work since I commenced the research phase outlined above and I am deeply grateful for that. The group of trainers has been very supportive of my work also and the focus group of trainers has been particularly unselfish by facilitating my work in their schools and allowing time for interviews too. I look forward to the continuing co-operation of the PCSP with my work.

Yours sincerely,

Frances Murphy.

## Appendix L

Observational Fieldwork: Letters of Consent

#### Observational Fieldwork: Letter of Consent

St. Patrick's College, Drumcondra, Dublin 9.

15<sup>th</sup> December 2002

Dear Chairperson,

I am lecturing in Physical Education in St. Patrick's College, Drumcondra. As part of my work, I am undertaking research work leading to a Doctorate in Education involving the Department of Education Trainers for Physical Education. This work involves gathering data on their experience of the training programme that they are currently engaging with. The data is gathered by means of questionnaires, interviews and observation of work they are undertaking currently and the work that they will embark on as trainers. While some of my work is based generally on the full group of trainers I have selected to work more closely with a small group of the trainers. A teacher/the principal (select appropriate term) of your school, xxxxx is a member of this smaller group.

I would like to visit xxxxxx in his/her school and observe his/her teaching of Physical Education on no more than two occasions during the period January to June 2003. I have spoken to xxxxxx about my plans to visit him/her in school and will of course ensure that my visit is at a time that is convenient to him/her and to the school.

I am now seeking your permission to undertake these visits. I have enclosed an envelope for your reply and would appreciate if you could return it to me at your earliest convenience. Please do not hesitate to contact me if you require any further information. Thank you.

Yours sincerely,

Frances Murphy. (tel.xxxxxx (h), xxxxxx (w), frances.murphy@spd.ie)

## Appendix M

Levels of Satisfaction: Process Elements

#### Levels of Satisfaction: Process Elements

### The Tutor Programme: Levels of Satisfaction with Process Elements.

Percentage of tutors who agreed with the listed statements:

|  | QST <sub>2</sub> % | QST <sub>3</sub> | QST <sub>5</sub><br>% |
|--|--------------------|------------------|-----------------------|
| Trainers have been engaged in dialogue about the training programme itself – its aims, content and methodologies | 71                 | 58               | 75                    |
| Group discussion is encouraged   | 83                 | 69               | 88                    |
| The training programme allows for reading and examination of materials   | 42                 | 45               | 69                    |
| The training programme promotes peer-guided learning   | 88                 | 92               | 88                    |
| The content of the programme is relevant to the contexts of schools  | 92                 | 86               | 88                    |
| The programme prompts me to innovate and change  | 96                 | <b>8</b> 6       | 81                    |
| The programme helps me to guide teachers in adapting physical education to their own context                     | 88                 | 86               | 81                    |
| Active learning is a key feature of the training programme   | 96                 | 92               | 88                    |
| The training programme encourages discovery learning   | 83                 | 86               | 86                    |
| The training programme fosters critical reflection   | 88                 | 68               | 88                    |
| Different learning styles are accommodated throughout the learning experience                                    | 83                 | 68               | 69                    |
|  |                    |                  |                       |

## Appendix N

## Seminar Day Outline

## Seminar Day Outline

## Physical Education In-service Seminar Day Timetable

| <u>Time</u>   | <u>Content</u>   |
|---------------|--|
| 9.00 - 10.45  | Overview of the PE Curriculum (Theory) Warm-up and playground games (Practical) Aquatics (Theory) Aquatic games (Practical)  |
| 11.00 – 12.30 | Games Overview (Theory) Ball handling skills (Practical) Pair work (Practical) Group work (Practical) Small-sided games using grids (Practical) Station teaching (Practical) |
| 1.15 – 3.00   | Outdoor and adventure activities Overview (Theory) Walking (Practical) Orienteering (Practical) Outdoor challenges (Practical) Conclusion – resources and planning (Theory)  |