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The Play versus Formal Debate: A study of early years provision in Northern Ireland and Denmark

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THE PLAY VERSUS FORMAL DEBATE: A STUDY OF EARLY YEARS PROVISION IN NORTHERN IRELAND AND DENMARK

By

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ABSTRACT

This study was designed to investigate examples of Year 1 provision in Northern Ireland schools in the context of the debate about the relative importance of play-based and formal approaches to learning and teaching. Northern Ireland schools, though they follow a similar curriculum to schools in England and Wales, are often said to be conservative in their approach to learning and teaching. In some primary schools this is manifested in a relatively traditional adherence to the 3Rs while in most primary and post-primary schools the influence of the selective '11+' system is all too plain to see. In Year 1 classrooms, the perceived effects of tradition (the 3Rs approach) and prescription of the Key Stage 1 curriculum combine to fuel the view that the experience of 4 to 5 year old children is too formal and lacks the benefits thought to be offered by more play-based systems in other parts of the world. This study has therefore attempted to evaluate the quality of experience for 4 to 5 year old children in Northern Ireland schools and has used kindergartens in Denmark as an example of play-based approaches to early years education.

In order to achieve the objectives of the study, data collection included observations of early years settings (in Northern Ireland and in Denmark), surveys of teachers' and paedagogs' attitudes in relation to early years schooling, and teachers', paedagogs' and parents' perceptions of high quality early years provision. Innovative aspects of the research design included the development and use of an observation schedule termed the 'quality learning instrument', QLI. This enabled the evaluation of the observed settings to be accomplished against judgement criteria, which were in turn established through a calibration process involving a panel of early years experts.

Data analysis was principally qualitative (primarily thematic analysis of observation and interview data) supported as appropriate by descriptive (frequency counts, means etc.) and inferential statistics (factor analysis, ANOVA and t-tests). The last stage of the empirical work involved the findings from the various research approaches being presented to three focus groups of early years experts (members of the Inspectorate and advisory services, teacher educators and Key Stage 1 co-ordinators respectively) to assess their validity and generalisability, and to consider their implications. The findings from the study focus on nine identified features of a learning context (used in the thematic analyses and including motivation, concentration, and confidence etc.) and the three parts
of the learning triangle: the pupils, the teachers and the environment. They are set out in
detail in the appropriate chapters but the main ones are mentioned briefly here.

In terms of their environment, the early years settings observed in Northern Ireland
suffered from a number of ‘blights’ such as lack of space, insufficient staff, inappropriate
surroundings and so on. These problems were not evident in the kindergartens. The
Northern Ireland teachers were mixed in their views on the importance of play versus
formal ‘academic’ learning (as required by the Key Stage 1 curriculum) though there was
consensus that the curriculum constrains the teachers’ flexibility to enable a greater
proportion of play-based experience for the children. By way of direct contrast, there was
almost complete consensus among the Danish pædagogs that play in an ‘educare’ system
was the paramount consideration for young children. Northern Ireland pupils were also
found to be displaying signs of failure, and a lack of interest in learning, as a result of the
competitive atmosphere generated in the Year 1 classes. This was not evident in the
kindergartens but meaningful ‘challenge’ was found to be lacking in both the Year 1
classes and the Danish kindergartens. Finally, almost two-thirds of the surveyed Northern
Ireland parents defined a high quality early years provision in terms of care and natural
development instead of basic skills teaching; a finding that flies in the face of their
perceived conservative attitude to education.
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1.1 INTRODUCTION

"Children, we hear, are little sponges who soak up skills and information with effortless ease" (Elkind, 1988a, p.3).

"Nature wants children to be children before they are men. If we deliberately depart from this order we shall get premature fruits which are neither ripe nor well flavoured and which soon decay" (Rousseau, 1762 in Elkind, 1988a, p. 6).

These quotations strike at the heart of this study, which sets out to examine the play versus formal debate in early childhood education in Northern Ireland. It has been driven by the author’s personal concern, as an experienced Year 1 teacher, about the quality of the experiences being offered to young children in Northern Ireland primary schools. The purpose of this chapter is to provide an introduction to the study, its background context, aims and design.

1.1.1 Aims of the Study

The main aim of this study was to examine the play versus formal debate relating to early years provision in an attempt to consider aspects of the quality of early years education provided in Northern Ireland Year 1 classes. Central to this aspiration was the development of a means to assess the quality of these targeted aspects of early years settings. In order to achieve these aims it was necessary to identify a robust data collection method to enable the quality of the early years settings to be evaluated. As a sufficient number of play-based Year 1 settings could not be found in Northern Ireland, Danish kindergartens were chosen to provide data on these. By implication, the data collection method had to be able to cover these settings also.

1.1.2 The Nature of the Study

It is necessary to state from the outset, that this study is not a conventional comparative study. When conducting a comparative or cross-cultural study McLean (1992), and more recently Dimmock and Walker (2000), identify the need to take into consideration the overall contexts of the societies involved, including such issues as politics, economics and religion. This was not deemed essential, however, for the purposes of this study. While elements of this work necessarily followed a comparative model, it is true to say that it was not so much a comparison between what happens in Northern Ireland and what happens in Scandinavia; rather it was a comparison of the formal type of early years
educational setting, which is predominant in Northern Ireland and the informal play-based setting, which is predominant in a number of countries, the chosen example of which was Denmark.

It was necessary to record evaluative analyses of the perceptions, practices, policies and children's experiences in both countries, not with the intention of comparing them in terms of their value or otherwise, but to compare them as representative illustrations of two quite different approaches to early years education. The study, therefore, did not follow a comparative model in the cross-cultural sense but instead allowed the inclusion of a detailed examination of Danish play-based practice to inform the analysis and evaluation of the typical formal practice of Northern Ireland early years education. Where appropriate and/or necessary, however, cultural contextualisation such as class size, teacher training, policy traditions etc. are included to assist explanation and interpretation.

In the rest of this chapter the context surrounding the aims is set out along with brief overviews of the relevant literature, the rationale for the work, the objectives to be addressed and the methods of data collection and analysis.

1.2 BACKGROUND TO THE STUDY

1.2.1 Growing Interest in Early Years Education

Throughout the world, early years education has been attracting considerable interest in recent times beginning, perhaps, with the 'Head Start' initiatives in the United States in the 1960s. In the early 1990s, countries such as France, Italy and Denmark had made significant progress in enabling early years education for their populations e.g. by 1994 95%, 91% and 79% respectively of their three to five year old children were attending publicly funded services (Ball, 1994). Other European countries such as Portugal and Spain were also reported to be increasing their provision for pre-school children. Vasconcelos (1997) indicated that the Portuguese Expansion Plan proposed to extend pre-school coverage for up to 90% of all five year olds, 75% of all four year olds and 60% of all three year olds by 1999. In Spain, it was reported that publicly funded pre-school centres had expanded rapidly since the mid 1980s to the point where 90% of 4 to 5 year olds and almost 100% of five year olds were attending some form of early childhood provision in 1995 (see Palacios, Lera and Olivia, 1995 cited in Oberhuemer and Ulich, 1997).
Advances in early childhood education have also been taking place in England, Scotland, Wales and Northern Ireland, especially since the inauguration of the Labour Government in May 1997. In its bid to raise standards the Government has created a National Child Care Strategy (DfEE, 1998a) which aims not only to make pre-school provision more accessible by increasing places and improving information, but also to raise the quality of provision in general and make it more affordable by introducing a new ‘child care tax credit’ for working parents. To date no evaluation of the initiative has been carried out and its impact is uncertain.

Research Evidence
The findings from a growing body of research literature, e.g. Lazar and Darlington (1982) and Osborn, Butler and Morris (1984), have emphasised the benefits of high quality early years provision not only for the children themselves but also for society. The most in-depth and most frequently cited of these studies was known initially as the Perry Pre-school Project and later as High/Scope (Schweinhart, Barnes and Weikart 1993, Schweinhart and Weikart, 1997). This study has followed the lives of 123 Afro-American families for almost three decades, comparing those who took part in a pre-school programme with a control group of children who remained at home. The results revealed that throughout schooling, the High/Scope graduates spent less time in remedial classes. After leaving school they were more likely to have jobs, to own houses and be higher paid. They were also less likely to receive social service assistance and to have been involved in crime.

This evidence has been supported by a number of international studies including Sweden (Andersson, 1992), Britain (Osborn and Milbank, 1987) and also Northern Ireland (Brooks, Cato, Fernandes, Gorman, Kispal and Orr, 1997). Andersson (1992) examined the development of 128 Swedish children from their first year at day-care to age 13, concluding that children with the most day-care experience performed best on academic tests and were better socially and emotionally adjusted. Similar findings were reported in a study carried out by Osborn and Milbank (1987) on approximately 8,400 British children born in 1970, indicating that there was a link between pre-school attendance and better educational and social outcomes at the age of ten. In the more recent study mentioned above, Brooks et al (1997) assessed the reading standards of a random sample of pupils aged 8, 11 and 14 in Northern Ireland. They found that at age 8 pupils who had
attended some form of pre-school provision had a higher reading score than those children who had remained at home.

The Social Context
Radical social, economic and demographic changes have been taking place in the last 20 years in many developed nations. The most significant of these, with implications for early child care provision, has been the increase in the number of working mothers. According to Eurostat (1995) an average of 50% of European mothers were resuming their employment after childbirth. Set in this context, it is arguable that the major concern no longer lies with whether early years institutions should be provided for young children, but how the quality of this provision can be assured. Although there is a general consensus among educationalists that a high quality early years programme is essential (Podmore, 1993; Melhuish, 1993; Sylva and Wiltshire, 1993; Pugh, 1997), recent controversy concerns how best this programme can be provided to ensure the all-round development of the early years child.

1.3 THE PLAY VERSUS FORMAL DEBATE
The research and discursive literature on early years programmes suggest at least two main strands of debate. Put simply there are those who advocate a play-based approach until around the age of 6 or 7 and those who prefer a more formal approach, based on fostering academic skills, right from the outset of a child’s education.

1.3.1 The Play-Based Model
The play-based model is embedded in a progressive school of thought which draws on the work of early years pioneers such as Froebel (1826); McMillan (1919); Isaacs (1930); and Montessori (1964) who, according to Sullivan (1996), sought to “loosen the shackles of traditional education” by presenting a more “humanistic” approach (p. 350). Much of what these thinkers proposed has been echoed and refashioned to form the basic principles of the play-based model.

One perspective on the core principles of play-based education was provided by Bruce in 1987 (and revised by Bruce and Meggitt in 1996). A synopsis of Bruce’s ten original principles (1987, 1997) are described as follows:

• Childhood is seen as valid in itself;
• The whole child is considered to be important;
• Learning is not compartmentalised;
• Intrinsic motivation is valued;
• Self-discipline is emphasised;
• There are specially receptive periods of learning at different stages of development;
• What children can do is the starting point of children’s education;
• There is an inner life in the child which emerges under favourable conditions; and
• The people with whom the child interacts are of central importance; and
• The child’s education is seen as an interaction between the child and its environment - including, in particular, other people and knowledge itself.

Central to the play-based advocates’ argument is the belief that formal schooling is inappropriate for young children. In their paper “Escalating Academic Demand in Kindergarten: Counterproductive Policies”, Shephard and Smith (1988) were particularly outspoken about the negative effects that can emerge from being exposed to formal instruction at an early age. They emphasised that a narrow focus on literacy and numeracy can be detrimental to young children as it deprives them of the time required to learn through play, it stifles the exploratory drive while at the same time increases stress. They also argued that an over-emphasis on academic activity causes many more children to fail who might have otherwise succeeded in a more informal programme.

Similar views have been reflected in the work of more recent writers such as Hurst (1994) who has openly voiced her distaste for an early start to formal schooling, referring to it as a “monstrous distortion of good practice and a tragic waste of resources” (p. 6).

Some national reports have also expressed the need for more informality in the early years of education. For example the Rumbold Report (DES, 1990) stated that:

“.... Educators should guard against pressures which lead them to over-concentrate on formal teaching and upon the attainment of a specific set of targets” (p. 9).

In a similar vein the Start Right Report (Ball, 1994) emphasised that early entry to primary education and to Key Stage 1 of the National Curriculum is not a suitable alternative to high quality early years education. Instead it recommended an ‘educare’ approach, in which children are educated and cared for simultaneously.
1.3.2 The Formal Model

While play-based practice may attract widespread acclaim, there is a body of authoritative opinion (described perhaps as the traditionalists) which proposes that an academic skill-based approach is more appropriate. The proponents of this view consider that the answer to raising standards is embraced in the early preparation of reading, writing and arithmetic (see for example Brophy, 1982 and Gersten, 1986) and a certain amount of direct teaching (e.g. Bruner, 1966). Related to the importance perceived for basic skill acquisition is the assumption that young children can only be sufficiently challenged in a formal programme. Major proponents of this argument are Alexander, Rose and Woodhead (1992) who argued that teachers need to demand more from their children, condemning individualised programmes as “hopelessly unrealistic” (p. 32: 110) and topic work as lacking any “educational rationale” (p. 9: 20).

Although much of the work in support of this approach may seem out-dated, the emphasis placed on formality has re-emerged in recent years in much policy documentation as a result perhaps of the emphasis placed on accountability and learning outcomes. For example in 1993 Dearing asserted that the principal task of teachers at Key Stage 1 is to “ensure that pupils make progress in the basic skills of oracy, literacy and numeracy” (p. 29: 52). Furthermore the Chief Inspector of Schools, Chris Woodhead, openly expressed his criticism of a child-centred play philosophy, blaming these so-called “trendy” (p.1) methods for the falling standards in reading and writing (MacLeod, 1996).

The UK Government has also committed itself to a ‘traditionalist’ education policy to help raise standards in primary schools. David Blunkett, Minister of Education and Employment, has placed much emphasis on literacy and numeracy as evidenced by the introduction of the literacy and numeracy strategies (DfEE, 1998b and DfEE, 1999a) respectively. Moreover in their White Paper entitled “Excellence in Schools” (DfEE, 1997) the Government advocated the use of whole class teaching, arguing that all pupils should reach minimum standards unless they have severe, special educational needs.

1.4 FOCUS OF THE STUDY

1.4.1 The Northern Ireland Context

The academically-oriented opinions mentioned in section 1.3.2 seem to be particularly reflected within the system of education that is practised in Year 1 classes in Northern Ireland, where significant proportions of the statutory Key Stage 1 programme could be
described as formal. Since the Education Reform Order Northern Ireland (Great Britain, 1989), Northern Ireland children have been obliged to commence compulsory schooling in the school year of their fifth birthday. Some children therefore begin formal schooling at the age of four years and two months. While the majority of their European counterparts undergo a more play-based and less structural approach to learning at this age, Northern Ireland 4 to 5 year olds follow the demands of the Northern Ireland version of the National Curriculum i.e. their learning is subject-based and assessment-led. Indeed it has been proposed that assessment should begin immediately on entry to primary school. In the wake of recent Government demands, therefore, baseline assessment of all children on entry to primary schools, which began in September 1998 for all five years olds in England and Wales, is presently proposed for all 4 to 5 year olds in Northern Ireland from September 2001.

According to Scott (1996a), chair of the British Association for Early Childhood Education, “such a decision will result in real pressure from parents or on parents to sit children down to rote learning. It is backward to basics” (p.2). If children are to be judged against a particular set of criteria even before entering primary school, perhaps there is a risk of a ‘teaching to the test’ programme emerging for three to four year old children in Northern Ireland.

Although there has been a growing interest into the quality of reception classes and other forms of pre-school provision in the UK (see e.g. Pascal, 1990, Sylva, Melhuish, Sammons, Siraj-Blatchford, 1997) no researchers, to the author’s knowledge, have as yet considered the appropriateness of Year 1 provision in the Northern Ireland context. From as early as 1990, Hayes has been calling for the need to conduct research into Year 1 provision but the only empirical evidence available is restricted to school inspection reports. These tell the story of a traditional and formal approach in many classes. Based on a sample of 100 reports, the researcher found that some 61% referred to an over-emphasis on traditional teaching methods and insufficient challenge. However it must be said that these reports made little specific reference to Year 1 classes.

Set against the backdrop of little or no research in this area, and only relatively impressionistic data from inspection reports, it would therefore seem fitting to conduct a research project into the learning experiences on offer in Year 1 classes in Northern Ireland.
1.4.2 The Comparative Dimension

In order to develop a comprehensive insight into the quality of the learning experiences on offer in the Year 1 classes in Northern Ireland; it was considered essential to review this practice with the experiences of a more play-based approach. As examples of play-based approaches were lacking in Northern Ireland for 4 to 5 year old children, an international dimension was added to the study. Melhuish (1993) has recommended this approach, arguing the need for integrating research across national boundaries to ensure that a less “distorted picture” (p. 21) of quality be grasped than might be the case if only one context was studied.

Several contexts were considered including Italy, France, Denmark and Portugal but it was decided to concentrate on a Scandinavian context and in particular Denmark. There were several reasons for this. The high levels of English speaking in Denmark made it an attractive and convenient source for research. Furthermore in recent years the model of early years practice in operation in Denmark has generated much interest in the UK and the USA. According to Moss (1996) this is the best example of an educare model of early years practice available where the caring and learning aspects of schooling are amalgamated. An earlier endorsement of Danish provision was also influential in this decision. Sommer (1992) had stated that also in the Danish play-based model “children are not just envisaged as an object of care, not just targets for teaching or preparation for school, but are seen as autonomous, self-directing and social individuals who will carry forward the best and noblest dreams of society and cultures” (p.31).

1.4.3 The Development of an Assessment Schedule

Before an examination of the learning experiences could be undertaken from a quality perspective, it was considered necessary to develop a definition of a high quality learning programme that was acceptable in both play-based and formal contexts. Athey (1990) recognised this need, emphasising that descriptors of quality need to precede any measurement process. She argued that “measurement without description and conceptual understanding can capture only the organisational surface of trivial features of situations” (p.8). Statham and Brophy (1992) also indicated that “any attempt to provide an objective rating scale for measuring quality has to assume that there is an explicit model of what constitutes good provision” (p. 145). Instead of simply adopting an existing definition of quality against which to assess the programmes, Balageur, Mestres and Penn (1992) recommended that it is more appropriate to develop an in-house instrument, indicating
that “the process involved in defining quality - with the opportunity it provides to explore and discuss values, objectives and priorities - is of utmost importance, and can be lost where people simply adopt existing measures” (p.11). A major objective of the research was therefore to design, develop and test an instrument for assessing quality, which would then provide data for the central analysis of the study.

1.4.4 Teachers’ and Parents’ Perceptions

In the 1990s, a number of writers argued that a quality perspective does not exist in a cultural vacuum (see e.g. Balageur, Mestres and Penn, 1992 and Moss and Pence, 1994). Instead the need for work associated with quality to be firmly contextualised within the culture to which it belongs, has been emphasised by researchers such as Dahlberg, Moss and Pence (1999). According to this approach the views of all the stakeholders involved in the early childhood programme must be considered including those of practitioners and parents, an approach, according to Folque and Siraj-Blatchford (1996), which is associated with Brofenbrenner’s theory of child development (Brofenbrenner, 1989). In Brofenbrenner’s theory the child is said to be influenced not only by the ‘microsystem’ (family) and the ‘mesosystem’ (school) but also the ‘macrosystem’ which refers to society at large.

This research has adopted the same approach and has sought to examine the perceptions of practitioners and parents in both the Northern Ireland and, to a lesser degree, the Danish contexts. On occasions, Northern Ireland education has been referred to as traditional in perspective. Caul (1990) for example has vigorously expressed this opinion, stating that the Northern Ireland education system “is locked into an academic and subject-oriented vice” (p. 199/200). Similar views have been expressed in relation to its religiously segregated education system (Cairns, 1987 and Gallagher and Dunn 1991). Set in this cultural context it could be argued that perhaps the mindset of teachers and/or parents in Northern Ireland might have prevented a play-based model from being implemented. Teachers and parents may have become embedded in a so-called deep-rooted traditionalism, preventing or inhibiting any innovation from taking place. Policy-makers may also have developed traditionally oriented opinions, opposed to change and educational innovation, raising the need to consider their opinions likewise. As Hujula-Huttunen (1996) argued, early childhood education:

"...is not separate from the rest of society. On the contrary, ... its pedagogical models and the growth environment reflect the society in which it is established and where it functions" (p.34).
On this basis, the study of teachers’ and parents’ views was therefore also considered necessary.

1.5 OBJECTIVES OF THE STUDY

As stated earlier the overall aim of this study has been to examine the play versus formal debate in an attempt to consider the appropriateness of Northern Ireland Year 1 provision for its 4 to 5 year old children. This focus led to the formation of the following objectives:

- to develop an assessment schedule which would allow the quality of the more formal programme (as exemplified by Northern Ireland Year 1 classes) and the play-based programme (as exemplified by the Danish model) to be assessed;
- to evaluate the quality of the formal and play-based models in operation in Northern Ireland and Denmark respectively according to a set of quality learning indicators covering:
  - the children’s actions,
  - the strategies and approaches of the educators involved, and
  - the environment;
- to explore and examine Northern Ireland teachers’ and Danish paedagogs’ perceptions of a high quality learning programme;
- to gain an insight into parents’ views of the programme their children follow in both contexts;
- to examine the extent to which the views of selected groups of policy influencers, teacher educators and practising teachers reflect the findings of this research project.

1.6 OUTLINE OF THE STUDY

In order to meet these objectives the research proceeded in several phases. The first phase involved the development of an observation schedule, based partly on an intensive literature survey of how young children learn and a pilot series of observations in Northern Ireland and Denmark to enable testing and calibration of the observation instrument. The second phase involved the main series of observations in Northern Ireland and Denmark with questionnaire surveys of practitioners in both contexts. The final phase covered the analysis and interpretation of the findings and included a series of focus group interviews with early years experts. Some aspects of the work necessarily straddled different phases of the study e.g. the one-to-one interviews with a sample of Year 1 teachers and Danish paedagogs as well as the series of parent questionnaires.
The phasing of the research was partly sequential and partly overlapping. The early part of the work formed a period of immersion in the various issues, contexts and literature and influenced the design of the observation instrument. The preliminary analysis of the observation and interview studies in turn influenced the design of the survey questionnaire. Finally the overall analysis of the data collated, including that derived from the parents’ questionnaires, informed the basis of the issues to be discussed with the expert focus groups.

A multi-method (e.g. observations, interviews, surveys etc.) and a multi-source (e.g. children, staff, parents, the environment etc.) research design was therefore adopted throughout the study. In this way a high level of validity for the study was assured, through triangulation and the emergence of a wider conception of quality resulting from a comprehensive empirical base.

The objectives of the study required that the emphasis of the research should be qualitative in approach. As it was necessary for the researcher to be immersed in the two approaches, to record and evaluate daily practice and the processes of learning in each context, direct observations acted as the main data collection method (68 settings in total). The observation studies were supported by one-to-one interviews of the main educators involved (n= 68), parent questionnaires (n= 650, 350 in Northern Ireland and 300 in Denmark) and a postal survey of Year 1 teachers in Northern Ireland (n=480) and pædagogs in Denmark (150). The data from the surveys enabled appropriate inferential statistics to be used in support of the work.

Aside from the observation and survey dimensions, the research design had three methodological features which are worthy of special note. These were: the development of an in-house observation schedule (known for the purposes of this study as the Quality Learning Instrument, QLI), the calibration of the instrument and the focus group interviews. The Quality Learning Instrument focused on nine features of a quality learning environment including children’s motivation, concentration, confidence etc., derived from the literature and pilot observation studies. The schedule considered the actions of children, staff and the role of the environment, the latter inclusion based on Brofenbrenner’s notion (1989) that active, growing human beings are affected by the immediate surroundings in which they live. Therefore a triangle of elements emerged where the children, staff and the environment were considered to have a complementary role to play in the overall quality of the programmes on offer.
As a solo researcher of the Northern Ireland and Danish programmes, the author’s singular judgements must be considered problematic and therefore required calibration against norms or standards. A short calibration study was therefore conducted with ten early years experts. These experienced people were asked to examine video excerpts of Danish practice and to assess the processes and interactions according to the Quality Learning Instrument. Their judgements were compared with the author’s to provide a calibration of the author’s judgements for the overall study.

Finally a number of focus group interviews were undertaken to test the findings of the study. The three panels of early years experts comprised: members of the Inspectorate and advisory services, higher education teacher educators and school-based Key Stage 1 coordinators.

Throughout the study the researcher was conscious of the underlying cultural dichotomy particularly in relation to language and meanings that needed to be shared. For this reason, there was close collaboration with colleagues in the Centre for Early Childhood Research in the Royal Danish School of Educational Studies in the making of research decisions. A full treatment of this eclectic suite of methodological approaches will be provided in Chapter 4 (Methods).

1.7 STRUCTURE OF THE THESIS

The thesis is set out in twelve chapters as follows. This Introduction is followed by Chapter 2, the Literature Review, which examines the play versus formal debate in early childhood education, from theoretical and empirical perspectives. Chapter 3 (Early Childhood Policies in Britain/Northern Ireland and Denmark) details an historical perspective of the development of the play-based model in Denmark and the formal model in Northern Ireland. Chapter 4 (Methods) - presents the qualitative and quantitative approaches to data collection and analyses. Chapter 5 (Development of the Observation Schedule i.e. the Quality Learning Instrument, QLI) presents a brief summary of the literature which informed the development of the main observation instrument, the results of the pilot phase of observation studies and the calibration of the instrument.

Five chapters then present the main findings for each aspect of the study. Chapter 6 (Findings from the Main Observation Studies) details the findings of a series of observation studies in which the observation schedule was used. Chapter 7 (Findings from the Interview Studies) records the results of the one-to-one interviews with the Year
1 teachers and Danish paedagogs and Chapter 8 (Findings from the Questionnaire Surveys of the Year 1 Teachers and Paedagogs) details the analyses of the Year 1 teachers’ and Danish paedagogs’ views. Chapter 9 (Findings from the Parent Questionnaires) presents the findings of the survey of parents’ views; while Chapter 10 (Findings from the Focus Group Interviews) concludes the results section by presenting the views of the three chosen groups of early years experts.

The findings are drawn together in Chapter 11 (Discussion) and Chapter 12 (Concluding Remarks) completes the thesis with discussion of implications raised by the work and ideas for further work.
CHAPTER 2: LITERATURE REVIEW

This chapter begins by setting the study within the context of the play versus formal debate, presenting definitions of early childhood pedagogy and describing the underpinning philosophical, psychological and pragmatic dimensions in support of each school of thought. Drawing on existing research and empirical evidence within the field, it then examines both the outcome and process perspectives of quality which informed the debate. A review of relevant studies relating to teachers' and parents' views of quality is also included. It concludes with a review of research on an early school start within the context of the UK.

2.1 THE PLAY VERSUS FORMAL DEBATE

2.1.1 Defining Early Years Pedagogy

Many attempts have been made throughout the years to define the different pedagogical approaches that inform early childhood education. The 1990s saw a major upsurge in attention to early years education but a comprehensive analysis of policy and pedagogic developments is beyond the scope of this present work. Instead, then, a brief overview from four particular sources: Athey (1990), Bruce (1997), Anning (1997) and Dahlberg, Moss and Pence (1999) has been chosen to provide a spectrum of opinion covering this period.

Drawing on the work of Weikart (1972) and Earwaker (1973), Athey (1990) discussed three pedagogical models associated with early childhood education, namely:

- child-centred;
- constructivist; and
- programmed.

The child-centred pedagogy, in her opinion, places much emphasis on maintaining the child's respect, regarding each child as an "unique individual to be kept happy and interested" (p. 25). Like the former, the constructivist model is said to place much emphasis on the active involvement of children within their environment. However in this case more stress is placed on the role of the teacher in interacting with the child to ensure learning takes place.

In contrast to the former models, which firmly place the child at the heart of the learning process, Athey's third model - programmed pedagogy - has the teacher making the decisions, where "knowledge is conveyed irrespective of its desirability" (Athey, 1990, p. 25).
More recently Bruce (1997) has attempted to classify the pedagogical approaches associated with early childhood education in terms of three perspectives which she called:

- empiricism;
- nativism; and
- interactionism.

The empiricist view, according to Bruce, envisages children as “something to be moulded into shape” (p. 8), where the role of the adult is to select the appropriate knowledge for the child and transmit it to him or her.

The nativist view, however, envisages children as “biologically pre-programmed with a propensity to unfold in certain ways” (p. 8). The emphasis is placed on the child's natural development, where “adults can offer help but never insist upon it” (p. 9). Play is seen as the natural way in which young children learn and the role of imagination and creativity is also stressed.

Bruce explains that the interactionist view also sees play as an important instrument for the young child's development, but unlike the nativist stance sees the adult as having a greater role in the learning process.

A simplified analysis is offered by Anning (1997) who refers to two traditions: the developmental psychological tradition and the elementary school tradition. The former, in her opinion, emphasises the importance of a learning environment where children learn through first-hand experiences in the presence of an adult who works in association with them. The elementary school tradition, on the other hand, stresses the importance of the basic skills of literacy and numeracy where the style of instruction is largely didactic.

Dahlberg, Moss and Pence (1999) attempt to reconcile a more complex picture of interrelated constructions of the young child which in their opinion have “consequences for the whole ecology of the system of early childhood pedagogy” (p. 44). Their categorisations tend to draw on the three above and include:

- the child as knowledge, identity and culture reproducer. Here the young child is viewed as one who “needs to be filled with knowledge, skills and dominant cultural values which are already determined, socially sanctioned and ready to administer” (p. 44). Like Athey’s programmed pedagogy, Anning’s elementary school tradition and
Bruce’s empiricism, the emphasis is placed on transmitting knowledge to the young child.

- the young child as nature or as the scientific child of biological stages. Similar to Athey’s child-centred model, Bruce’s nativism and Anning’s developmental tradition, the child’s development is considered to be an “innate process” (p. 46) which occurs naturally without the need of outside interference.

- the child is seen as a co-constructor of knowledge, identity and culture. The child in this paradigm, like Athey’s constructivism and Bruce’s interactionism, is considered as having a recognised and independent place in society, being “unique, complex and individual” (p. 50). Rather than being envisaged as an ‘empty vessel’ which needs to be filled, the young child is viewed as being ‘rich’ in potential, interacting actively with the world.

Different though these pedagogical models may superficially seem, inherent in all of them is the play versus formal debate in early childhood education. Put simply some of the definitions appear more disposed to a play-based “nursery” type programme where the emphasis is placed on the child’s active involvement in the acquisition of learning, practical activities are advocated and child-initiation is encouraged to a greater or lesser extent. Others seem more disposed to a formal model of schooling where the emphasis is placed on the transmission of skills such as reading, writing and arithmetic and it is the role of the teacher to impart that knowledge.

2.1.2 Reviewing the Debate
The play versus formal debate has become particularly controversial in the light of recent policy initiatives in the Government’s bid to raise standards (see Chapter 1) and is embedded in the contrasting epistemologies of progressivism and traditionalism. As Kirkman (1997) put it “the traditional and liberal camps are once again poised for battle” (p. 1).

Philosophical, psychological and pragmatic viewpoints may be argued to underpin the play versus formal debate and these are examined in turn below.

Philosophical Perspectives
Carr (1998a) takes the view that many of the arguments that exist within this debate can be interpreted principally in philosophical terms. The philosophical perspective that underpins the play-based argument can be explained primarily in terms of the value that is
placed on the young child, where it is claimed that “at the heart of the education process lies the child” (CACE, 1967, p. 9). This is premised on the view that childhood should be a time of exuberance and pleasure when “young children deserve to find themselves, to discover creativity, to learn through play and social encounters” (Gammage, 1992, p. 9) instead of being confronted with the pressures and demands of “accelerated learning” (Hills, 1987, p. 1).

Much of this philosophical discourse is embedded within the progressive ideals propounded by a number of early years pioneers identified by Whitbread (1972) and more recently Anning (1997) as being, among others, Rousseau (1762) and Froebel (1826), and in more recent times Isaacs (1930). According to Wood and Attfield (1996) these pioneers “sought to establish the uniqueness and importance of childhood as a stage in its own right” (p. 17). Drawing on what they called their romantic ideals, Blenkin and Kelly (1996) translated this level of philosophical thought into contemporary society, arguing that it is necessary to divert our attention from the end product of education and focus instead on the individuals who lie at the heart of education.

Aspects of Elkind’s condemnation of formal instruction (1988b) also help to explain the philosophical stance of the play-based advocates’ argument. He drew attention to the way in which pressures from both school and society are undervaluing the importance of childhood. In his opinion the concept of childhood risks extinction in contemporary society where the child has become the victim of overwhelming stress. In his view unless such pressure is released where children are allowed to be children, their self-esteem, pride in their work and sense of accomplishment will suffer.

The words of the United Nations Convention (1990) on the rights of the child sum up the viewpoint of this philosophical position:

“The children of the world are innocent, vulnerable and dependent. They are also curious, active and full of hope. Their time should be one of joy and peace, of playing, learning and growing. Their future should be shaped in harmony and co-operation. Their lives should mature as they broaden their perspectives and gain new experiences” (United Nations Convention, 1990 cited in Pugh, 1991, p. 45).

Aspects of the rationale voiced in favour of an early start to formal schooling appear to draw on the philosophical discourse of Locke (Jeffreys, 1967) which sees the child as a ‘tabula rasa’ to be filled with knowledge. This has been translated into contemporary debate which considers the early acquisition of literacy and numeracy as being necessary for the young child’s development. Brophy in 1982 asserted that much more attention to
what is the “bread and butter of schooling” (p. 4) i.e. instruction in academic content and supervised practice of basic skills, was required. More recently, Turner (1997) has claimed that basic skills are “an essential tool kit” (p. 1) for learning. The value attributed to basic skill acquisition is also inherent in the Government’s remit for raising standards in the UK as evidenced by the introduction of the literacy and numeracy strategies (see Chapter 3).

This philosophical perspective, which stresses the importance of a particular body of skills and subject content, is consolidated in the words of Alexander, Rose and Woodhead (1992):

“...to resist subjects on the grounds that they are inconsistent with children’s views of the world is to confine them within their existing modes of thought and deny them access to some of the most powerful tools for making sense of the world which human beings have ever devised” (p.21: 64).

Engelmann, Becker, Carnine and Gersten (1988) also argued the importance of basic skills in terms of ensuring more positive self-concepts among children. Their reasoning was that children who became competent in academic and other skills would consequently feel good about themselves, and that other persons would communicate positive attitudes towards them in the process.

**Psychological Perspectives**

A psychological dimension also appears to underpin the play versus formal debate where according to Curtis (1986) much of the discussion surrounding the early years curriculum can be explained in psychological terms. The play-based advocates such as Bredekamp (1987) and Sava (1988) dismissed academic instruction in the early years of education on the grounds that it is unnatural and developmentally inappropriate. Instead they endorsed the work of Piaget (1950) who considered children to learn via developmental stages.

Similarly Blenkin and Kelly (1996) claimed that young children’s thinking is qualitatively different from older children and therefore the nurturing of their all-round development requires a specialist curriculum which is appropriate to their needs. Gura (1996) concurred, opposing the National Curriculum on the grounds that it is a premature start to formal activity which as yet makes no sense or is of no use to the young learners who have their “own urgent business to attend to” (p. 151) at this stage of their development.

The developmental inappropriateness of an academic programme was also addressed by Kelly (1994) who suggested that children at the age of four or five are not ready for an abrupt transformation to a formal programme, recommending instead the age of seven or
eight as a more appropriate time to commence more academic instruction. In fact Anning (1994) indicated that if the early years curriculum was actually designed in a manner to take into consideration children’s learning needs perhaps we might “encourage a generation of children with a love of learning rather than groups of dispirited ‘beginning readers’ already feeling that they are inadequate” (p.75).

From a psychological perspective play-based advocates argue that children require a programme which is commensurate with their stage of development; one which, according to the Early Years Curriculum Group (1989), responds to each child’s needs for something familiar, something new and challenging and something which enables him or her to pursue a current interest.

These advocates’ psychological conviction is voiced by Hurst (1991) who stated:

“...we cannot prepare children for an athletic future by making them do exercise programmes designed for older children. Rather we need to prepare them by making sure they have rewarding experiences of success at their own levels now, in order to give them strength and confidence for the future” (p.14)

Compared to the play-based advocates, who seem to draw heavily on developmental psychology, behavioural psychology appears to underpin the arguments of those who favour a more formal approach. Behavioural psychologists such as Skinner (1974) proposed that any healthy animal or person can be taught to perform tasks successfully if the amount of learning is sufficiently small and the reinforcement offered adequately tempting. A number of writers such as Engelmann and Engelmann (1981), Doman (1984), and more recently Woodhead (1999) appear to support these theories, promoting the child’s capacity to be taught reading, writing and arithmetic at an early age. Turner (1990) also lends support to this argument. Referring to the downward trend in British school children’s reading attainment at the age of 7 or 8, he emphasised the need for children from an early age to be taught how to read by means of structured and phonic-based methods instead of relying on child-centred methods. These he termed “reading readiness, linguistic development and the use of books” (p.33) which in his opinion “result in children learning to fail instead of learning to read” (p. 23). Such thinking is reminiscent of views expressed by Dearden (1967) who saw play-based activities as being trivial and lacking any educational quality.

More recent psychological perspectives, from the sub-disciplines of neuropsychology and sociocultural psychology, appear to permeate both strands of the debate i.e. the play and formal. Neuropsychological research such as that of Brierley (1976), Simmons and
Sheehan (1997) and Sylwester (1998) has emphasised the significance of the early years in the development of the brain and has been interpreted from a play-based perspective (e.g. see Andreski and Nicholls, 1994) as promoting the need for active exploration and a range of experiences. Yet this does not mean that neuropsychological research could not also be interpreted from a formal perspective. If the early years have been proven to be so important for brain development then why not take advantage of this and introduce children to skill development at an early stage, something which Woodhead (1998) seems to be recommending in his argument that teachers need to raise their academic expectations of young children.

Similarly sociocultural psychology, which according to Anning and Edwards (1999) draws heavily on Vygotskian theory, can also be interpreted by both play-based and formal advocates. Inherent in the play-based school of thought is the need for young children to co-operate and collaborate with 'significant others' to ensure that profitable learning takes place in line with Vygotsky 's well-known maxim that ‘what children can do with assistance today, they can do by themselves tomorrow’. However sociocultural psychology may also be interpreted by the formal advocates as promoting the need for a greater role to be played by the teacher in the early years of schooling and for more whole-class teaching to take place. Such approaches have, of course, been recommended both in Alexander, Rose and Woodhead’s Paper (1992) and the Government’s White Paper: Excellence in Schools (DfEE, 1997).

Pragmatic Perspective

Wider arguments, posed in favour of both positions, tend to be based on more pragmatic perspectives. According to Anning (1997), the formal tradition is largely embedded in an “utilitarian view that education is about introducing children to the basic skills which will make them into productive citizens and workers” (p. 17). This is also reiterated in the work of Dalhberg et al (1999). They indicate that the emphasis in this school of thought is placed on ensuring a “stable, well-prepared” (p. 45) workforce for the future, and thus as a foundation for long-term success in an increasingly “competitive global market” (p. 45).

This pragmatic argument appears to be inherent in the Government’s remit for the need to concentrate specifically on literacy and numeracy. A recent Department for Education and Employment circular ((DfEE, 1999b) reports on the literacy and numeracy strategies in UK primary schools and quotes David Blunkett’s (Minister of Education) support for such initiatives in pragmatic terms. He emphasises the importance of literacy and
numeracy in “our drive to raise standards”, voicing his confidence that such initiatives will help “make the improvements needed to reach our challenging targets” and will also improve Key Stage 2 results in future years. Thomas (1994) provided an insight into the pragmatic stance taken by many such advocates of formal approaches:

“No matter how far one takes informality or child-centredness, there is simply no point in children coming to school unless they are learning something. Learning to read, write and figure will enable children to become independent citizens and to contribute to the society in which they live, playing some part in changing it for the better” (p. 32).

Some of the arguments voiced by the play-based advocates can also be associated with pragmatism. Katz and Chard (1988) and Katz (1995, 1999) argued that damaged dispositions can emerge from following an academic-based programme. Although she suggested that children can be instructed successfully, for example in reading skills such as phonics, the process of instruction can actually damage the child’s desire and willingness to want to read. Elkind (1981) had earlier propounded the same view, maintaining that when adults impose their learning priorities on young children, this can stifle the child’s intrinsic motivation and result in feelings of guilt and anxiety. Embedded within much early childhood literature (e.g. Guha, 1988, Bruce, 1987, 1997, Moyles, 1989, 1994 and Wood and Attfield, 1996) is the belief that play is essential in the early years to develop the whole child and to ensure that children will possess the skills that are required for later life. As Atkin (1991) argued, the principal medium for learning is play. In play, Atkin explained, children are not learning to fail and seek right answers with little thought, but rather they are developing their “self-esteem, task-orientation, attitudes to learning, persistence, flexibility and creativity” (p. 34).

Summary
In summary, the three basic tenets of the play-based approach from philosophical, psychological and pragmatic perspectives can be described as: (i) the child is placed at the heart of the curriculum, (ii) practice is developmentally appropriate and (iii) the whole child is developed. In contrast, the underpinning arguments in support of a formal approach include: (i) subject knowledge is at the core of the curriculum, (ii) young children can be taught to read, write and do number and (iii) early acquisition of basic skills raises standards.

Although a number of theoretical arguments have been posed in favour of both the play-based and formal programmes, the empirical research addressing the debate also requires consideration. The approach adopted in this thesis is one which considers the play versus
formal debate from a quality perspective within the context of Northern Ireland, and informed by practice in Denmark. The research has necessitated the development of an assessment instrument and a consideration of the views of parents and educators. Although the intention is to review the research concerning each of these issues the literature relating to the development of the observation schedule has been included in Chapter 5 to facilitate the reader.

Existing research and other comment relating to the appropriateness and effectiveness of play and formal early years programmes falls mainly into two categories based on the outcomes of the educative process and on the process itself. These categories are considered next.

2.2 OUTCOME STUDIES

2.2.1 Outcome Studies in the US

The most impressive and rich source of comparative research on the effects of different models of early years provision has been conducted in the US. These studies are essentially compensatory in approach (i.e. attempting to discover which type of curriculum will make amends for economic disadvantage) and experimental in design. The stimulus for them can be traced back to the concerns of the 1960s to find an early years programme which would enable all children, regardless of their social background, to commence formal schooling on an ‘equal footing’. Such research tends to be longitudinal in nature, examining at least three main curricular models. These mainly include a structured academic programme, known in most of these studies as ‘direct-instruction’, a traditional free-play approach, and a constructivist model such as High/Scope in which the philosophy, (as described earlier by Athey, 1990), is based on the teacher and child planning the activities together, carrying them out and then evaluating their success. However the author would argue, on the basis of her studies, that the findings gathered from such research remain as inconclusive as the arguments posed. This view arises from the following critique.

A body of research findings has highlighted the more academic-oriented model as the most successful in catering for the needs of the disadvantaged. One of the most comprehensive of these studies, reviewed by Engelmann, Becker, Carnine and Gersten (1988), has been the National Follow Through Project conducted by “impartial and independent agencies” (p. 310) and assessed in a series of tests by “Stanford Research
Institute and evaluated by the Abt Associates” (Engelmann et al, 1988, p. 310). Based on a large-scale study (approximately 75,000 disadvantaged children from 170 communities took part each year) of students’ performances in kindergarten through to third-grade (i.e. eight to nine year olds), Engelmann et al’s findings favoured the direct instruction model. They reported that it was the only approach where the participants performed consistently and successfully across all measures in contrast to the more child-centred programmes. The direct instruction students also outperformed their child-centred counterparts in cognitive skills of reading comprehension, maths problem solving and maths concepts and they scored adequately in the affective domain also.

Engelmann et al (1988) indicated that these added gains continued throughout primary and secondary levels in terms of better academic performance, better attendance, fewer grade retentions and increased college acceptance at the high school level. Although large in scale, the fact that the children were not assigned randomly to each programme may have weakened the findings to a certain extent. Weisberg’s study (1988) replicated these findings, the direct instruction groups surpassing the performance of their more child-centred peers on aspects of reading, writing and arithmetic, as well as displaying a higher degree of achievement motivation.

Earlier evaluations, such as those conducted by Miller and Dyer (1975) and Becker and Gersten (1982) found similar results, the direct instruction models seeming to ensure greater academic achievement. Meyer’s study (1984) also emphasised the social gains to be derived from more formal programmes. Having compared the long-term performance of subjects who followed a direct instruction model with those who did not, Meyer inferred that the direct instruction programmes were effective in reducing the number of pupils who repeat a grade and drop out from school, while increasing the number of college acceptances.

In contrast to the research above, however, there are a number of studies which emphasise the importance of the more informal and constructivist approach in facilitating the progress of the disadvantaged. The most significant long-running piece of research within this field, has been that initiated by Schweinhart and Weikart, which investigated the effects of differing pre-school models i.e. the High/Scope programme, Distar Instruction (a formal programme) and the Nursery school tradition (Schweinhart, Weikart and Larner, 1986 and Schweinhart and Weikart, 1997). The research concentrated on 68 children from Ypsilanti, Michigan, aged three and four year old between 1967-1970. The
children all came from families of low economic status and were at risk of failing in school. The outcome measures included intellectual and scholastic performance over time, self-reports at age 15 of delinquency, various aspects of social behaviour and attitudes, and mental health, employment and financial affairs. Few significant differences emerged between the curricula in relation to intellectual and academic gains but by age 15 and 23, variations in the areas of personal relationships and community behaviour had become more pronounced. At age 15, the direct instruction participants admitted to twice as many acts of misconduct as those who experienced the more child-centred approaches. They were less likely to be appointed to a school job or office and to participate in sporting activities and in general they were less respected by their families.

By age 23, the results were even more dramatic. In comparison to the direct instruction model, the child-centred graduates were involved in fewer felony arrests of various kinds, they spent less time in special education because of emotional problems, they possessed greater academic aspirations and were more likely to be living with their spouse. Schweinhart and Weikart (1997) concluded that early childhood programmes, which encourage children to initiate and activate their own learning activities, are therefore more beneficial than teacher-directed programmes.

Several criticisms have been voiced against this study on the grounds of its small sample size, several disparities in the characteristics of the sample, the narrow range of measures used and the lack of an independent team of researchers to analyse the findings (Gersten, 1986). Similarly Anning (2000) argues that the success of the High/Scope study may have been more to do with the parental involvement and substantial amount of financial input than the actual interventionist programme. Nevertheless the project remains an important part of the empirical background to the play versus formal debate.

On a less extensive scale, Devries, Reese-Learned and Morgan’s (1991) study adds support to these findings. They found that the more play-based programme they studied was more interpersonally active and that by the age of six the children involved possessed a greater number and variety of negotiation strategies and shared experiences. Furthermore the findings from a recent study (Hart, Burts, Durland, Charlesworth, DeWolf and Fleege, 1998) investigating the effect of early childhood type on stress behaviour, found that more structured programmes induce twice as much stress behaviour among lower socio-economic status children.
It was not only on social and emotional indicators that the informal programmes were deemed to be more superior. Marcon's research (1992), for example, discovered that preschool children who participated in child-initiated learning demonstrated the greatest mastery of basic skills. Similarly, Frede and Barnett (1992) deduced from their findings that when a non-academic whole-child focused programme is implemented in the early years, the academic skills of young children are increased.

In fact Miller and Bizzell's study (1984), based on a sample of 214 children, (90% of whom were black and from low-income families) added a gender dimension to the debate. Their findings suggested that the males from the two non-didactic programmes studied showed significantly higher achievement than males who participated in the more didactic models. Females, on the other hand who followed the didactic programmes partly, but not significantly, out-performed their non-didactic counterparts. They explained their results in the different maturity levels of the two sexes. The girls may have been more capable of processing information by means of observation and verbal instruction, while the boys might have required more kinaesthetic and hands-on manipulation of materials.

A small number of studies have attempted to extend the generalisability of the types of findings to include the effectiveness of early years programmes on the more 'privileged' classes. However such research tends to be small in scale and therefore can not provide compelling evidence in favour of either programme. Stipek, Feiler, Daniels and Milburn's evaluation (1995) of different instructional programmes for young children included both economically disadvantaged and middle-class children. Overall their findings favoured the child-centred programmes on aspects of motivational measures but neither programme proved to be significantly more effective in generating cognitive advantage. If anything, letters and reading achievement were slightly more in favour of the didactic programmes. Hirsh-Pasek, Hyson and Rescorla's research (1990) concentrated entirely on the middle-classes, however like Stipek et al, the evidence amassed did not provide significant academic gains in favour of either programme. They deduced from the findings that academic programmes did not provide any advantage to the middle-class children's scholastic or intellectual development and if anything resulted in a higher level of test anxiety, less creativity and more negative attitudes towards school.

All things considered, then, the research literature does not conclusively support the superiority of the formal over the play-based approaches or vice-versa.

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2.2.2 Outcome Studies Beyond the Confines of the US

One of the most commonly cited evaluation studies of early years programmes beyond the US has been that conducted by Nabuco and Sylva (1995) and Sylva and Nabuco (1996) in Portugal. Not only were the children’s experiences studied within pre-school (by means of the Early Childhood Environmental Rating Scale - ECERS developed by Harms and Clifford (1980) and revised by Harms, Clifford and Cryer (1997)), the progress of some of these children was also assessed during their first year in primary school. This enabled the comparison of the effects of three differing curricular orientations (five High/Scope settings, five with a formal skills curriculum and five in a traditional nursery programme (i.e. Movimento da Escola Moderna) on a longitudinal basis. A control group of children was also included for comparison purposes and all of the settings were selected on the basis of high quality as judged by the researchers in terms of their curriculum category. The test battery included letter identification, reading ten common words, writing own name, addition and subtraction problem-solving skills and measures of pro-social behaviour.

The children in the formal skills settings were found to possess a lower degree of social acceptance and more anxiety about school, while overall the High/Scope children displayed greater academic progress at school on aspects of reading and writing. The superiority of this latter model was attributed to the children’s greater balance between choice and guidance, between cultural play and problem solving and between playing in small groups and sharing with others in the whole class. Research undertaken in Bahrain corroborates this evidence (Hadeed and Sylva, 1996). Having assessed 96 children who attended either an ‘educational’ or ‘care-oriented’ pre-school on measures of intellectual, social and behavioural development as well as ECERS, the findings in this study favoured the ‘educational’ graduates.

Although it may be tempting to conclude that this evidence favours a more structured school-based model, the research indicates that the educationally-oriented centres tended to be more ‘informal’ in actual orientation, practising more flexible and child-oriented practices than were found in the care-oriented centres, which Hadeed and Sylva termed “institutional” (p. 9). According to the authors, although it might appear quite ironic, staff in the care-oriented settings were more insensitive than their educational counterparts, perhaps stemming from the more favourable environment there. The findings also
importantly revealed that in the educationally-oriented centres there were better child-staff ratios, better staff working conditions and a greater selection of facilities.

In New Zealand an important longitudinal study is currently underway, funded by the New Zealand Ministry of Education and the New Zealand Council for Educational Research (NZCER). According to Cubey (1999) the project is designed to discover the impact which children's early childhood education experiences, their activities, family resources and school resources have on the development of their competencies. It is anticipated that such a study will provide in-depth data relating to the effectiveness of differing curricula for the young child. Preliminary findings have suggested that children attending 'high quality' programmes were ahead on aspects of communication, perseverance and social skills. High quality was associated with centres with staff who were fully trained in early childhood education, adequate group size, appropriate ratio of adults to children and staff salaries that acknowledge demands and responsibilities.

2.2.3 Cross-Cultural Outcome Studies

Some cross-cultural studies, which are outcome related, also inform the play versus formal debate. Although most of these studies such as the Third International Mathematics and Science Study - TIMMS (Harris, Keys and Fernandes 1997), have concentrated on children in primary and secondary school, in some cases association between the country's success and the type of early year practice is highlighted. This was illustrated in earlier studies such as Austin and Postlethwaite's secondary analysis (1974) of studies undertaken by the International Association for Evaluation of Achievement - IEA, covering mathematics, reading comprehension and science. Their principal findings stressed the importance of an early school start for mathematical development but such an initiative appeared to be less beneficial regarding reading and science performance. The authors attributed the difference in mathematics, reading and science achievement to the curriculum undertaken. They stressed that mathematical instruction in 'formal' schooling tends to reflect the more sensory-motor experiences commonly practised within pre-school programmes, than reading or science instruction.

Later studies have also attempted to consider the relationship of academic achievement and early childhood education e.g. the International Association for the Evaluation of Educational Achievement (Elley, 1992) which measured the reading standards of nine and fourteen year old pupils from 32 different countries. Initially a correlation was found between the highest achieving countries and a later start to reading instruction, but after
adjustments were made for economic and social development, the pattern in favour of this result was reversed. Earlier Gordon (1987), having undertaken a comparative examination of academic performance in Japan and the US, accredited the higher performance of the Japanese in a skills and knowledge test over their US peers, to the more socially-oriented and problem-solving activities they encountered within pre-school.

In a similar vein, Prais’ comparative study (1997) also referred to the relationship between achievement and the early years of schooling. Although the comparisons are based on too limited a sample to provide conclusive evidence (approximately 200 English and 65 Swiss pupils), Prais tentatively attributed the Swiss nine and ten year old children’s out-performance of their English counterparts on a basic arithmetic test to the more flexible starting age that is the norm in Swiss society. This enables young children to remain in kindergarten for as long as required before entering compulsory education. A more recent study, conducted by Kavkler, Aubrey, Tancig and Magajna (2000) found that from the age of nine, British children, in spite of their earlier start to formal instruction, are outperformed by their Slovene counterparts on tasks of mathematical competence. Although two-way analysis of variance revealed that at the age of 6, English pupils scored significantly higher than Slovene pre-schoolers did on a basic arithmetic test, one year later the difference was immaterial and from then on the Slovene pupils began to take the advantage. The researchers conclude from this study that an early introduction to formal scholastic skills within the English educational system appears simply to reinforce failure for low-achievers, rather than providing the ‘sound beginning’ that is intended.

2.2.4 Summary of the Outcome Studies

Before any conclusive evidence regarding the effectiveness of either the play-based or formal programme can be made, much more rigorous research is required. From these findings it could be deduced, that the advantage of the formal models is explained in terms of advanced basic skill mastery while the success of the play-based models is defined in terms of more social and emotional gains. However it was not the intention of the present study to consider the cognitive or affective impacts of the play-based model observed in Denmark, and the formal model of Year 1 classes, observed in Northern Ireland. Instead it was the process quality of Northern Ireland Year 1 classes that was the main issue.
2.3 PROCESS STUDIES

Before the research referring principally to a process perspective of quality can be reviewed, it is necessary to provide a brief insight into the way in which process quality has been defined.

2.3.1 Defining Process Quality

Katz (1995) offers a comprehensive definition of process quality in terms of four perspectives:

- the top-down perspective;
- the bottom-up perspective;
- the outside-inside perspective; and
- the inside perspective.

The top-down perspective incorporated "selected characteristics of the program (sic), the setting, the equipment and other features" (p.120), whereas in her opinion, the bottom-up perspective considered the way in which the programme was "experienced by the participating children" (p. 120). She explained the outside-inside perspective in terms principally of parental satisfaction and the inside perspective in terms of staff satisfaction.

It appeared to be a form of both the top-down and the bottom-up perspectives of process quality that Andersen (1993) was recommending a few years earlier. He defined quality in terms of the inter-relationship between children and adults, the climate of the setting and the opportunities provided to allow children to explore their surroundings, to concentrate fully and to engage in a variety of activities. His view of quality is illustrated in the following diagram.

Figure 2.1: Andersen’s Model (1993, p.11) of Quality Provision
Laeyvers (1992) provided another definition of quality emphasising the need to focus on the treatment characteristics e.g. the classroom environment, the teacher style, the contents of the programme and process variables, and aspects of pupil activity.

Dahlberg, Moss and Pence (1999) who classify quality in terms of structural criteria, process criteria and outcome criteria, present a more recent definition of quality in early childhood education. Their structural criteria seem to correspond with Katz’ top-down perspective concentrating on organisational features such as group size, staff training, adult-child ratios and the content of the curriculum. Their process criteria incorporate what is taking place within the setting in particular the children's activities, the staff behaviour and the inter-relationships between children and adults as well as parents. Although their outcome criteria are explained primarily in terms of assessing the child’s development, they also make reference to the importance of “customer satisfaction” (p.98), in line with Katz’ outside-inside perspective e.g. parental satisfaction.

2.3.2 European Process Studies
The primarily European-based empirical studies, which have considered quality from a process perspective, will be presented under the following headings:

- a top-down perspective of quality; and
- a bottom-up perspective of quality.

A Top-Down Perspective of Quality
Of the research literature which has attempted to consider the process quality of early years programmes, much has been described as 'top-down' in perspective i.e. concentrating principally on the programme and setting characteristics, rather than the experiences of the children. A particular group of studies, concerned with the overall quality of early years provision in specific countries, are predominant in this field. Most of these studies used the Early Childhood Environment Rating Scale - ECERS (Harms and Clifford, 1980) as their assessment schedule. These included Lambidi and Polemi-Todoulou (1992) in Greece, Lera (1996) in Spain, Karrby and Giota (1996) in Sweden, Lera, Owen and Moss (1996) in England and Hennessy and Delaney (1999) in Ireland.

ECERS was developed in the US to assess a global perspective of environment quality in a range of settings. The scale consisted of 37 items, measuring seven dimensions of quality, including personal care routines, furnishings and display, language reasoning experience, fine and gross motor activities, creative activities, social development and
adults’ needs. Ratings were made on a seven-point scale ranging from excellent (7) to inadequate (1). For further details about ECERS see Chapter 4: (Methods).

Some cross-cultural studies have also considered process quality from a top-down perspective. Tietze, Cryer, Bairrao, Palacios and Wetzel (1996) compared the scores of samples from five countries (Austria, Germany, Portugal, Spain and the United States) using ECERS and the Caregiver Interaction Scale - CIS (Arnett, 1989). They concluded from their findings that the more child-centred approaches of the Austrian and German settings scored highest on ECERS, placing a greater emphasis on children’s free choice and exploration rather than group activity. The more teacher-directed classroom approach of the Spanish settings scored lowest.

Other studies, such as that conducted by Horgan and Douglas (1995), have also considered the ‘top-down’ perspective of process quality using assessment schedules other than ECERS. Based on two large-scale studies in Ireland (Horgan, 1987) and in Germany (Douglas, 1993), two case studies representing the best kindergarten visited in Germany and the most outstanding Irish junior infant class were compared. A multi-faceted data collection method was used, encompassing the Target Child Observation Schedule, (Sylva, Roy and Painter, 1980), interviews, a study of classrooms, a questionnaire and an interaction analysis system. Although the findings suggested that in both countries the early childhood philosophy was child-centred, the German kindergarten was reported to be larger and better equipped, possessing a more favourable staff-child ratio than that of the school in Ireland. The environment allowed children more opportunities for physical development as well as a greater choice of activity. In spite of the high academic status of the Irish staff, it was argued that the German practice of deferring formal learning until the post-kindergarten stage is a more efficient method than that of the Irish programme. According to the researchers, this deferral could result in a greater understanding of the academic subjects when introduced at a later stage.

In a similar comparative approach, Howes and Marx (1992) attempted to inform policy and practice in the US by comparing the quality of French early years practice to their own country’s practice. Their comparison was based principally on a top-down

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1 CIS concentrates on the type of interaction that early childhood teachers have with the children in their care. CIS consists of 26 items categorised into four sub-scales i.e. positive interaction, punitiveness, persuasiveness and detachment. Scores range from (1) not at all i.e. the teacher was not observed using this behaviour, to (4) very much.
perspective, concentrating specifically on adult/child ratios, teacher training and teacher-child interaction. Drawing on data collated from a study tour, they argued tentatively for the importance of teacher education and training in a programme’s quality. Moreover, Karrby’s study (1991) in Sweden and Britain also considered the process quality of childcare centres, concentrating specifically on the function and organisation of the preschools. Results of two earlier studies (Karrby, 1984) and (Sylva, Roy and Painter, 1980) were compared according to the activities on offer, the linguistic interactions and the group patterns. In contrast to those in Sweden, the British centres were found to be more educational in orientation where adult-led cognitive activities were more common. The results also revealed that in spite of the more favourable staff-child ratio and group sizes in Sweden, the frequency of dialogue between children and adults was similar in both countries.

The Bottom-Up Perspective of Quality
The studies that have concentrated on a bottom-up perspective of quality are fewer in number. Those that do exist tend to be Scandinavian based. Broström, Hännikäinen, de Jong, Rubenstein-Reich and Thyssen (1993), for example, undertook a collaborative project which focused on children’s involvement, as an indicator for quality in early childhood care and education, to produce a description of the quality of children’s lives in Danish, Swedish and Finnish early years centres. The main purpose of the project was not to compare the quality of provision in the differing contexts but to derive a better understanding of high quality provision for the early years child. The data collection methods used included observations in four settings in both Denmark and Sweden and in two settings in Finland. Interviews with both pedagogues and children were also conducted in each of the settings. In 1997 Hännikäinen, de Jong and Rubenstein-Reich reported the findings from this project. They emphasised the importance of children participating fully in activities and working together as a team. Other quality features included the importance of the adults’ role and the need for children to be respected. They concluded that the actual activity type was subservient to these features.

A study carried out in Finland (Hujala-Huttunen, 1991) explored children’s own views about their experiences in early childhood programmes. A random sample of children in third, fourth and fifth grade from nine Finnish cities and three rural areas were asked to write about their experiences and memories in day care centres, pre-school and family day care. The results showed that children’s experiences in pre-school were more positive.
than the other settings and Huttenen suggested that this might have emerged from the
balance between play and educational guidance as well as the developmentally-
appropriate practice that was on offer.

A particularly interesting study within this field was that conducted by Broström (1995,
1998a) which compared the education, motivation and social competence of six-year-olds
in a play-based kindergarten in Denmark and a more formal setting in the US. The main
methods of data collection were observation, interviews and conversations in everyday
situations. Two different sets of criteria were included as a means of describing the level
of children’s learning motivation and social competence. A quantitative analysis was
included; each of the time-sampled observations was counted and analysed, based on
whether they were teacher or child initiated. A survey was also administered to 378
Danish and 120 US parents.

On the basis of the research, Broström discovered that the six-year-olds in the US
academic-oriented kindergarten scored higher on measures of learning motivation than
their Danish peers. However the Danes displayed a greater degree of social competence
encountering less difficulties when participating in-group activities. While some
inferences can be drawn from all of the above studies about the process quality of early
childhood establishments, such studies remain small in scale and their generalisability
remains limited. Many questions remain unanswered regarding the quality of the
children’s learning processes in a number of contexts and a more comprehensive body of
work is clearly required.

2.3.3 Parents’ and Teachers’ Perceptions

Some researchers have addressed teachers’ and parents’ perceptions of high quality
practice in the early years, which also help to inform the play versus formal debate. In
New Zealand, for example, Farquhar (1991) found that parents and staff considered safety
and security as the foundation of an early childhood programme with the aim of
developing confidence, independence and positive social interaction.

Tobin, Wu and Davidson’s comparative study (1989) considered the views of parents and
eyearly childhood educators in Japan, China and the US. They were asked to complete
“rating sheets” (p.9) based on video-based evidence of practice in each of the contexts.
Based on these comments, Tobin, Wu and Davidson deduced that despite both Japanese
educators and parents being concerned about their children’s educational progress, they
believed that an academic curriculum was inappropriate for early years children. The Chinese parents and teachers, on the other hand, stressed the importance of academic instruction commencing from an early age and the need to teach children how to behave properly and to instil in them an appreciation for the value of discipline. The US educators and parents gave a more mixed response; some of whom saw the need for an academic head start in the early years while others were more apprehensive about such an initiative, fearing the social and emotional consequences. In all three cultures, the authors indicated that early years staff referred to an increasing pressure from parents to prepare children for later academic success.

Research conducted by Broström (1996) considered the perceptions of both Danish teachers and parents towards high quality practice in the early years. The results indicated that many teachers and parents considered independence and self-esteem to be of importance, as well as the development of positive social competence. Furthermore they gave credence to the importance of play in the early years, accompanied by empathetic adults. After having analysed the findings in terms of philosophical, democratic and ecological debates, Broström deduced that if the desire is to develop in children the skill to participate fully in democratic life, then the content of the curriculum should emphasise the freedom of the mind, rather than a didactic, educational approach.

Some studies have considered British teachers’ views of the National Curriculum. For example the Swansea University Impact Study, referred to by Cox (1996), found that on the one hand the head teachers welcomed the tighter control on the children’s learning activities, while others criticised the over-emphasis of subject content. Respondents in Sylva, Siraj-Blatchford and Johnson’s study (1992) on the impact of the National curriculum on pre-school practice in four English authorities also reported different results. Although in most cases the early years teachers referred positively to the change in assessment and the increased continuity between nursery and infant class, some teachers feared the demise of the play curriculum and too much parental pressure for school-like activities.

Some informative findings were also derived from a cross-cultural study undertaken by David (1992) with regard to British parents’ perceptions of early years education. Having interviewed a selection of parents of pre-schoolers in both Belgium and Britain, in small groups and individually, it was found that Belgian parents sent their children to pre-school so that they could learn to become more independent and socially adept. British
parents emphasised rather the need for children to spend more time on reading and writing activities in preparation for school.

2.3.4 Summary of the Process Studies

Many of the process studies have concentrated on a top-down perspective of quality where well trained staff, a high staff-child ratio and a spacious environment have been identified as features of high quality practice. The majority of these process studies have used ECERS as their observation schedule and for this reason much more extensive research using other assessment instruments is also required before any conclusive evidence can emerge. This appears also to be the case for those studies that have concentrated on a bottom-up perspective of quality and those which have considered teachers’ and parents’ perceptions. Although they provide insightful comment on the play versus formal debate, much more research is needed to allow for a more comprehensive argument.

The principal concern of the present research study is the appropriateness of Year 1 classes in the context of Northern Ireland, where children are obliged to enter formal schooling in the September after their fourth birthday. For this reason a detailed review of the early school start literature in a British context is required. Although it is not compulsory for children in Great Britain to start formal schooling until after their fifth birthday, many children are admitted to reception classes in primary schools at the age of four. Research concentrating on the quality of this initiative has therefore a particular relevance to the present study.

2.4 RESEARCH IN A BRITISH CONTEXT

2.4.1 An Early School Start

Some studies, such as that conducted by Tymms, Merrell and Henderson (1995, 1997a), have attempted to address the issue of an early school start from an outcome perspective. The data used in Tymms et al’s study came from a larger project known as the ‘Performance Indicators in Primary Schools – PIPS’ study, where a series of assessments in reading and mathematics were carried out on 1700 pupils at the beginning and end of their reception year. An analysis of the results using regression techniques enabled the researchers to decide whether the pupils had progressed and if so how this might be explained. The results revealed that many children who start school at the earliest possible opportunity make the most rapid progress, in comparison to those who stay at
home or attend nursery. The reception year was found in particular to have had an impact on the literacy and numeracy of children. A follow-up study (Tymms, Merrell and Henderson 1997b) on the children at the end of Year 2 revealed that the gains made in reception had a lasting positive impact.

In contrast, other research studies such as that conducted by the National Foundation for Educational Research - NFER (Sharp, Hutchinson and Whetton, 1994 and Sharp and Hutchinson, 1997) have shown less positive effects. The data used in this study was based on results amassed from the Key Stage 1 Standard Assessments Tests. To evaluate this data the NFER drew a random sample of around 4,000 seven year olds from 310 schools in 73 local education authorities and background information about each child was requested from their teachers e.g. number of terms of infant schooling, pre-school experience etc. The sample was divided into three age groups i.e. autumn born (September-December), spring born (January-April) and summer born (May-August) and various tests of variance were applied. From the analysis they deduced that children who start school close to their fourth birthday perform less well than those born at the same time of the year who start school later.

Of those studies that have assessed the quality of an early start from a process perspective some interesting findings have emerged. The Audit Commission (1996) engaged early years inspectors to rate approximately 50 settings of different types in eight local authority areas. The inspectors indicated that although strengths and weaknesses were found in all settings, nursery education scored higher than all other types (reception, day nursery, playgroup and private) overall. Two features, which were associated with high quality settings according to the researchers, were staff trained specifically for working with young children and an age-appropriate curriculum.

According to studies conducted by HMI (OFSTED 1993, 1998) the overall standard of work in reception classes was considered satisfactory or better in nearly 80% and 90% respectively. The findings of the more recent study of the two suggest, however, that the least progress and development was observed in those classes where there was a "premature use and over-dependence on worksheets which impoverished the pupils’ experience of language" (p. 7). Similar comment was made about the use of commercially produced maths schemes, which were considered to result in poor work. Reference was also made to the fact that inside and outdoor play was not being used to its full potential in more than half of the reception classes. These findings were reflected in a
number of studies such as Sestini (1987), Bennett and Kell (1989) and Anning and Billett (1996) all of whom referred to the inappropriate facilities and lack of opportunities for play in the settings they studied.

Cleave and Brown’s research (1989, 1991) also endorsed this argument, finding that not only was there a lack of space, lack of access to outdoor play, and an inappropriate child-staff ratio but the curriculum and teaching methods were inappropriate for four year olds’ needs. Some studies such as that by Pascal and Ghaye (1988) highlighted the stress that can be encountered from an early school start due to the unfavourable conditions that children can meet, the unsuitable curriculum and in some cases the inappropriately trained staff (Pascal, 1990 and Blenkin, Rose and Yue, 1996, Anning and Billett, 1996). The findings of the British Audit Commission (1996) also support these results.

Some studies report on the lack of challenge offered in reception classes. Perry’s early study in 1982 found that in infant school, four year olds can spend a quarter of their time accommodating to primary routines and having much less opportunity for language development than in nursery school. Eight years later Clark’s findings (1990) endorsed this evidence. Arising from a review of research in the field, she concluded that reception classes may offer a less challenging and stimulating environment than that of the preschool unit. Although Bennett and Kell (1989) found that reception proved an excellent start for some children, they revealed how more than half of the observed tasks were mismatched (i.e. inappropriately matched to the young child’s level of development), lacked challenge and real world relevance and concentrated too much on reading, writing and arithmetic. More recently Anning and Billett (1996) also revealed particular concern with the over-emphasis placed on teacher-direction in reception classes, which tended to result in low levels of motivation and concentration.

Sestini’s results (1987) indicated that an early start to formal schooling was of little advantage to children’s reading, writing and arithmetic, in spite of the more teacher-directed activities encountered. In the same year Osborn and Milbank (1987) who followed children from birth and tested their cognitive, verbal and mathematical skills at the age of five and ten found similar results. They deduced that learning through play is more beneficial for four-year-old children and under than the formal activity of the typical reception class.

Mills and Mills’s recent report (1998), in association with a Channel 4 production entitled ‘Dispatches’, is particularly relevant to the present study. In an attempt to gain an insight
into the quality of the British early school start, they examined early childhood educational experiences on offer in three European settings, namely Hungary, German Switzerland and Flemish Belgium - all successful in terms of international school achievement. The results revealed that they all possessed similar high quality early childhood programmes. Their main goals were to prepare children for effective formal learning which begins on entry to school proper at the age of six or seven. In all three countries, emphasis is placed on attention, listening and memory skills, appropriate group behaviour, conceptual understanding and phonological and motor skills. In all cases it was found how use of abstractions were avoided as well as protecting the children from failure. The researchers used this information to highlight the inappropriateness of the earlier school start in Britain, which they stress “far from helping young children, actually damages many of them for life” (Mills and Mills, 1998, p. 17).

Another television documentary, Panorama (BBC, Oct. 1998), alluded to the quality of Norwegian early years practice as compared to that in the United Kingdom. In interviews with parents and early years experts in both countries, an indication of the process quality in both countries was presented. It was noted how children in Norway are allowed to enjoy their childhood for a longer period of time than in Britain, but at the same time acquiring skills which will be beneficial in later schooling. The staff-child ratios were considered to be more favourable and they stressed how all teachers are trained in the field of early childhood, compared with only one third of British teachers. The report also indicated how children in Norway spend up to one year on letter acquisition, language training and listening skills and even at age 9, Norwegian children attend school for only four hours. They postulate however that in spite of this later school start and more relaxed early years practice, Norwegian pupils are doing better than their English counterparts on international reading tests.

There are also major on-going studies which are addressing the issue of quality preschool programmes for the early years child. The Effective Provision of Pre-school Education Project (EPPE), conducted by Sylva, Melhuish, Sammons and Siraj-Blatchford, is a major five year study which began in January 1997 with the principal aim to assess the effectiveness on pre-school children of differing early years provision in the
UK (Sylva et al, 1997 and Sylva et al, 1999). Such research, the most intensive of its kind in the UK, aims not only to provide the ‘career path’ (Sylva et al 1997, p. 3) of a large sample of children from entry to pre-school until the end of Key Stage 1, but also hopes to establish whether some forms of pre-school provision are more effective than others for children’s cognitive and affective development. This type of research is likely to be particularly insightful for the formal/informal debate as children’s experiences in reception classes are compared with other forms of less academic provision. It is of particular interest that the study has been extended to Northern Ireland, investigating the effectiveness of four types of pre-school provision attended by the majority of three and four year olds in Northern Ireland - namely playgroups, nursery schools/classes, private day nurseries and reception classes. It is necessary to note however that the four year old in compulsory schooling is not considered as the study concentrates specifically on pre-school provision.

Another British study led by Pascal and Bertram and known as the Effective Early Learning Project, began in 1993 in an attempt to improve the quality and effectiveness of young children’s learning (see Pascal, 1995). Such an objective has required a wealth of detailed qualitative and quantitative data from early childhood settings across the UK, allowing a comparative evaluation to be made of different kinds of provision. However as yet no findings, to the author’s knowledge, have been published. Recently the same researchers (Pascal and Bertram, 1999) have planned a subsequent study known as the AcE Project (Accounting Early for Lifelong Learning) which will extend their initial research and development project to look at the relationship between process and outcomes in a variety of different pre-school settings.

All of these studies must be read with some caution in the context of early years research in Year 1 classes. Although they provide insightful information about the experiences offered in reception classes, children in reception classes have not yet commenced compulsory school. For this reason they are not expected to follow a national curriculum, as is the case for the four-year-olds in Northern Ireland, the subjects of the present research project.

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2 Although the overall findings from this research are not intended to be published until Spring 2004, some preliminary findings are beginning to emerge. It has been reported that maintained pre-school provision is of higher quality than private or voluntary run institutions.
2.4.2 An Early School Start in a Northern Ireland Context

To the author's knowledge research considering the quality of the compulsory early school start in Northern Ireland does not yet exist. One study by Pinkerton (1990), although quite discursive in style, addressed the quality of Northern Ireland reception classes. She commented on the lack of outdoor facilities and dining hall arrangements for four-year-old children within primary school. She referred also to the early introduction of four-year-olds to the formal teaching of reading and mathematics and the lack of opportunities for structured play in general. More parental involvement was also considered to be necessary. Like their English and Welsh counterparts children in reception classes do not follow a national curriculum and they are not obliged to attend.

2.5 OVERALL SUMMARY OF THE LITERATURE REVIEW

In summary, a review of the discursive and empirical-based literature about the play versus formal debate has reinforced the dichotomy that exists about a high quality curriculum for the early years child. Although some outcome studies have been carried out in an attempt to assess the effectiveness of one curricular model against the other, most of what does exist tends to be US-based and little conclusive evidence has been revealed.

Of the research which is process in perspective, much has been top-down in design, considering the quality of the experiences on offer in terms of child-staff ratios, curricular implementation, teacher training etc. The research, which has attempted to assess the process quality from the child’s perspective, is more limited. The literature review identified that although research is growing in this area, particularly in Scandinavia, further study is necessary to provide an indication of the quality of the experiences on offer to young children in play-based and formal settings. Further study is also required into teachers’ and parents’ views about the programme they follow. Although some reference has been made to the more conservative mindset of British parents in comparison to their European counterparts, much more research is necessary before any conclusions can be drawn.

This appears also to be the case for the ‘early school start’ research in a British context. Although several studies have identified the inappropriateness of reception classes for four-year-old children, others have referred to them in more positive terms, arguing that starting school early can ensure a head start in academic skill development. The lack of
literature about the early school start initiative in the Northern Ireland context was reinforced. Both process and outcome measures are required to provide an insight into the quality of this initiative i.e. children aged as young as four years two months being obliged to follow an assessment-led and subject-based curriculum. Before the impact of the early school start can be evaluated, some degree of knowledge about the quality of the experiences on offer is necessary, an issue the present study attempts to address in the light of Danish play-based practice.

Previous studies involving both Northern Ireland/Britain and Denmark (see e.g. Curtis, 1989 and Cohen and Hagen, 1997) have mainly been cross-cultural in perspective, attempting to compare policy and provision in both contexts. Although this is not the intention of the present study, it is imperative to gain some insight into the recent policy initiatives in both Northern Ireland/Britain and Denmark to become more familiar with the thinking inherent in the programmes, before any evaluation process is addressed. Policy issues are therefore considered in the next chapter.
CHAPTER 3: EARLY CHILDHOOD POLICIES IN BRITAIN/NORTHERN IRELAND AND DENMARK

This chapter provides an insight into the policy initiatives that have been taking place in the contexts of Northern Ireland and Denmark from an historical perspective. The details are briefly and chronologically presented from the turn of the nineteenth century until the present day.

3.1 INTRODUCTION

The purpose of this chapter is to examine the trends of early years provision in Northern Ireland and Denmark from its initiation in the late eighteenth, early nineteenth century, to the present day. This brief historical analysis is deemed necessary in order to highlight the way in which policy initiatives have influenced practice in both contexts. As Anning (1997) explained “an analysis of the past can help us to understand what is happening now and to anticipate what may happen in the future” (p. 1).

3.2 THE BRITISH CONTEXT

3.2.1 Pre-Plowden

At the beginning of the nineteenth century, British children as young as three and whose mothers had to go out to work, were admitted to Dame schools (child minding facilities provided by elderly women) or the baby and infant classes of monitorial schools.3 In spite of the efforts of philanthropists such as Owen (1771-1858), who attempted to provide more appropriate facilities for young children (see Rusk, 1951), Whitbread (1972) recorded that strict discipline, formal instruction and much rote-learning characterised the practice experienced by many of these young children.

In 1870 elementary education became compulsory for all five-year-olds in England and Wales in contrast to many European countries where the statutory school age was 6 or 7 years. Although the designated age of compulsory schooling was recognised as 5, many children aged 3 and 4 continued to attend the infant classes, in some cases giving rise to over-crowding and unsuitable conditions (European Commission, 1995). Continued efforts were made by early years pioneers such as the McMillan sisters (Margaret, 1860-1931 and Rachel, 1859-1917), Montessori (1870-1952) and Isaacs (1885-1948) to

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3 Monitorial schools, according to Whitbread (1972), consisted of one large classroom in which large numbers of children of different ages and standards were taught by child monitors, with one master in charge.
develop more appropriate provision, details of which are recorded in the works of, for example, Whitbread (1972), Curtis (1986) and Anning (1997).

In 1933 the Hadow Report (Board of Education, 1933) emphasised that public elementary schools not only tended to "dull the children’s minds" (p. 30) by providing an unsuitable curriculum, but were also detrimental to their health, depriving them of fresh air, exercise and adequate sleep. According to the Hadow Report the curriculum should have been seen rather in terms of "activity and experience, rather than knowledge to be acquired and facts to be stored" (p. 93).

Eleven years later, in 1944, the Education Act (Great Britain, 1944) imposed an obligation on local authorities to provide nursery schools and nursery classes for all children, not only the disadvantaged. The need to secure places for children younger than five years was also made statutory by both the Education Act (Scotland, 1946) and the Education Act (Northern Ireland, 1947). However this reform was put on hold in an attempt to provide adequate schooling for the older children first.

Whitbread (1972) related that the war years had fostered new attitudes towards the educational needs of 3 to 5 year old children, not only among policy makers but also some mothers who were beginning to accept that their young infants did not need to be with them 24 hours a day and that the break from each other actually did both parties some good. Private nurseries began to develop at greater speed during the subsequent years but remained essentially the privilege of the middle-classes. It was during this time that the Pre-school Playgroup Association (PPA) was established, the first play group opening in Marylebone in 1961 (David, 1993).

Much of the practice in the infant schools at this time remained quite formal in approach, where according to Mellor (1955) “.... In all too many of our infant schools one still sees young children seated, for the most part of the day, in static desks all facing the blackboard, receiving instruction rather than education” (p.28).

3.2.2 From Plowden (1967) to the Education Reform Act (1988)

The next major report which had impact on the provision for young children was that of Plowden (CACE, 1967). This report injected a progressive input into the British education system as a whole, drawing on the developmental psychological theories of that time and the earlier work of pioneers such as the McMillan sisters, Montessori and Isaacs. Reference was made to the individual needs of children as they grow and develop, and the
importance of providing a play-based curriculum in accordance with the interests of the
children. Such child-centred thinking is embodied in the following citation:

"At the heart of the education process lies the child. No advances in policy, no acquisitions
of new equipment have the desired effect unless they are in harmony with the nature of the
child, unless they are fundamentally acceptable to him" (p. 7).

Following this report there was some expansion of nursery provision for three and four
year olds, especially in deprived areas, in line with the compensatory movement that was
spreading from the US. The European Commission (1995) reported that in 1972 the
White Paper for England and Wales (Education: a Framework for Expansion) proposed
the extension of pre-school facilities on at least a part-time basis for three and four year
olds. Similarly in 1978 the Government published “Day Care and Nursery Education for
Under Fives in Northern Ireland- Policy and Objectives” which established a framework
for further expansion of nursery provision in Northern Ireland (European Commission,
1995).

However as a result of the recession of the mid 1970s to mid 1980s, such hopes were
dashed and the Education Act of 1980 (Great Britain, 1980), according to the European
Commission, reduced the obligation, which had been placed on local authorities to
provide a pre-school programme (Education Act 1944), merely to an enabling power.

In 1988 the Education Reform Act (ERA) for England and Wales (Great Britain, 1988)
introduced a National Curriculum which according to Sylva, Siraj-Blatchford and
Johnson (1992) represented a “radical attempt to provide a national standard entitlement
for all pupils of compulsory (5-16) school age” (p. 41). The content of the curriculum was
to be subject-based, containing a range of attainment targets for each of the subject areas
which described what children were expected to know, understand and do between the
ages of 5-16. Moreover children were obliged to be formally assessed at the end of each
key stage i.e. at 7, 11, 14 and 16 by means of Standard Assessment Tasks (SATs).

Although the former act referred only to compulsory age children i.e. five and above, it
was followed by a DES Report in 1989 (Aspects of Primary Education: The Education of
Children Under Five) which defined a quality curriculum for the pre-school child in terms
of nine skill areas, emphasising the role of play in young children’s learning. No
reference was made to enhanced provision for young children, but as David (1993)
reminds us, between 1980 -1991 there was a 32% increase in the number of places for
children under statutory school age in the reception classes of English primary schools.
The Education Reform Act was almost replicated in the Education Reform Order in Northern Ireland (Great Britain, 1989) a year later, with some slight variations to establish the place of Religious Education, Irish and the Cross-Curricular Themes. However one major difference was the compulsory school start age, where children in Northern Ireland were now obliged to commence formal schooling in the September after their fourth birthday. The reason for this early school start was in accordance with the wish of Dr Mawhinney, then Minister of Education, who wanted every child in Northern Ireland to have seven years of compulsory schooling before attending secondary school (Hayes, 1990). The curriculum included Level 1-attainment targets within which the Year 1 children were expected to work. Examples of these levels of attainment are included in appendix 3.0.

Another major piece of legislation with particular reference to the care of young children, known as the Children’s Act, was introduced in England and Wales in 1989 (Statutes in Force, 1989). In essence the principal features of the Act referred to the care, upbringing and protection of children, particularly those who were considered ‘in need’ Little reference, if any, was made to the educational aspect of the early years of schooling. As Candappa, Bull, Cameron, Moss and Owen, (1996) stressed, the main aspects of the Act involved placing a duty on local authorities to regulate pre-school services in the private and voluntary sectors and to undertake a review of day-care facilities once every three years.

It was not until 1995 that a similar piece of legalisation was implemented in Northern Ireland (Northern Ireland, 1995). Much of the content replicated that of the Children’s Act with great emphasis being placed on the provision of appropriate care for the young child.

3.2.3 Initiatives of the 1990s

The 1990s began with the publication of a report entitled “Starting with Quality”, more commonly known as ‘the Rumbold Report’ (DES, 1990). One of the report’s main findings emphasised the need for an appropriate play-based curriculum for the under fives.

Such proposals were echoed in 1994 in an independent report by Sir Christopher Ball (the Start Right Report, Ball, 1994). This report argued that the compulsory school starting age should be raised from five in the UK to the age of six, in line with the practice of
most European countries. A “triangle of care” (p. 7), according to Ball, should be formed by parents, professionals and the community to ensure the best possible childhood for children.

In an attempt to provide these “integrated centres”, as recommended by Ball, initiatives were undertaken in Strathclyde, Manchester, North Tyneside and Islington (Penn and Wilkinson, 1995). Similarly a Northern Ireland report entitled “Policy on Early Years Provision for Northern Ireland” (DHSS and DENI, 1994) set out an array of principles and policy objectives in an attempt to maximise the quality and scope of provision. The report also recommended that one year of nursery provision should be made available for all those children under compulsory school age whose parents wished to avail of it, taking account of the lower age limit for compulsory schooling that had been introduced in Northern Ireland.

In July 1995 a nursery voucher scheme was introduced by the Government to support the education of four-year-olds in England and Wales. The main elements of the voucher scheme proposal included a voucher worth £1,100 to be made available to the parents of every four year old and a set of learning goals which would determine whether a setting could qualify for the receipt of vouchers (Audit Commission, 1996). This set of learning goals was known as the “Desirable Learning Outcomes” developed by the Department of Education and Employment and School Curriculum and Assessment Authority (DfEE and SCAA, 1996) which emphasised early literacy, numeracy and development of personal and social skills, knowledge and understanding of the world, physical and creative development. These six areas of learning were defined by a separate set of skills, knowledge and competencies which children were expected to have achieved by the age of five and were intended, according to DfEE and SCAA to provide a foundation for later achievement.

This scheme was greatly criticised (Crouch, 1996, Pugh, 1996a Mouatt, 1997) and it was eventually abandoned when the government was changed in 1997. Typical of the criticism was that voiced by Morris in 1997:

“The voucher scheme failed in all its objectives. It did not lead to the provision of a high quality nursery place for every four-year-old; it only led to damaging competition between providers and an unnecessary paper chase. Today we are doing away with all that bureaucracy and putting in place a planning process that has the needs of children at its heart” (DfEE 1997b).
Some significant events were taking place in Northern Ireland during this time with regard to Year 1 classes. In December 1994, Michael Ancram, then Northern Ireland Minister of Education, announced that additional resources were being made available for the primary sector and that these would be used specifically to improve the quality of Year 1 provision. This led to the initiative known as ‘Making a Good Start - Improving the Quality of Primary 1 Provision’ (DENI 1995) which referred to the need for a practical and age-appropriate curriculum at this stage. Funding was made available to ensure the employment of a part-time classroom assistant in every Year 1 classroom in Northern Ireland and any additional funding was to be used to improve the quality and range of books and equipment available to Year 1 children.

The Labour Government’s commitment to education was embodied in their electoral campaign slogan ‘education, education and education’ and ratified in their white paper entitled “Excellence in Schools” (DfEE, 1997a). In this paper they stressed their determination to provide a good quality early years education alongside child care and family learning where appropriate; careful assessment of children when they start primary schools; smaller infant classes to support more effective teaching and learning; and a national programme to raise standards of literacy and numeracy and to develop positive attitudes towards learning.

In their effort to raise the status of early years they introduced initiatives including the establishment of early years forums, the creation of early excellent centres and the development of a National Childcare Strategy (DfEE, 1998a). Such an effort comprises not only an aim to raise the quality of care and to provide more child care provision, but also to attempt to make child care more affordable and accessible to all parents and children.

As part of their initiative they replaced the Desirable Learning Outcomes (DfEE and SCAA, 1996) by a set of learning goals to be covered in the foundation stage (i.e. for children aged three to five). These areas of learning provide a set of early learning goals, which indicate what each child should have achieved by the end of the reception year (DfEE and QCA, 1999). A sample of these goals is included in appendix 3.1.

Initiatives were also announced in Northern Ireland in the report ‘Children First: The Northern Ireland Childcare Strategy’ (DHSS, T&EA and DENI, 1999). This report is designed to act as a component of the overall national programme and one of its main issues concerns the provision of more childcare places. With regard to this matter new
proposals for pre-school provision were set out in documents entitled Pre-school Education-A Consultative Document (DHSS and DENI, 1997) and Investing in Early Learning (DENI and DHSS, 1998).

In light of the recognised differences between Northern Ireland and Great Britain (i.e. the lower compulsory school starting age and the single entry to compulsory schooling in the September of each year) the Government has introduced a programme for pre-school expansion, phased according to the availability of resources and targeted towards particular groups of children. Preference is given to socially disadvantaged children aged four before the first of September in their final pre-school year (DENI, 1999a).

A document entitled “Curricular Guidance for Pre-school Education” (DHSS, CCEA and DENI, 1997) was made available to all pre-school institutions in Northern Ireland. This document outlined the way in which good practice could be promoted and the different aspects of development to be enhanced. The latter was classified into seven areas almost synonymous with those identified in the Desirable Learning Outcomes (DfEE and SCAA, 1996) but including early experiences in science and technology. Unlike the Desirable Learning Outcomes however, they are not envisaged as a form of assessment, but as a means to “support the efforts made by staff in their review, development and improvement of existing provision” (DHSS, CCEA and DENI, 1997, unpaginated).

3.2.4 Recent Policy Initiatives and Year 1 Classes in Northern Ireland

Although many of the recent policy initiatives concerning early years have applied primarily to pre-school provision, there are two main policies which have impacted on 4 to 5 year olds in Northern Ireland Year 1 classes: baseline assessment and target setting.

Baseline Assessment

Since the autumn term of 1998, all English and Welsh primary schools have a statutory duty to carry out a baseline assessment of children when they commence compulsory schooling. The aims of such practice were identified by the Schools Curriculum and Assessment Authority (1997), now known as the Qualifications and Curriculum Authority (QCA), as providing information “to help teachers plan effectively to meet children individual learning needs and to measure children’s attainment using one or more numerical outcomes which can be used in later value-added analysis of children’s progress” (p. 2).
The assessment process can be undertaken by using any one of 90 accredited schemes, the content of which must:

- cover language, literacy, mathematics and personal and social development;
- provide guidance to teachers on how assessments can inform planning;
- provide numerical outcome(s) for value-added analysis; and
- specify a period in which Baseline Assessment must be taken (and is within seven weeks). (Baseline Assessment, 2000)

Much of the Northern Ireland baseline assessment system finds resonance with the English scheme but it is still in a pilot stage. However some differences require acknowledgement, the most important being the age at which the assessment takes place. As compulsory schooling commences one year earlier in Northern Ireland than in England and Wales, most children will be assessed at the age of four years instead of five. Furthermore, according to CCEA (1999c), in Northern Ireland only one accredited scheme exists with the aim of “ensuring that children are assessed in a consistent way across schools” (p.1) and the assessment process is conducted by means of a best fit approach rather than raw scores. This scheme concentrates on Language Development, Early Mathematical Experiences and Personal, Social and Emotional Development, each of which is divided into three progressive stages. Each stage consists of a number of descriptions, which help to categorise the child within the appropriate stage. Like England, the emphasis is placed on the development of literacy and numeracy, each making up one third of the entire scheme, while all aspects of personal, social and emotional development together comprise the remaining third.

**Target Setting**

As part of the Government’s strategy to raise standards, national targets have been set in literacy and numeracy. These project that by the year 2002, 80% and 75% of eleven-year-olds will have met the standards expected for their age in English and mathematics respectively. This has led to a formalised programme of literacy and numeracy known as the Literacy Strategy (DfEE, 1998b) and Numeracy Strategy (DfEE, 1999a) respectively being implemented in England and Wales throughout the primary school and incorporating the reception class. The strategies require that one hour is spent on literacy every day and 45 minutes on mathematics in all Key Stage 1 classes.
Although these strategies have not been made compulsory in Northern Ireland, (based on Inspectorate evidence that literacy and numeracy teaching is of good quality), particular initiatives have been introduced to ensure better standards in both subjects. These initiatives include:

- helping teachers become more skilled in identifying the specific weaknesses of pupils with literacy and numeracy problems and in tackling these weaknesses effectively and as early as possible;
- promoting higher standards across the whole ability range especially among boys; and
- underpinning both aspects, the need to recognise, disseminate and build on the valuable lessons learnt from the many examples of good practice in the teaching of English and Mathematics, both within Northern Ireland and further afield (DENI, 1998).

In order to meet these aims schools are encouraged to write a policy on how they intend to provide literacy and numeracy, while at the same time setting targets for raising standards in both subjects as part of their school development plans. From autumn 2000 schools will be required to publish their current position in terms of their key stage assessment in relation to English and mathematics and the targets they have set themselves so that progress can be monitored (DENI, 1998, p. 10: 2.7). All 4 to 5 year olds in Year 1 classes are subject to this process of raising overall standards in both these subject areas.

### 3.2.5 Summary

Against this backcloth of recent early years development in Britain as a whole, it would appear that at the beginning of a new century, little change regarding practice for the 4 to 5 year old in compulsory schooling in Northern Ireland has taken place. Despite funds being offered for additional resources and staff, these young children are obliged to follow a subject-based and assessment-led curriculum. Furthermore as many would argue (e.g. Anning, 1998; Pugh, 1996b; Blenkin, Rose and Yue, 1996), the content of many of the recent policy initiatives appear to be ‘formalising’ early years practice by placing greater emphasis on learning outcomes and teaching of the 3Rs - reading, writing and the arithmetic. With this in mind it is necessary to turn our attention to policy initiatives which have informed practice in the early years context of Denmark.
3.3 THE DANISH CONTEXT

3.3.1 Pre-1976

In general an historical account of Danish early years provision is much easier and straight-forward to present than that of Britain, principally on the grounds that formal schooling does not commence until the age of 7 and all practice which accommodates 4 to 5 year olds is therefore pre-school based. In addition the system has remained constant throughout the years, strongly embedded in the social sector of government policy. This long tradition of provision has been referred to by Vilien (1993) who emphasised the close co-operation between the government and the public and private sectors to generate good quality day-care, based on developmentally appropriate practice for pre-school children.

The first day care centres, known as asylums, began to appear in Denmark in the early 1800s to facilitate working class women who needed to go out to work. Approximately 50 years later, in the second half of the 19th century an increasing number of private fee-paying institutions were established for more affluent families. Many of these were based on Froebelian and Montessorian theories (European Commission, 1995).

Oberhuemer and Ulich (1997) reported that around the end of the nineteenth century efforts were made to combine these separate forms of provision and in 1901 the Folkbørnehaveforeningen (Folk-Kindergarten Association) was formed in an attempt to create full-time kindergartens for a broader range of the population. It was not until 1919 however that the government began to provide grants for these børnehaver (kindergartens) and issued a statement that the premise of such provision should be embedded in a policy of care and education.

This was the first official statement regarding the programme to be implemented in such institutions - a programme which still exists, the philosophy of which, according to Bugge (1993), has been gratefully influenced by the work of Grundtvig (1783-1832). This poet and clergyman established, in the words of Bjerg, Callewaret, Ell, Mylov, Nissen and Silberbrandt (1995), “a radical alternative to the predominant way of looking at education in the nineteenth century” (p. 31). Grundtvig openly expressed his distaste for rote learning. Instead he placed the individual at the core of pedagogy and emphasised the importance of each child realising his/her full emotional and intellectual potential (Bjerg
et al., 1995). According to Bugge (1993), Grundtvig has attached much importance to the freedom and responsibility of each individual as well as to the need for social interaction.

Public financial assistance, (up to half of the running costs for kindergarten provision), was extended in the 1933 social reforms and these initiatives were enhanced in 1949 when the state recognised the need to subsidise all institutions, not only those catering for low-income families (European Commission, 1995). But according to Langsted and Sommer (1993) it was not until the beginning of the 1960s that “national day care policy changed from being primarily a residual one into a component of the institutional welfare state” (p. 149). In 1964 a new childcare law was passed, enabling all children to be enrolled in day-care irrespective of their socio-economic background and stipulated that two-thirds of the cost would be financed by means of taxes and the remainder would be paid by parents. Regarding the programme itself, Langsted and Sommer (1993) argued that this law gave more priority to the “developmental and pedagogical function” (p. 150) of the kindergartens, reinforcing the need to move beyond custodial care.

3.3.2 The Social Assistance Act (1976)

The next major reform which impacted upon early childhood practice in Denmark was known as the Bistandslov Number 333 (the Social Assistance Act) and implemented in 1976 (Ministry of Social Affairs, 1976). This placed a duty on the local municipalities to provide the number of places in day-care centres, while at the same time reinforcing the fact that day-care centres must possess social and educational aims which complement what is happening in the home (Leira, 1987). The Circular of Day Care Offers (Ministry of Social Affairs, 1976) provided some general information concerning the aims of such provision:

“Public day care institutions have the task, in co-operation with the parents, of creating a milieu for the children that can supplement the upbringing in the home. The aim should be that particular children develop as open and independent human beings with the willingness to be co-operative, and try to employ their knowledge to improve their own and other people's living conditions. Public day care institutions, therefore, have to offer the children security and protection, and furthermore maintain the possibilities for experiences that stimulate their need for exploring the environment in such a way that their field of knowledge is developed and their activity enhanced. This task has to be pursued with consideration of the different age and developmental levels of the children” (Langsted and Sommer, 1993: 159/160).

This was the only stipulation the government made about practice in the early years establishments. Staff were free to implement these recommendations however they wished, but close co-operation with parents was essential. Knutsen (1997) revealed that
as a result of the implementation of this act, Denmark was the first country to decentralise
its childcare.

In 1976 the Government, according to Engberg (1989) and Vilien (1993) established the
Child Welfare Commission, which in 1981 defined a number of goals for a policy on the
child. These goals emphasised the need:

- to respect the child as an individual in the family and in society;
- to give the child a central position in the light of grown-ups;
- to promote in a wider sense the physical conditions in which children grow; and
- to even out differences in the conditions of life of children - both in a material and a
cultural sense.

3.3.3 Initiatives during the 1980s

Based on the initiatives of the late 1970s, the 1980s began with increased childcare
provision and a better-developed childcare policy. However as the Inter-Ministerial
Committee on Children (1996) reported, such advancements were “offset by a rise in
demand” (p. 13) due to an attitudinal change within society regarding working mothers.
To cater for the increased demand, Leira (1987) reported that the Ministry of Social
Affairs in November, 1982, indicated to the local authorities that they should seek
cheaper and more cost-effective forms of day care to provide the extra child care places.
During the period of 1982 and 1985 the number of staff within institutions was reduced in
relation to the number of children.

In an attempt, perhaps, to reduce the number of children in kindergartens (Leira, 1987), it
was decided in 1985 to make it possible to start the kindergarten class/børnehaveklasse4
one year earlier i.e. at the age of five rather than six years. Yet it is necessary to note that
few parents actually availed of this opportunity, preferring their children to remain in the
kindergarten atmosphere for as long as possible (Broström, 1995, 1998).

In 1987 an Inter-Ministerial Committee on Children was established as an
interdisciplinary body to deal solely with matters regarding children and families. Its
central objective was to “create coherence and unity in areas relating to children and
families, and to take initiatives across sectors to improve the living conditions for
children and young persons while growing up” (Ministry of Social Affairs, 1997, p.5).
Oberhuemer and Ulich (1997) emphasised that as a result of this an important move was made to include policies for children in all spheres of political decision-making, hence presenting a more integrated approach. Such efforts to cater for the needs of families became even more pronounced in 1989 when the government prepared a report on parents’ affiliation with the labour market, attitudes to working hours and obstacles to reform. The issues scrutinised included:

- providing opportunities for families to spend more time together;
- developing options to enable both parents to look after their children;
- establishing schemes to provide care for sick children;
- alleviating burdens on single providers; and
- improving parents’ opportunities to support their older children.

(Inter-Ministerial Committee on Children, 1992 and Ministry of Social Affairs, 1992)

Also in 1987 the government finalised its decentralised policy for pre-school education by devolving all responsibility for pre-schools, including financial management, to the local authorities. According to the Ministry of Social Affairs (1992) this decentralised model is “based on the wish to strengthen local involvement, and thereby the development of a broad and wide-ranging selection of different day-care opportunities, adapted to local conditions and requirements” (p. 5).

3.3.4 The Social Assistance Act (1990)

In 1990 further reforms, emerging from the new Social Assistance Act, were implemented and these influenced practice in day care centres. Five broad principles relating to the social and pedagogical objectives of provision were stipulated in the Circular of Day Care Offers for Children and Youth. These stated that:

- the children’s development, well-being and independence must be promoted;
- children must be listened to i.e. children should have a say in the planning and implementation of activities in day-care;
- parents must have influence. Not only must parents gain an insight in to the daily life of their child within the day-care setting, but also be involved in the actual decision-making programme;

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4 This is a class within a primary school where the emphasis is placed on preparing children for 'formal schooling', almost synonymous with the British idea of reception.
services are a resource in preventative work, providing support for those families in need; and
services must be a part of the area’s overall provision for children i.e. day-care must extend into the wider community. (European Commission Network on Childcare, 1996).

Parental participation was formalised in 1993, according to Oberhuemer and Ulich (1997), when all day-care centres were obliged to possess an elected committee of parents and staff representatives, with the former comprising the majority. The purpose of this committee has been to decide on the centre’s educational objectives and activities to be offered the allocation of funds and staff appointments. However decisions concerning individual children still lie with the leader of the centre who is also responsible for ensuring that the decisions made by the committee are implemented.

Throughout the 1990s further initiatives have taken place to create more child care provision. The European Commission Network on Childcare (1996) emphasised that a publicly funded place would be guaranteed for all young children between the ages of 1 and 6 years. The latest figures would suggest that 57% of all children between 6 months and 2 years, 83% of 3-5 years olds and 63% of 6-9 years olds are being catered for by public day care facilities (Ministry of Social Affairs, 1997).

3.3.5 Recent Initiatives Impacting on Danish Early Years Practice

The recent Act of Social Services (1998) has made reference to the need to support children’s all-round development, including their self-esteem and social capabilities (section 8:2). Emphasis is also placed on the need to offer children the opportunity to participate in decision-making and problem-solving exercises in order to facilitate the growth of independence and social interaction (8:4). Furthermore the Act recommends that day care settings should stimulate the children’s imagination, creativity, linguistic and physical development, the possibility to interact with others and to explore their surroundings (8:3). It is also highlighted that the programme offered should render opportunities both for learning and playing, emphasising the role of the adult in children’s development.

The Danish Ministry of Education (1999) has also emphasised in “Childhood Life in Denmark in the Year 2000” that a better co-operation between kindergartens and schools is required in an attempt to make both institutions aware of the different learning
programmes and traditions that are followed in each context and to benefit children's all-round development.

At the beginning of the twenty-first century, it would appear that the Danish government is beginning to stress, more than ever before, that 'learning' (principally through the medium of play) should be part of the kindergarten lifestyle.

3.3.6 Summary of the Policy Initiatives in Both Contexts

This chapter has helped to contextualise the study, providing an insight into the relevant policies that have informed the play-based model in Denmark and the more formal model in Northern Ireland. An historical review of the Danish policies shows little change down the years in the Danish governments' philosophy regarding the early years child. Emphasis appears to be placed on providing a form of early years provision that ensures the young child's emotional and social development. Although recent policy initiatives have stressed the importance of learning in the early years, play remains the focus of this practice.

A review of the British policies has been much more complex. Efforts were made from as early as the nineteenth century to increase the availability of provision for the early years child. These government initiatives were mainly in the form of providing reception classes in primary classes for four-year-old children. It was not until the 1990s that the early years of schooling became a major political issue. After the Education Act (1988) in England and Wales and the Education (Northern Ireland) Order (1989), which placed much emphasis on accountability and learning outcomes, the subsequent governments saw the need for increasing early years provision to ensure better overall academic standards in later years. Accompanying the importance accredited to the early years of schooling, has been a formalisation of practice where baseline assessment, target-setting and basic skills (i.e. literacy and numeracy) are at the heart of the learning process. This appears to be particularly the case of 4 to 5 year olds in Northern Ireland due to the low starting age for compulsory schooling.

This review of policies in both the Northern Ireland and Danish contexts highlights the cultural and political differences which would undermine a purely comparative study on the aspects of quality provision. As mentioned earlier, this is not the intention of the present study which instead attempts to examine the extent to which the learning experiences on offer in the formal Northern Ireland model are appropriate for 4 to 5 year
old children in the light of the play-based approaches. Attention will now be turned to the way in which the present study was conducted i.e. the Methods.
CHAPTER 4: METHODS

This chapter details the methods used in the study, to meet the demands of the objectives set. It begins with a brief rationale of the design and phasing of the work, commenting initially on the need for an eclectic approach and the validity and reliability of the study as a whole. Details of the samples, data collection and data analysis are presented, along with a justification for the choices made, structured in accordance with the main phases of the study.

4.1 INTRODUCTION

The overall purpose of the study was to undertake an examination of the play versus formal debate in early childhood education, by exploring the extent to which the Northern Ireland Year 1 model is appropriate for the 4 to 5 year old child. This focus led to the following objectives being targeted:

- to develop an observation schedule which would allow the quality of the formal programme (as exemplified by Northern Ireland Year 1 classes) and the play-based programme (as exemplified by the Danish model) to be assessed;
- to evaluate the quality of the formal and play-based models according to a data set of quality learning indicators considering:
  - the children’s actions,
  - the strategies and approaches of the educators involved, and
  - the environment;
- to explore and examine Northern Ireland teachers’ and Danish pedagogues’ perceptions of a high quality learning programme;
- to gain an insight into parents’ views of the programme their children follow in both contexts; and
- to examine the extent to which the views of policy influencers, teacher educators and practising teachers reflect the findings of this research project as well as taking into consideration their proposals for the way ahead.

4.2 OVERALL DESIGN OF THE STUDY

The guiding principle of the research design was to ensure that the methods employed would be ‘fit for purpose’. From as early as 1972, Parlett and Hamilton were calling for the need to ensure that the problem defined the methodology used rather than the contrary. More recently, Clarke and Dawson (1999) also highlight the need for the objectives to dictate the methods used stating “Evaluators are exhorted to use whatever
methods appear to be best suited given the nature and context of the evaluation situation” (p. 62).

The objectives identified in this study demanded an eclectic approach which encompassed not only qualitatively rich, illuminative data (from direct observations, interviews and questionnaires) but also some degree of statistical analysis, principally in the form of an attitudinal analysis. The qualitative emphasis of the study was important for three reasons:

- to provide the essential first-hand evidence through what Miles and Huberman (1994) term “thick descriptions that are vivid and nested in a real context” (p. 10). The research objectives demanded an illuminative account of “real practice” (p. 10) in both the play-based and formal programmes on which the study would be built.
- to supply the detailed information required for the evaluative process, rather than a set of quantitative measures that would do little to explain the judgements made. Walsh, Tobin and Graue (1993) also recommended the use of descriptive methods for this purpose commenting that “... as researchers, we have measured people, but we have not listened well to them. We have gone into classes and come out with little but numbers, as though the day-to-day interactions of human beings who spend large portions of their waking hours in classrooms could be reduced to computations” (p. 465).
- to suit the principal subjects of the study i.e. young children who tend to be less disposed to test-like situations. According to Pascal, Bertram, Mould and Hall (1998) more accurate results emerge from observing children’s actions, especially when supported with discussions of adults who work with them. (The inclusion of a Danish context in the research sample demanded that observations should act as the primary assessment procedure as the researcher would have needed to be a fluent Danish speaker to have conversed freely with the children).

Although the primary methodology was qualitative, a research imperative involved extracting the views and opinions of a wider collection of early years practitioners than was possible by means of observations and interviews alone. A survey of attitudes was therefore required, and this involved the factor analysis of the data, adding a quantitative inferential statistics dimension to the study.
The use of an array of data collection methods has been recommended by a number of writers from as early as Parlett and Hamilton’s work (1972) to the present day e.g. Denzin and Lincoln (1998) and Clarke and Dawson (1999). These writers have been advocating an eclectic design to ensure a more in-depth understanding of the issue in question. Kirk and Miller (1986) had earlier used the analogy of sight to indicate the importance of employing a range of methods, stating that: “Natural vision is binocular, for seeing the same thing simultaneously from more than one perspective gives a fuller understanding of its depth” (p.12).

4.2.1 The Overall Validity and Reliability of the Research Design

The eclectic design also allowed for a process of triangulation, which in turn helped to ensure that more reliable and valid judgements would be made. Essentially the validity of the study was strengthened by the range of qualitative methods employed, and the care taken to ensure that judgements in relation to the data were tested against other expert’s views. The inferential statistical analysis of the questionnaire responses added an objective dimension to the research, though this, in turn, was subject to subsequent judgmental interpretation.

In order to maximise the reliability and generalisability of the study, randomised samples for the main observation studies and the attitude-scale survey were employed. Although this was not the case for the play-based programme, as the settings to be evaluated and the paedagogs to be surveyed were chosen principally for convenience purposes, a Danish early years specialist, Professor Stig Broström, carried out the process, seeking as representative a sample as possible.

It was decided also, in an attempt to enhance the objectivity of the study, to describe in detail all aspects of the decision-making process as proposed by Kirk and Miller (1986) and to support such decisions with a strong theoretical base. Moreover the researcher, aware of the subjectivity that permeates all studies despite their design, attempted to be as explicit as possible from the outset of the study, identifying any assumptions, values and biases that may have been present, as suggested by Miles and Huberman (1994).

More specific details referring to the validity and reliability of the individual data collection methods will be presented in the sections which follow.
4.3 PHASING OF THE RESEARCH

The study was designed to proceed in three phases:

- the first phase of the study, broadly the development phase, encompassed a comprehensive literature review, a pilot series of observation studies to immerse the researcher in the various contexts and to enable the design of the observation instrument, and a calibration of the instrument using the experience of early years experts;
- the second phase of the study, broadly the implementation phase, covered the main series of observations using the assessment instrument in 50 settings i.e. 28 Year 1 classes in Northern Ireland and 22 kindergartens in Denmark. A questionnaire survey of teachers was also conducted, addressing a random sample of Year 1 teachers throughout Northern Ireland and a sample of Danish pædagogs;
- the final phase of the study, broadly the final analysis and reporting phase, incorporated a series of focus group interviews with three groups of early years experts in Northern Ireland - members of the Inspectorate and advisory services, higher education tutors from Northern Ireland’s two teacher training colleges, and a group of school-based Key Stage 1 co-ordinators.

In addition, some aspects of the work e.g. the interview studies of Year 1 teachers and Danish pædagogs, and the administration of parent questionnaires, straddled different phases of the research design. The study was largely developmental in approach i.e. later phases of the research depended upon data collection in earlier phases, but a degree of overlap was also necessary. For example the final stage of the observation studies ran in parallel to the administration of the attitude-scale survey.

4.4 SAMPLING

4.4.1 The Development of the Observation Schedule

Although the development of the observation instrument was based on a comprehensive review of both discursive and research-based literature pertaining to how young children learn (see Chapter 5: the Development of the Observation Schedule), some degree of empirical evidence of practice in the play-based Danish model and the Northern Ireland Year 1 model was required to inform the development process. As the researcher had no experience of the play-based approach it was necessary to be immersed in a sufficient
number of settings to become familiar with the programme. Even though the researcher had an in-depth knowledge of her own Year 1 class in Northern Ireland, it was considered necessary to gain an insight into other Year 1 classes also.

Eight kindergartens were selected for visiting for two full days each in the city of Århus and in ten primary schools in several large towns in the Northern Ireland Southern Education and Library Board area for one school day each. Letters were distributed initially to explain the purpose of the visit and to seek consent. This was followed by a telephone call to make arrangements for the visit. Only two Year 1 teachers refused, one due to personal reasons and the other as a result of a time-clash with a general inspection. Two alternative schools were then chosen.

The number of settings to be visited held no significance. What was of greater concern was to ensure that the chosen settings were representative of both programmes. In Northern Ireland all primary schools are obliged to follow the Northern Ireland Curriculum and teachers are trained primarily in one of two teacher training colleges. Therefore, there is no great disparity within Northern Ireland primary school provision, except the way in which it is delivered by individual teachers, a variable which cannot be controlled. Two Year 1 teachers next door to each other in the same school might teach differently from two teachers 30 miles apart. No form of national curriculum is followed in the Danish kindergartens, but the visits were arranged by a Danish early childhood expert to ensure as representative a sample as possible.

4.4.2 The Main Observation Studies

The Northern Ireland Year 1 classes
The purpose of the main observation studies was to put the assessment schedule into practice to assess the quality of the experiences on offer in both the play-based and formal settings. In an attempt to protect against selection bias and to ensure as representative a sample as possible, the Northern Ireland Year 1 classes were randomly chosen.

All primary schools (excluding the Irish-speaking schools) in the Greater Belfast area, were numbered from 1 to 136 (the number of schools in this area). By means of the most basic method of random sampling i.e. drawing numbers from a hat, 34 settings were then selected. The ratio of the sample to the population of schools in the area was therefore 1:4 or 25%. A letter was sent to the principal in each of these targeted settings, explaining the rationale for the study and seeking permission to visit a Year 1 class. This was followed
by a telephone call to make arrangements for the visit, if they accepted. Only six of the principals refused admission, two because their schools were undergoing a general inspection, two because they already had student teachers in and two because the Year 1 classes had substitute teachers.

A total of 28 schools provided the observation sites for the research. It was decided that the use of the assessment schedule in 20 settings would provide sufficient evidence of the quality of the experiences on offer in the Year 1 classes and that a further eight observations would be undertaken later to allow the evaluations and inferences collected from the earlier studies to be tested and consolidated.

_The Danish Kindergartens_
Unlike the Northern Ireland Year 1 classes which were randomly selected, the Danish kindergartens were chosen by the collaborating Danish early years expert, Professor Stig Broström, to provide as representative a sample as possible, while at the same time ensuring that at least one paedagog in each setting was a fluent English speaker. Although 25 kindergartens had been targeted in the Greater Copenhagen area, time constraints only allowed the researcher to visit 22 of them for the six hours needed each day. Fifteen settings were considered adequate to provide a general picture of the quality of the learning experiences on offer. Like the Northern Ireland sample, a further seven evaluations were then carried out one year later to enable the consolidation and the collection of additional information if necessary.

4.4.3 _Interview Studies_
The teacher in each of the 38 Year 1 classes observed in Northern Ireland was interviewed. In the Danish kindergartens it was mainly the leader who was interviewed (30 in total) unless they felt uncomfortable speaking English, in which case another paedagog was interviewed. On five occasions the interviews were conducted with more than one paedagog, providing a more comprehensive view.

4.4.4 _Attitude-Scale Survey_
The main purpose of the attitude-scale survey was to gain an insight into the Year 1 teachers’ and Danish paedagogs’ perceptions of a play-based versus formal programme for the 4 to 5 year old child. In so doing an attempt was made to increase the generalisability of the study by addressing a variety of schools throughout Northern Ireland instead of concentrating specifically on the Greater Belfast area. Financial
constraints prevented targeting the entire Year 1 teacher population. Instead a process of systematic sampling (a method recommended by Pedhazur and Schmelkin, 1991) was used to provide a representative selection of Year 1 teachers.

The sample frame was based on a list of all primary schools in Northern Ireland, numbered 1-910. For convenience purposes and for financial reasons, the sample was restricted to 150 schools i.e. approximately one sixth of the total population of primary schools in Northern Ireland. The targeted schools were chosen by selecting every sixth number from a list of numbers 1-910, which had been previously randomised by a computer program. The selected numbers were then matched to the appropriate primary school. It was to these schools that a questionnaire, covering letter and stamped addressed envelope were dispatched. A second questionnaire was also included for the 30 largest targeted schools in an attempt to increase the number of Year 1 teachers’ responses. In spite of sending a reminder letter, the response rate was relatively low, approximately 50%. As a result the initial factor analysis had insufficient responses for stability to be established and a second survey was undertaken. The sampling process was undertaken in a similar fashion, selecting every second school from the random list of schools, excluding the 150 already chosen.

As the Danish survey was needed for some aspects of comparison, a sample of Danish pædagogs (150) was chosen by Professor Stig Brostrøm, and the selection criteria were principally opportunistic. Of the 150 questionnaires distributed:

- 50 were sent to each kindergarten in the Gladsaxe municipality and in this way a variety of ‘pædagog types’ were being addressed;
- 50, sent through a kindergarten association known as BUPL (the Danish National Union of Pre-school Teachers), were distributed to a number of kindergartens in the Copenhagen region. Once again a selection of ‘typical’ pædagogs was considered;
- 50 were sent via another Danish kindergarten association, which in the past was Christian, oriented. Although some still have a Christian background, the majority nowadays is secular in thinking.

By employing this selection procedure the researcher could argue that the pædagogs who answered the questionnaires were to some degree representative of ‘typical’ Danish pædagogs. However it is necessary to emphasise that the responses came from pædagogs only in the Copenhagen and Gladsaxe region and as a result, this raises the question as to
whether paedagogs in other areas of Denmark, particularly the rural regions, would answer in the same way. Although it is impossible to give a definite response, evidence from other studies such as that undertaken by Broström (1996) suggested that no significant difference existed between paedagogs’ responses from the cities and the countryside.

4.4.5 Parents’ Questionnaires
Questionnaires were randomly distributed to ten parents of children in most of the Northern Ireland Year 1 classes (three classes in Northern Ireland did not participate) and all of the Danish kindergartens. A total of 650 parents was targeted i.e. 350 in the Northern Ireland Year 1 classes and 300 from the Danish kindergartens. The Year 1 teacher/kindergarten leader was responsible for returning the questionnaires in the envelope provided. The researcher’s address was also included on the introductory letter to enable those parents who wished to return their responses directly to do so.

4.4.6 Focus Group Discussions
Three focus group discussions with early years experts were arranged. These were planned to include members from the Inspectorate and advisory services, higher education teacher educators and Key Stage 1 co-ordinators. It was intended that each of the focus groups should not exceed more than ten. Invitations (see appendix 4.0) were issued to all the inspectors with responsibility for early years, all the early years assistant advisory officers in the education and library boards and two members of the Northern Ireland Council for the Curriculum, Examinations and Assessment (CCEA) with responsibility for early years education. All early years higher education tutors in both teacher training colleges were also invited as well as a selection of Key Stage 1 co-ordinators from each education and library board (recommended by the early years assistant advisory officer in each education board). A relatively large sample was targeted, as the researcher was aware that due to other commitments some of these experts would be unable to attend. Table 4.1 provides details of those who attended in comparison to the number invited.
Table 4.1: The number of experts invited/attended the focus group discussions

<table>
<thead>
<tr>
<th>Experts</th>
<th>Number Invited</th>
<th>Number Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspectors</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Advisory Officers</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>CCEA Members</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Higher Education Tutors</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Key Stage 1 Co-ordinators</td>
<td>25</td>
<td>11</td>
</tr>
</tbody>
</table>

Two additional experts (a primary advisor from the Belfast Education and Library Board and a psychologist), having heard about the focus groups, asked permission to attend one of the discussions. An agenda was distributed to all who responded positively, outlining the format of the focus group and defining the areas to be discussed (see appendix 4.1). This will be discussed later.

4.5 DATA COLLECTION

4.5.1 The Development of the Observation Schedule

Existing Assessment Schedules
The first phase of the study was designed to develop an observation schedule against which the learning experiences in the play-based and more formal programme could be assessed. A review of the literature enabled the researcher to decide that existing assessment schedules were inappropriate for use in this research project. Many were eliminated on the grounds that they were test-bound. For example those used in Miller and Bizzell’s (1984) study concentrated primarily on measures of IQ and academic skills and more recently studies such as that of Sundell (1992), Tymms (1995) and Hadeed and Sylva (1996) have included aspects of reading, writing and arithmetic as the key source of assessment. These ‘outcome’ approaches are of course valuable in their own right but were inappropriate for this study.

Existing schedules, designed to assess the process quality of early childhood settings such as Harms and Clifford’s Early Childhood Environment Rating Scale - ECERS (Harms and Clifford, 1980 and Cryer, 1996), Farquhar’s Quality Review Checklist, QRC (Farquhar, Smith and Crooks, 1991) and Balageur, Mestres and Penn's proposals (1992) for measuring quality, were also judged as inappropriate for the purposes of this study for the following reasons:

- many of these instruments tend to concentrate on the “top-down” perspective of quality (Katz, 1995, p.120) e.g. accessibility of the provision, the curriculum on offer,
the adults’ needs, i.e. structural features which were not the main concern of this study;

- some aspects of their content could be described as pre-school in orientation, with the main emphasis being placed on ensuring that the child is adequately cared for and not referring specifically to the learning processes such as motivation, concentration, independence etc., which represented the main focus of this study. For example an entire section of ECERS related to “personal care routines” including greeting/departing, meals/snacks, nap/rest, toileting/diapering, and health and safety practices;

- some of them, it could be argued, favour a developmental play-based approach from the outset e.g. in the section entitled “programme” in Farquhar’s QRC, there was an underlying assumption that the learning medium should be play. The use of such schedules may not be appropriate for more formal programmes. Statham and Brophy (1992) in England and more recently Hennessy and Delaney (1999) in Ireland have argued both, that some of the ECERS subscales involve an excessive amount of adult-direction e.g. in relation to the supervision of gross motor activity. In item 20, the highest score can only be awarded when the staff are considered to be using the activities to an educational end rather than simply to ensure the children’s safety. Some aspects of ECERS may not be considered suitable to use therefore in some play-based programmes.

Some schedules such as that used in the Effective Early Learning Project (Pascal, 1995) have attempted to focus on the learning processes by means of the Involvement Scale previously devised by Laevers (1992). However the term involvement was considered too general for the purposes of the present study, in that it provided an overall rating rather than specific reference to individual indicators such as the level of motivation, concentration, confidence etc. observed. Broström, Hännikäinen, de Jong, Rubenstein-Reich and Thyssen (1996) also criticised the Involvement Scale for over-emphasising the academic aspect of learning with little reference given to the social and emotional perspective of development.

It could be argued that other measurement schedules such as that devised by Jowett and Sylva (1986) and by Broström (1995, 1998) have been regarded as too narrow in focus for use in the present study, concentrating on only two or three aspects of quality practice.
For example the former schedule evaluated the children’s level of cognitive challenge, linguistic competence and social interaction while the latter concentrated specifically on the children’s consciousness of their own learning and their level of social competence.

In other instances however, the instruments are so comprehensive (such as the inspection schedule devised for nursery and primary schools (OFSTED, 1995)) that a single visit to an early years setting may not have been sufficient to carry out the appropriate data-collection. There is also the danger that such a schedule might be considered as biased to the British system, having been developed by OFSTED. This may also be the case of the assessment criteria devised for the purposes of Baseline assessment both in Northern Ireland and elsewhere in the UK. The inappropriateness of these existing schedules led the researcher to devise an in-house instrument, based on a literature survey of how young children learn (see Chapter 5) and a series of pilot observations.

The Pilot Observation Studies
During each of the initial series of visits, the intention was to gather as much observation data as possible against a triangle of interaction: children, teaching and the environment, based on the thinking that children's learning does not take place in isolation (see e.g. Vygotsky, 1978; Brofenbrenner, 1989 and Dahlberg, Moss and Pence, 1999). Therefore a global perspective of quality was to be developed in an attempt to increase the overall validity of the findings i.e. the observations were to be triangulated by means of a variety of sources to provide a clearer picture of the quality of the learning experiences.

The purpose of this immersion in the Year 1 and kindergarten settings was to identify the various aspects of the early years experiences that could later be structured into an observation schedule for the main study. The format of the observation therefore involved constant note-taking during the time of the visits, structured only in terms of processes and interactions around the children and teachers, and descriptive detail of the environment as appropriate. On average, the field notes covered up to 20 A4 pages of loosely written notes per observation.

Both video recordings and photographs supported the descriptive field notes. The benefit of recorded material was emphasised by Atkinson and Heritage (1984), indicating that they help to control “the limitations and fallibilities of intuition and recollection” and they also “expose the observer to a wide range of interactional materials and circumstances” (p.84).
During the pilot observation studies the researcher adopted a non-participant mode referred to as the peripheral-member-researcher by Adler and Alder (1987). This role allowed for a degree of detachment in spite of the researcher’s knowledge and experience of the Northern Ireland Year 1 context and in this way guarded against the intrusion of bias (Clarke and Dawson, 1999). During the period of observation, the researcher attempted to remain as inconspicuous as possible by dressing similarly to the staff in both contexts and assuming a low profile.

The field notes themselves were guided by the researcher’s awareness of the main features of such settings as derived from the literature and her experience. The way in which the QLI was developed from this series of pilot observations is presented in section 4.6.1.

4.5.2 The Main Observation Studies

The second phase of the study involved using the Quality Learning Instrument (QLI) in a number of settings in both the Danish kindergartens and the Northern Ireland Year 1 classes and it may be viewed in appendix 4.2. The QLI was used in two ways: firstly as an in situ observation schedule and then as a format for the analysis of the data (to evaluate the quality of the children's experience). The data analysis is described later.

For data collection the QLI was not used as a checklist but rather as a lens through which the settings could be assessed. It offered nine themes against which the judgements were recorded. These themes (discussed more fully in Chapter 5) were:

- motivation
- concentration
- higher order thinking skills
- confidence
- independence
- well-being
- social interaction
- respect
- multiple skill acquisition
The note-taking took a form similar to the pilot phase in as much as it was free-flowing and constant during the visit, but was deliberately structured against the themes and the triangle of interaction (children, teacher, environment) to assist later analysis.

The QLI did not include any form of timing procedure, as this was not considered appropriate to capture the essence of process quality required for this study. This decision avoided the risk that perhaps the researcher may get so involved with implementing the timing procedures that salient aspects of practice may be overlooked. The only reference to time involved recording whether the observations were conducted in the mornings or afternoons, as the children’s and adults’ energy levels may have affected the quality of activity observed. Unlike schedules used by Tizard, Blatchford, Burke, Farquhar and Lewis (1988), which attempted to provide a description of time spent by children on particular tasks, the present study was more concerned with how and why particular actions were taking place.

Validity and Reliability
The validity and reliability of this phase of the study, was established in the use of an assessment instrument, the design of which was embedded in practice, the contents of which were verified by a group of early years experts from both programmes and the judgements of which were calibrated against experts’ opinions (see section 4.6.2). The fact that the same instrument was being used across a number of sites in both programmes added a degree of reliability to the study as Denzin and Lincoln (1998) argue: “Observations conducted systematically and repeatedly over varying conditions that yield the same findings are more credible than those gathered according to personal patterns” (p.88). The ecological validity was also increased as the evaluations were based on first-hand evidence of the children in their everyday settings.

4.5.3 The Interview Studies
The interview studies were designed to complement the observation studies by serving two key purposes:

- to enlarge on issues that had arisen from the observations; and
- to gain an insight into the perceptions of the Year 1 teachers in Northern Ireland and the paedagogs in Denmark in relation to a high quality programme for the 4 to 5 year old child.
The interview schedule was designed to cover the same material in the same order and allowed for flexibility to probe for more in-depth responses. This approach enabled the information gathered from the interviews to be easily compared, while at the same time maximising the richness of the data collated. A similar interview schedule was employed in the Danish kindergartens, allowing interpretations between practitioners in both contexts to be made. The interview schedule included personal issues and those relating to the programme on offer and covered eight key areas namely:

- training
- job satisfaction
- commitment and dedication
- planning
- curriculum content
- social relationships
- challenge
- other information

The structure and questions associated with the key areas may be viewed in appendix 4.3. The interviews were conducted at the interviewees’ workplaces and lasted approximately 45 minutes. During the interview brief notes were taken and in most cases the interviews were taped if the interviewee so agreed. To assist with possible problems of interpretation, the Danish interviewees were sent a translated copy of the interview schedule in advance.

The Pilot
The interview schedule was piloted in order to test the wording, structure and content for clarity and ease of understanding. The time taken to conduct the interviews was also assessed. In addition this piloting process allowed the researcher the opportunity to familiarise herself with the interview procedure.

The pilot was carried out with three Year 1 teachers, all of whom were female and whose experience averaged 18 years. These teachers were chosen principally for convenience, but at the same time ensuring that different levels of teaching experience were included. The schedule was also sent to two pædagogs in Denmark to comment on its suitability.
and terminology for a Danish audience. For example all references to teacher were changed to pædagog, and school or classroom to kindergarten.

Arising from the pilot some questions were removed, as the interviews were considered quite long. Some of these included personal details of when they intended to retire their aspirations for the future etc. In addition some questions about planning were combined rather than asked separately. Apart from these minor changes, the interviewees expressed their satisfaction with the interview procedure and in particular its structure, emphasising that the initial discussion about their training put them at ease.

**Validity and Reliability**
The researcher's main aim was to extract as valid and reliable responses as possible from the interviewees. The use of an interview schedule, where the questions were asked in a systematic and consistent way, as well as an in-depth pilot process and the tape-recording of the responses, helped to establish the overall reliability of the interview. However as Clarke and Dawson (1999) suggest "...no matter how clearly a question is phrased there is always the possibility that the interviewee may either inadvertently or deliberately give an untruthful response" (p. 74/75). In an attempt to reduce the amount of bias that may emerge, it was decided to ask the interviewee to illustrate their response with examples, or explain their answer in more depth, as appropriate.

**4.5.4 The Attitude-Scale Survey**
From a preliminary analysis of the interview studies, it was apparent that in spite of some Year 1 teachers favouring a less formal programme, others indicated that there was no need for change. Clearly there was a need for the attitude-scale survey to attempt to identify the educators’ complex perceptions of high quality practice for the 4 to 5 year old child in both contexts. Factor analysis was required to unpick the complex and contradictory data, imposing order, according to Child (1990) upon the "apparent chaos" (p.1) of the variety of inter-related measures around these issues.

The survey instrument was also designed to gather information in a number of areas, including the educators’ biographical profiles, their experience in the field, details of the Year 1 classes/kindergartens etc. The questionnaire was designed to begin with simple questions such as biographical details and teaching experience, leaving the more complex attitude-scale to later, to ensure that respondents were not initially deterred. An introductory letter was also included, explaining the purpose and rationale for the survey.
and the time required to complete it, in an effort to encourage as high a response rate as possible (see appendix 4.4 for a copy of the letter).

*The Design of the Attitude Scale*

The design of the attitude-scale survey was based on Kline's advice (1994) that when undertaking factor analysis the full range of variables must be sampled in an attempt to map the whole field. A 48-item inventory was developed as a first draft to reflect the different perceptions that were gathered during the interview studies. These included: the role of the educator in children's learning, the content of the curriculum and the issue of pressure in the early years of schooling. The initial piloting involved two experts in the field of early childhood studies being asked to study the item definitions in depth to ensure that a comprehensive view was given. A suggestion was made to include some statements about assessment. For this reason two further items were included, namely “Monitoring play allows a record of children’s development to be kept” and “Tests are the only means of assessment for the 4 to 5 year old” (see appendix 4.5 for initial questionnaire).

A five-point Likert-type scale, referred to by Pedhazur and Schmelkin (1991) as “one of the most popular forms” (p.122) of summated rating scales, was used as a means of enabling the respondents to reveal their level of agreement or disagreement with each of the item statements from strongly agree (5) to strongly disagree (1). It was hoped that this straightforward approach would ensure a higher response rate and more accurate responses, and would facilitate the process of coding and analysis.

Once generated the items were randomly distributed in terms of negative and positive disposition, which according to Pedhazur and Schmelkin (1991) helps to minimise the response acquiescence sets i.e. the tendency to agree rather than disagree. The random selection was accomplished by drawing numbers ‘from a hat’.

To enable the respondents to answer as frankly as possible the questionnaire was designed to be anonymous. The opportunity was made available however, for the respondents to write their name and address on the last page of the survey if they wished the researcher to follow up and discuss issues in more depth with them.

_Questionnaire Pilot_

After the initial inspection by two early years experts, a pilot study was conducted prior to the distribution of the survey to ensure that the questionnaire was both legible and
comprehensive to Year 1 teachers. Fifteen Year 1 teachers participated in the short study and all but one replied. All the respondents reported how the timing was accurate and that the background information was clear and precise covering all areas of comment.

The most common area of concern referred to the need to clarify certain words and phrases. For example one respondent commented that the word “care” in the item “a play-based programme places too much emphasis on care and not enough on learning” required further clarification and for this reason the phrase ‘looking after the children’ was inserted in the place of “care”. At the request of another respondent the phrase “be available for” in another item was changed to “interact with” to ensure that the statement was clearer and more comprehensive. The statement then read “To ensure maximum learning the teacher always needs to interact with the children when they are playing”.

Some misunderstanding also arose concerning the word “formal” and “structured”. For example one respondent commented in relation to the item “Structured arithmetic lessons in Year 1 are more important than problem-solving approaches” that problem-solving activities can be structured also. Another remarked that she was unsure as to whether a “structured teaching programme” referred to a structured play programme or a formal programme. Therefore it was decided to be more consistent throughout the items avoiding the word structured and concentrating specifically on the word “formal”.

There was also some ambiguity about whether the statements referred to children in general or specifically to 4 to 5 year olds. It was decided therefore to sprinkle more “4 to 5 year olds” in place of children and to add “early years” in certain statements to emphasise that all the items related to 4 to 5 year old children in the early years of schooling.

Based on the pilot survey two further changes were made. First the statement “teachers should ensure that pupils have time to develop their curiosity” was changed to “teachers should ensure that pupils are encouraged to develop their curiosity”. Secondly instead of the word “time” in the statement “there is no time in Year 1 for anything other than reading, writing and arithmetic” the word “place” was inserted to ensure that the focus of the study was maintained.
Changes Made to the Danish Questionnaire

Although the interviews had relied upon the English-speaking expertise of the Danish pædagogs, it was considered imperative in the case of the questionnaire to have it translated into Danish to establish a greater degree of validity in its use.

For the purposes of the Danish audience, questions about qualifications, training specialism and other classes taught were replaced by a question referring to the length of their training (as this has been increased in the last few years) and the number of years of experience. Background details about the setting focused specifically on the number of children within the establishment and the type of area in which the kindergarten is situated.

Some changes also had to be made to the perception statements to allow for more accurate translation and clearer understanding. In all statements “school” was changed to “kindergarten”, “Year 1” to “the early years”, “pupil” to “4 to 5 year old” and “teacher” to “pædagog”. The statements “Play times provide the teacher with an opportunity to listen to the children read” and “4 to 5 year old children are subjected to too much pressure in the context of learning to read” were omitted entirely from the Danish questionnaire as they were considered to be irrelevant to Danish practice.

After the questionnaire had been translated, it was re-checked by a Danish early years expert, Professor Stig Broström, to ensure that the Danish respondents would find the questionnaire appropriate, straightforward and easy to complete. (See appendix 4.6 for a copy of the Danish questionnaire)

The Second Questionnaire

As will be discussed in detail in Chapter 8, the preliminary analysis failed to give a stable factor structure and a second survey with a larger sample and a reduced number of items were undertaken. This was piloted with 25 early years teachers who were studying for a masters degree in education. This pilot was necessitated due to the reduction in items to ensure that clarity and ease of understanding was maintained. No changes were suggested. All 25 subjects indicated that the questionnaire was user-friendly, taking only 10-15 minutes to complete and according to one respondent, “providing plenty of room for thought”. (See appendix 4.7 for the revised version of the questionnaire).
In the first and second questionnaire survey, a reminder was sent to each targeted school, accompanied by a further questionnaire and stamped addressed envelope to encourage those teachers who had not yet replied to do so.

**Validity and Reliability of the Questionnaire Survey**

At all stages of the planning, design and administration of the survey, the main aim was to ensure the greatest reliability and validity. The content validity was established from the outset as the items definitions were mainly drawn from the interview studies and literature sources. The two pilot studies as well as the process of examination by the two early years experts helped to ensure that the content of the questionnaire was a comprehensive representation of the area in question, that the instructions were clear and the item definitions were unambiguous. Emphasis was placed at all times on ensuring clarity and ease of understanding and to prevent, as far as possible, double-barrelled items from being included.

The pre-analysis reliability of the survey was enhanced by the random selection of the participating schools from which the Year 1 teachers were chosen. The researcher was aware that the reliability of the overall study would have been much higher if a decision had been taken to target all Year 1 teachers but this was not viable financially.

Professor Stig Broström distributed the Danish questionnaires, checked the factor analysis and the inferences drawn from the Danish survey to ensure that the interpretations made were representative of the pædagogs' thinking.

**4.5.5 Parents' Questionnaires**

Although this research project concentrated particularly on the quality of practice from the perspective of the children and educators, a study of the parents' views was carried out in an attempt to get some insight into their perceptions of high quality practice for the 4 to 5 year old. Evidence such as that from the work of Balasuhramaman and Turnbull (1988), Landers (1990) and the Rumbold Report (DES, 1990) indicated that positive parental attitudes and a well-developed home-school liaison are essential if early education is to be successful.
The Questionnaire Content
The questionnaire was designed to be as straightforward and as easy to complete as possible. The first section consisted of biographical details including the gender of the parent, the marital status, place of residence, occupation and age. The second section consisted simply of five open questions incorporating:

- the parents’ satisfaction with the provision their child receives;
- changes they would like to see take place;
- their definition of a high quality programme for 4/5 year old children;
- how successful they consider the teachers to be; and
- their opinion of how well their own needs as parents are considered.

Two definitions of high quality practice were included, one appealing more to play-based provision (i.e. a caring programme where children develop at their own rate) and the other demanding more formal instruction (i.e. an academic programme where basic skill acquisition is at the core). Space was provided at the end of the questionnaire for parents to include any other comments if they so desired. (See appendix 4.8 for a copy of the parents’ questionnaire)

Although the questionnaire was translated into Danish, the parents were asked, if possible, to complete the questionnaire in English, but if this was not possible, translation facilities were available to the researcher.

Validity and Reliability
The parent questionnaires were intended to act as a supplementary data source in the research and for this reason were not as sophisticated in design. The researcher was aware that the reliability of the data would be reduced as a result of the convenience sampling and the open question format. The validity of the responses may also have been reduced due to the educator being involved in the questionnaire collection procedure.

The instrument was piloted with five parents who had children in a Year 1 class in Northern Ireland. All parents agreed that the schedule was straightforward and easy to use and was not time-consuming.
4.5.6 Focus Group Discussions

The purpose of this aspect of the study was to underpin the validity of the findings of the project, attempting to address what Clarke and Dawson (1999) refer to as the "central question" (p 116) of any research study, eliciting the extent to which the results can be generalised. In order to do so the aims of the focus group discussions were three-fold:

- to test the preliminary findings;
- to consult an expert audience; and
- to refine the findings.

Borrowing from the work of McCormick and James (1983), a process of respondent validation was established. In an attempt to reduce the subjectivity associated with the qualitative dimension of the study, it was considered imperative to evaluate the extent to which experts in the field of early childhood recognise the study's authenticity. To elicit as valid and reliable a judgement as possible, it was thought necessary that the experts chosen for such a purpose should have expert knowledge of the field. In this way they would also be capable of providing expert judgements as to what action should be taken, if any, to improve the situation of early years provision in the Northern Ireland context and suggest any further issues that the research should address.

The structure of the focus group meetings included a brief welcome and some light refreshments, which was followed by an introduction to the study. This included an insight into the rationale of the study and the principal methods of data collection employed within the research. The intended purposes of the seminars were also identified. After presentation of the preliminary findings, a discussion and feedback session followed. During this part of the seminar the experts were encouraged to ask questions as well as respond and provide an insight into the following aspects of the study:

- Are the findings valid in your experience?
- If not, what aspects are problematic?
- If yes, are there explanations that can be offered for the differences?
- What action, if any, do you believe is necessary?
- Are there any aspects of the research which you feel might require further work?
- Are there any aspects left out?
During the discussions, note taking was completed openly. Although tape recording had been considered, it had been decided that this might constrain the respondents’ candidness and inhibit a purposeful discussion from materialising. As the seminars were conducted with a group of people, differentiating between the individuals in the taped record might also have proved problematic.

4.6 DATA ANALYSIS

4.6.1 The Pilot Observations

The purpose of the pilot observations was to provide an ‘immersion’ for the researcher in a variety of examples of the early years settings. This was designed to enable the main features of the children’s experience to be identified and ultimately to enable a systematic observation schedule (the Quality learning Instrument, QLI) to be developed. The observations necessarily, therefore, produced large volumes of fieldnotes taken in situ, which required analysis before leading to instrument design. This analysis required condensation and categorisation of the fieldnotes and a form of thematic analysis was used. In this method the researcher used pre-selected themes from the literature survey and identified themes arising globally from the whole data set. Each set of fieldnotes (up to 20 pages) was therefore condensed to two pages by categorising the fieldnotes into thematic boxes on two A4 sheets.

The voluminous records, produced during the pilot observations, were then condensed into a data matrix, consisting of two axes. The horizontal axis listed the themes e.g. motivation, independence, happiness etc. and the vertical axis listed the triangle of interaction i.e. children’s actions, teaching strategies and the role of the environment. Each matrix cell therefore, contained evidence which grouped the theme with the interaction focus e.g. the children’s actions in the context of their motivation.

The next stage in the condensation process used a different data matrix. As before one of the axis listed the themes, but the other listed the observation settings. In this way, the matrix held all of the selected data from the series of observations and each matrix cell contained evidence of the particular theme in accordance with a particular setting. The following table (4.2) illustrates the process used, providing the details of two research sites and reproducing details of the hand-written fieldnotes undertaken during the pilot stage of observations:
Table 4.2: Illustration of thematic analysis matrix for the pilot observations

<table>
<thead>
<tr>
<th>Research Sites</th>
<th>Motivation</th>
<th>Concentration</th>
<th>Independence</th>
<th>Themes continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activities on offer stimulating and practical. Children very keen at story and playtime. Environment cheerful and colourful</td>
<td>Few distractions. Children mainly involved in what they do, showing some precision in the process. Some signs of challenge on the part of the teacher</td>
<td>Some encouragement to participate in classroom chores. Little signs of initiative being shown. Activities quite directed. Teacher decides what should be done and when. Child-sized furniture but not much freedom to use</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dull expressions on part of children. Little eagerness shown. Activities quite boring and repetitive. Few opportunities for hands-on work. Dull environment</td>
<td>Teacher in control and maintains a level of concentration by walking around the classroom and reprimanding anyone who does not work. Some signs of children in time-wasting activities but tend to be brought back by teacher</td>
<td>Children no choice. Told exactly what to do. Specific time to go to toilet. Some children are encouraged to deliver messages and to help at tidying up</td>
<td></td>
</tr>
</tbody>
</table>

The next stage of analysis involved the researcher consulting the data matrix to categorise the data as high to low examples of each theme. An excerpt from the QLI for the motivation theme is presented in Table 4.3.

Table 4.3: An excerpt from the theme ‘motivation’ in the QLI

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Children’s Actions</th>
<th>Teaching Strategies</th>
<th>The Role of the Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>High:</td>
<td>High:</td>
<td>High:</td>
</tr>
<tr>
<td></td>
<td>- eager to participate in activities;</td>
<td>- a variety of stimulating and age-appropriate activities on offer (e.g. practical tasks, games activities planned around the children’s needs);</td>
<td>- décor is colourful, bright and aesthetically pleasing;</td>
</tr>
<tr>
<td></td>
<td>- a degree of curiosity and inquisitiveness displayed;</td>
<td>- activities changed regularly;</td>
<td>- variety of exciting areas available allowing for privacy and curiosity;</td>
</tr>
<tr>
<td></td>
<td>- signs of excitement energy and vitality;</td>
<td>- adults show interest in children’s activities;</td>
<td>- resources are in plentiful supply and are exciting and interesting to use;</td>
</tr>
<tr>
<td></td>
<td>- enthusiastic gestures e.g. clapping hands, jumping up and down, hopping on one foot;</td>
<td>- participate and extend learning process when appropriate;</td>
<td>- stimulating outdoor equipment available;</td>
</tr>
<tr>
<td></td>
<td>- a degree of creativity and imagination shown.</td>
<td>- adults are cheerful and enthusiastic.</td>
<td>- facilities spacious, airy and attractive for the learner;</td>
</tr>
<tr>
<td>Low:</td>
<td>- apathetic and unenthusiastic;</td>
<td>Low:</td>
<td>Low:</td>
</tr>
<tr>
<td></td>
<td>- constructive questions are seldom asked;</td>
<td>- uninteresting activities on offer;</td>
<td>- small, dull and lacking in character;</td>
</tr>
<tr>
<td></td>
<td>- appears bored;</td>
<td>- activities are rarely changed;</td>
<td>- resources available but tend to be routine and uninspiring;</td>
</tr>
<tr>
<td></td>
<td>- complete activity out of obligation rather than interest</td>
<td>- adults rarely participate in children’s learning;</td>
<td>- no outdoor facilities;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- adults display little overall interest.</td>
<td>- unattractive environment</td>
</tr>
</tbody>
</table>
These examples were intended to help the researcher make judgements about the quality of the learning experience observed but it is necessary to highlight that not all of them are needed and the list provided is not considered exhaustive. Further examples relating to each of the targeted themes e.g. concentration, confidence etc. are presented in Chapter 5.

4.6.2 Assuring the Validity and Reliability of the QLI

The Views of Early Years Experts
When completed the QLI was then sent to 14 early years experts (six in Denmark and eight in Northern Ireland) who commented on the suitability of the targeted features and the criteria chosen for the 4 to 5 year old child. The sample of experts included: one staff inspector, five university lecturers, two early years advisors, two full-time researchers and four early years teachers in management positions. The average number of years experience was approximately 23. All of the experts were trained in the field of early childhood and table 4.4 details their highest qualifications.

Table 4.4 Experts' qualifications in the reliability check of the QLI

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Number of Experts</th>
<th>% (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>57</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

Calibrating Judgements Arising from the Observation Schedule
As a single judge of the quality of the learning experiences on offer, the researcher's judgements are open to criticism on the grounds that an objective reflection cannot be guaranteed. Despite the researcher's expertise in the field of early childhood education and the video and paper-based accounts to support the judgements made, the question is still begged how reliable are the judgements? (i.e. would other judges record the same findings). Kirk and Miller (1986) used the analogy of a thermometer to explain this process, describing reliability as "the extent to which a measurement procedure yields the same answer however and whenever it is carried out" (p. 19).

For this reason a calibration study was carried out as it was considered the only way of ensuring as objective judgements as possible. The Assistant Advisory Officer for Early Years Education in each of the five education and library boards in Northern Ireland was contacted by telephone for the names of two practising Year 1 teachers who might be willing to participate in the calibration study. The recommended teachers were sent a letter requesting their participation and detailing their role in the study. All of the teachers
responded positively. Of the ten Year 1 teachers who participated, seven were Key Stage 1 trained and the remaining three had specialised in Key Stage 2. Table 4.5 illustrates the highest qualifications of the sample:

Table 4.5: Qualifications of the sample in the calibration study

<table>
<thead>
<tr>
<th>Qualification</th>
<th>No. of Year 1 Teachers</th>
<th>% (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEd</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>BEd</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Teacher Certificate</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>BA+PGCE</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

The total number of years’ teaching experience recorded by the sample amounted to 196 years, the mean being approximately 19.5 years. This is tabulated as follows:

Table 4.6: Experience of the sample in the calibration study

<table>
<thead>
<tr>
<th>Experience (years)</th>
<th>No. of Year 1 teachers</th>
<th>% (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>11-20</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>0-10</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

The majority of the Year 1 teachers (hereafter known as raters) also held a position of responsibility i.e. two were vice-principals and four were Key Stage 1 co-ordinators. No male teachers participated in the study.

Each of the raters was sent an extract of video, taken in a Danish kindergarten, accompanied by a set of instructions, some photographs and a copy of the QLI (see appendix 4.9 for a summary of the content of the video excerpt and details that were distributed to the sample).

In connection with this piece of video, the teachers were asked to rate the children’s actions, the teaching strategies and the environment on offer using the QLI as the observation instrument. To facilitate this assessment process, each teacher was sent a list of instructions. These requested that the video should be viewed initially, followed by consultation of the QLI. The video was then to be re-watched and in the grid provided, examples of practice were to be noted. Each category i.e. children’s actions etc. in each of the targeted features, was then to be scored on a 5-point scale i.e. 5 being at the highest end and 1 at the lowest of a spectrum of high and low quality learning activities. The video was then to be viewed for a third time and any further comment was to be added.
sample record sheet based on observation in an imaginary kindergarten was included in the pack to provide the teachers with some concrete evidence as to what was expected. The video excerpt was also viewed and assessed by the researcher in advance but the raters were not aware of her scores. Calibration was achieved by comparing the researcher’s scores to those of the teacher panel. The results of this process are set out in Chapter 5.

4.6.2 Analysis of the Main Observation Studies

Data arising from the main observation studies were analysed within the framework of the nine themes forming the structure of the observation schedule (QLI). The field notes, which were gathered during each observation, were summarised using similar data matrices as in the pilot observation studies. In relation to each theme, the children’s actions, the effort/lack of effort made by the staff to promote such behaviour in each area, as well as the role played by the environment in encouraging such actions were noted for each research site. Each setting was rated against the QLI using a best-fit model i.e. whether the collated evidence fitted best into the high or low categories of quality or somewhere in between.

As for the pilot observations, such information was further refined using a second matrix (one for the Northern Ireland Year 1 classes and another for the Danish kindergartens) in which one axis was the research sites and the other was the themes. The structuring of the data in this fashion allowed patterns in the data, between observations and within observations, to be identified fairly quickly while allowing immediate cross-referencing to the fieldnotes themselves for clarification etc. Such an approach requires both constant reflection on the choice of abbreviated data and careful identification of areas of similarity or difference and this vigilance was maintained throughout. Although less detailed, it was possible, using this matrix, to compare easily the quality of the individual research sites and the overall quality of the experiences on offer in both programmes.

4.6.3 Analysis of the Interview Studies

Like the observation studies the interview data was also analysed thematically in accordance with the main themes which formed the structure of the interview schedule e.g. training, job satisfaction, social relationships etc. The main intention was to analyse the data qualitatively, highlighting the commonalities and differences in the Year 1 teacher’s and pædagogs' responses on each of the questions posed.
4.6.4 Descriptive Analysis of Attitude-Scale Survey

All of the items in both attitude scales (i.e. Northern Ireland and Denmark) were subjected to descriptive analysis in terms of frequency comparisons, applying not only to the biographical profiles, but also to the item statements. This was intended to provide illuminative information on the underlying complexities that might underpin the responses e.g. if the overall mean of an item was approximately three this might suggest that in general the respondents were uncertain about their response. On the other hand such a mean score might indicate that the respondents are completely divided with approximately half agreeing with the statement and the other half disagreeing. The use of descriptive analysis would therefore help to highlight these underlying diversities.

4.6.5 Factor Analysis

Educators' views of a play-based versus formal programme is multi-faceted inasmuch as it is possible for some Year 1 teachers to consider formal activities such as reading and writing essential in the early years of schooling while others might see them as inappropriate. Some of those that perceive them as essential might do so based on an innate acceptance (perhaps derived from their training) that traditional teaching methods and formal practice benefit children’s learning. Others might also consider formal activity essential but only inasmuch that they are obliged to carry out such activities due to outside pressures e.g. parents, the Inspectorate etc. Still others might see formal activity as having a role to play as a result of experience. Perhaps they have been successful in practising formal teaching methods and for this reason feel more comfortable using them.

Factor analysis was considered as the most appropriate procedure to unravel such complex possibilities from the data. According to Pedhazur and Schmelkin (1991) factor analysis is designed to identify factors that underlie the relationships among a set of variables and in this way insights into the respondents' perceptions can be drawn.

Barlett's Test of Sphericity

When opting to use factor analysis, Pedhazur and Schmelkin (1991) argue that it is necessary to identify that the correlation matrix is not an identity matrix i.e. where all the item responses are inter-correlated. Barlett's Test of Sphericity enables such an evaluation to be undertaken and was carried out on each factor analysis run.
Sample Size
Many rules of thumb exist about the sample size required to ensure stable factor analysis. Some experts such as Comrey and Lee (1992) have emphasised the need for a large sample size of at least 300 while others such as Kline (1994) and Loehlin (1992) have argued that a sample size of around 100 is sufficient. Pedhazur and Schmelkin (1991) referred to a number of researchers such as Nunnally (1978), Cliff (1987) etc. who are more concerned with the determination of sample size in relation to the number of variables. For example, Nunnally suggested 10 times the number of subjects to variables, while Cliff recommended a ratio of approximately 4:1. More recent writers, such as Foster (1998), propose looser guidelines of twice as many subjects to variables. Others such as Wolins (1982), according to Pedhazur and Schmelkin (1991) have been arguing that these specifications of sample size are inaccurate, in the sense that the sample size is relative to the aims of the study i.e. some studies require a larger sample than others.

What appears to be the overriding issue, however, is that the analysis proves stable i.e. with strong internally reliable factors. In this study the ratio was 3:1, with 48 and 44 items for 180 and 150 subjects in Northern Ireland and Denmark respectively.

Extraction of Factors
Principal Axes Factoring, using SPSS as the analytical tool, was chosen for the extraction of the factors. This method, according to Kline (1994) is similar to Principal Components extraction, with the former possessing a slight advantage. Kline argued that unlike the Principal Components method which explains all the variance in any given matrix, the principal axes method does not, reducing therefore the amount of error contamination. Simple tests however were required to ensure that the factors arising from the analyses were not correlated. An oblique rotation (Oblimin) was carried out in order to test for any correlation in the factors. If this was shown to be low, the more conventional Varimax orthogonal rotation could be used safely.

Item Analysis
As the items chosen for the study had been derived principally from the interview and observation studies, and an intense pilot study had been conducted, their overall validity could be claimed to be relatively high. However it was necessary to check for items that correlate very lowly with the other items. Items with the item-total correlation of <0.3 were therefore rejected in the further analysis.
Meaningful Loadings
Child (1990) provided some useful information on the value of correlation required in accordance with the sample size. He recommended for a sample size of 90 that a loading of 0.206 is required at the 5% level and 0.272 at the 1% level. However the more widely accepted minimum loading is 0.3 and this was adopted in this study (Foster, 1998). It was decided that complex loadings i.e. items which load on more than one factor, be considered for interpretation in the factor against which they loaded highest. These items were also to be considered in relation to the other factors upon which they loaded only if they added to the interpretation of the latent trait.

Number of Factors Retained
Comrey and Lee (1992) referred to a number of notable researchers such as Horst (1965), Harman (1967) and Lee (1979) all of whom recommended a variety of methods for factor extraction, and from these and other sources the following decision rules were adopted as conventions for the factor analysis in this study:

- use of Barlett’s Test of Sphericity to ensure factor analysis was viable;
- use of an Oblimin rotation to establish if the Varimax rotation could be used;
- exclusion of items with low item-total correlations (e.g. <0.3);
- exclusion of items loading at less than 0.3 on each factor;
- consideration of factors with eigenvalues ≥1.0;
- examination of Catell’s Scree Plot (1966) to assist in determining the number of factors to be extracted;
- use of complexed items to assist with factor meaning; and
- investigation of factor reliability, ignoring factors with less than three strongly loaded items (≥0.3) or with an overall reliability of ≤0.5.

When acceptable factors were identified, analysis was carried out, in an attempt to interpret whether different groups of the sampled population had different views. The factor mean scores for different categories of respondents in the Northern Ireland data set were compared using appropriate statistical tests and the categories chosen for the purposes of this study included:
• age
• place of training
• training specialism
• board area

The reason for these analyses was to discover if the underlying traits indicated by the factor-based sub-scales were associated with these characteristics. Although a similar analysis of the Danish data might prove interesting, it was judged unnecessary as the main research focus was on Northern Ireland Year 1 classes.

4.6.5 Analysis of the Parents’ Questionnaires
The data from the parents’ survey were analysed in a descriptive fashion. For the open-ended questions, lists of responses under each question were prepared, categories were established and the responses were grouped and counted. It is necessary to emphasise that the parent questionnaire data should be interpreted with caution in both contexts; in Northern Ireland this caution arose from the convenience sampling and in Denmark it arose from the low response rate (43% i.e. 129/300).

4.6.6 Analysis of the Focus Group Interviews
The data arising from the focus group discussions was analysed thematically under the headings: validity of the findings, explanations offered, action required and research suggestions. As with the earlier analyses the intention was to establish consensus views from the experts on the issues in question.

4.7 PROBLEMATICS OF THE RESEARCH
Inherent in this research project is a number of problematics, which had to be addressed namely:
• the cultural dimension i.e. language and context;
• the time factor; and
• the methods chosen.
4.7.1 The Cultural Dimension

Language
As the researcher was not able to speak the Danish language she was unable to understand what the children were saying during the observation studies and unable to undertake a comprehensive review of the Danish literature base. Initial attempts had been made to grasp a rudimentary knowledge of the language but this proved impossible, as Danish was not taught in any accessible institution within Northern Ireland. Also if the latter had been possible, the researcher as a linguist was aware of the level of language proficiency that was required in order to communicate with young children and comprehend policy documentation.

Although the problem could not be eradicated, measures were taken to alleviate it as much as possible. For example:

1) The need for any work in Danish was kept to a minimum.

2) The researcher relied on the Danes’ competence in speaking English, which in many cases proved to be almost flawless. During each observation a pædagog acted as interpreter, translating salient parts of the children’s conversations. The interviews were also conducted in English due to the pædagogs’ bi-lingual skills (the interview questions being given to them in advance to assist them in this process).

3) Intensive translations undertaken by Danes, who were fluent English speakers, were conducted on the attitude survey and parent questionnaire. The researcher was conscious that the majority of pædagogs could have completed the survey with relevant ease, but thought that a more valid response would emerge if translated into their own language as suggested by Bereday, (1964). This may also have promoted a higher response rate.

With regard to the Danish literature, translations were sought wherever possible and interviews were conducted with three experts in the field to get an insight into the literature base. In some cases however second-hand reviews had to be relied upon which would not have been the case if the researcher had been a fluent Danish speaker.

Cultural Context
Although the cross-cultural perspective of the study was not its main focus, the fact that the example of the play-based programme was in Denmark could not be ignored. Numerous contextual differences exist between Northern Ireland and Denmark, such as child-staff ratio, educator training, national curricula etc., all of which have the potential
to confound the findings of the study. As already mentioned all decisions made, instruments used and results found, were verified by a Danish early years specialist.

4.7.2 Researcher Time and Bias
Throughout the data collection period the researcher was a practising Year 1 teacher. Although aware of the advantages this offered to the study with respect to the researcher’s expertise in the field, it was particularly challenging to find suitable periods to visit the settings both in Northern Ireland and Denmark. For the pilot studies the observations were conducted during the Northern Ireland’s children first term of schooling and for this reason may have affected some of the judgements made. However for the main observation studies, which were more evaluative in procedure, the observations were not conducted until the third term of the school year. The study was vulnerable to a potential source of bias inasmuch as the researcher was a Year 1 teacher and this might unwittingly influence her judgements. An attempt was made to minimise this problem by carrying out the calibration study.

4.7.3 Methods Used
As for any piece of research the methods chosen possessed both strengths and weaknesses about validity and reliability. The overall qualitative dimension, despite adding an ecologically valid underpinning to the research, was labour-intensive and time-consuming requiring much organisation and analysis. Adler and Adler, (1987) and Denzin and Lincoln (1998) would argue that a degree of subjectivity intrudes into all qualitative research and attempts have been made to counteract this problem not only by the use of a calibration study but also the independent focus group discussions and the eclectic design. Nevertheless subjectivity cannot be ignored.

The quantitative aspect of the attitude survey also had potential weaknesses. As the responses were principally taken at face value, there was a chance that the latter might have suffered from ‘vicarious enquiry’ i.e. the responses given may not be a true reflection of the subjects' perceptions. The small sample size used in both contexts could also have led to the intrusion of error. The reliability of the attitude study was however verified by the use of Cronbach’s alpha test of internal consistency for each factor.
4.8 SUMMARY

A number of potential weakness areas existed within the study, but as no research is perfect, the essential role of the researcher is to be aware of the limitations that exist and attempt to address them as appropriately as possible. Clarke and Dawson (1999) emphasise that the most important aspect of any research project is the capacity to appreciate the strengths and weaknesses of various research methods and to formulate an evaluation design and research strategy, which is capable of producing meaningful findings. The essential issue is to ensure that the conclusions are supported by the evidence and this principle guided the researcher throughout.
CHAPTER 5: THE DEVELOPMENT OF THE OBSERVATION SCHEDULE

This chapter details the development of an observation schedule, known as the Quality Learning Instrument, which was used in this study. The chapter begins by presenting an outline of the features associated with an experiential model of how young children learn i.e. the theoretical underpinning of the instrument. It then details the empirical development of the QLI, presenting the findings of a series of pilot observation studies in a number of Year 1 classes in Northern Ireland and Danish kindergartens. A summary of the results to emerge from the calibration study, which was undertaken to establish the inter-rater reliability of the instrument, is also included.

5.1 INTRODUCTION

As quoted in Chapter 1, Balageur, Mestres and Penn (1992) advocated the use of an in-house assessment instrument when evaluating quality, indicating that “the process involved in defining quality – with the opportunity it provides to explore and discuss values, objectives and priorities – is of utmost importance, and can be lost where people simply adopt existing measures” (p. 11). This formed an underlying research design decision in this study inasmuch as none of the off-the-shelf instruments were considered to be appropriate for the necessary data collection. Therefore a process of identifying the framework for an instrument from the literature and developing this with empirical trialling to an instrument deemed valid in the settings under investigation was undertaken.

However before setting out the empirical development of the instrument, it is important to present the theoretical base underpinning it. In essence the instrument draws on a model of how young children learn, a model which might be summarised as experiential in line with the research aim of identifying a quality learning experience. This chapter therefore proceeds by way of a brief outline of the literature around key features of the experiential model including – active engagement, social interaction, emotional well-being etc. to a trialling of the pilot schedule and its refinement into the final Quality Learning Instrument.

In this way, although the development of the QLI was embedded in an experiential model of learning, its formulation was mediated by evidence from the pilot observation studies, the views of early years experts and the calibration study. These empirical dimensions of the QLI’s development established its validity and reliability, and ensured its suitability for the two contexts in question.

In the section which follows, the main features of the experiential model are identified, supported by an outline analysis of the relevant background literature.
5.2 THE THEORETICAL UNDERPINNING OF THE INSTRUMENT

5.2.1 The Experiential Model of Learning

The experiential model of learning draws heavily on the earlier work of philosophers such as Dewey (1938) who expressed the belief that “all genuine education comes through experience” (p. 25). Piagetian ideas are therefore also acknowledged in this model of learning, where children are believed to construct their own knowledge through interaction with the environment. The child is not however perceived to learn in isolation but rather in the company of significant others who can support them as they learn. In this way the experiential model of learning is deeply rooted in the Vygotskian notion of social constructivism. Six key features of the experiential model are presented in the section which follows namely that:

- children should be actively engaged in their learning;
- children need some control and autonomy over their own learning;
- children must feel secure in their learning environment;
- children learn in the company of others;
- children’s learning is not disseminated into subject areas, but rather they learn holistically; and
- children’s metacognitive powers must also be considered.

Active Engagement

An integral feature of the experiential model is that young children need to engage actively in the learning process to ensure effective learning takes place. As Watson (2000) states “knowledge is not passively received and absorbed but actively built up by the individual” (p. 136). Czikszentmihayli (1979) also voiced this opinion, arguing that successful and fruitful learning only takes place when young children are thoroughly absorbed in what they are doing, concentrating and persisting fully on the task. He termed this behaviour a “state of flow” (p. 262). Laevers (1993) referred to this mental activity as a source of intense involvement which facilitates the overall development of the young child. He defined involvement as “a quality of human activity, characterised not only by a high level of motivation, but also by concentration and persistence, intense perceptions and experience of meaning, a strong flow of energy and a high degree of satisfaction” (p. 61).
Experiential proponents therefore recognise the importance of intrinsic motivation for young children’s learning and educational achievement. Psychologists (e.g. Deci and Ryan, 1980, 1985, Dweck, 1986, Dweck and Leggett, 1988, Gottfried, 1990 and Ames, 1992) stress the need to initiate in children a desire to want to learn, becoming what Dweck (1986) referred to as a “mastery” learner - i.e. one who is challenge-seeking, persists in the face of difficulty and enjoys “exerting effort in the pursuit of task mastery” (p. 1040).

In this way experiential proponents advocate that the learning environment should respond to young children interests and natural curiosity (Lombardi, 1992) and, as emphasised by the Rumbold Report (DES, 1990), “With encouragement and stimulation, this curiosity will in turn develop into a thirst for and enjoyment of learning” (p. 7: 57). Inherent therefore within the experiential model is the idea that fostering a positive disposition towards learning (i.e. developing an environment in which children are fully motivated and actively absorbed in the learning process) is as important as developing young children’s knowledge and skill acquisition (Katz, 1995, 1999).

**Autonomy**

Embedded in much of the experiential literature is the belief that children should have some control over the learning that takes place. Howe (1984) took this point of view, suggesting that children’s independent actions and feelings of self-control were important to later development. He argued that when children believe that the outcome of a situation depends on their own actions, they engage more effort in the process.

Grolnick and Ryan (1989) and Ames (1992) endorsed this opinion, claiming that more autonomous children perform and behave better in class. In a more recent paper, Burk-Rodgers (1998) also stresses the value of autonomy. Drawing on an array of research such as Kamii (1985, 1989 and 1994) and Miserandino (1996) etc., Burk-Rodgers argues that:

- young children should be free to make real choices that effect their lives;
- interactions between adults and children are characterised by co-operation and negotiation; and
- young children should not feel pressured to behave in pre-determined ways (p.78).
Emotional Security
Experiential learners must also feel secure in their learning environment. A wealth of convincing evidence (e.g. Greenhalgh, 1994; Goleman, 1996 and Laevers, 1996, 1999) has referred to the importance of children’s emotional stability for learning and development. For example Goleman (1996) reported that people in general possess two brains, two minds and two different kinds of intelligences, namely rational and emotional, which affect their potential in life. He indicated that people with well-developed emotional skills are more likely to be content and effective in their lives. To ensure that children feel happy, safe and secure, educationalists e.g. Ball (1994), Moss (1996) and Scott (1996b) have been recommending a warm, positive and secure learning environment.

According to Ball (1994), children who feel confident in themselves and their own ability have a head start in learning. He proposed that the nurturing of confidence in children is the first and most important responsibility of parents and teachers. This view is supported by Woolfson (1997), who stated that “a child’s self-confidence, his belief in his own abilities and his own worth affects everything that he does” (p. 16). He recommended several factors to help boost children’s self-confidence which include: making them feel special; getting them involved; applying rules consistently; letting them say what they feel and treating them with respect.

Social Interaction
The need for positive social relationships has been identified as another feature of an experiential learning environment. As already referred to in Chapter 2, Vygotsky (1926 in translation, 1978), advocated the importance of rich interactive settings for profitable learning experiences. He emphasised the crucial role of significant others in children’s learning, in helping the children to extend their learning beyond what they can do alone. Rogoff (1990) also emphasised the learning potential engendered by communication and social participation with adults and peers stating:

“...day to day engagement of children and adults in shared activities contributes to the rapid progress of children in becoming skilled participants in the intellectual and social lives of their society....like genes, social interaction and social arrangements are an essential aspect of child development, without which it would be impossible to conceive of a child developing” (p. 138).

The role of the experiential educator, according to Anning and Edwards (1999) is to support children as they learn to cope effectively with the world around them and develop an array of skills and knowledge in the process.

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Children Learn Holistically
Another integral feature of the experiential model is that children’s learning is not separated into distinct subject areas, but rather that it is holistic in nature. This view is expressed by Gardner (1993, 1999) who advocated the importance of a broad and balanced curriculum. He argued that children possess ‘multiple intelligences’, comprising linguistic, logical mathematical, musical, spatial bodily kinaesthetic, interpersonal and intrapersonal skills, all of which, in his view, require enhancement. This theory is also predominant in the work of Malaguzzi and the ‘hundred languages of children’, which reinforces the different ways in which young children learn (Edwards, Gandini and Forman, 1998). Experiential proponents are of the opinion that young children are capable of demonstrating sophisticated powers of complex thinking when provided with an appropriate learning environment (see e.g. Aubrey’s research, 1993 on the mathematical competency of young children), and for this reason advocate what Katz (1995) referred to as “educative” (p. 90) experiences, rather than “frivolous one shot activities” (p. 35).

Metacognition
Based on an experiential model, a high quality learning environment needs to develop children’s metacognitive powers and skills. According to Meadows (1993), these skills include “analysing and defining the character of the problem at hand; reflecting upon one’s own knowledge (and lack of knowledge) that may be required to solve the problem; devising a plan for attacking the problem; checking how the plan helps in the problem-solving.... and, generally, orchestrating cognitive processes in relation to the cognitive contents and the objectives involved” (p. 78/79). In this way it is important that the learning environment enables young children to think about what they are doing and encourages them to engage in a reflective process, which develops their higher order thinking skills. These views are reminiscent of the work of Dewey who as early as 1938 indicated that reflection was central to all learning experiences and that the most powerful learning experiences were those that engaged the learner in posing and solving problems, making meaning, producing products, and building understandings.

5.2.2 Features of a High Quality Learning Environment
Drawing on the experiential model of learning, a high quality learning environment for the 4 to 5 year old could be described as one in which children are:
• motivated and fully absorbed in the learning process through the provision of stimulating and challenging activities;
• encouraged to become confident and independent in their learning through activities that emphasise success rather than failure;
• able to develop an aptitude and willingness to talk and co-operate with others in a rich interactive and social setting;
• provided with the fundamental skills for later learning i.e. linguistic, mathematical, scientific and aesthetic skills including higher order thinking skills by means of a broad and balanced curriculum;
• happy, secure and well-behaved in a warm, secure and safe environment; and
• able to develop a high self-esteem and positive attitude towards learning in general.

A high quality learning environment from an experiential perspective can be therefore summed up in the words of Adams (1996):

“A quality curriculum addresses not just the moment, but prepares children for the next step ahead. The best way to prepare children for tomorrow is to give them a good today - a today that is challenging but not threatening or intimidating. A today that encourages children to think of themselves as learners and to accept and appreciate those around them” (p. 52).

Drawing from the theory, seven key features were considered integral to the development of the Quality Learning Instrument (QLI) namely:

• motivation
• concentration
• confidence
• independence
• social interaction
• multiple skill acquisition
• higher order thinking skills

Many of these features resemble the elements which are addressed in several national and international curricular frameworks, catering for 4 to 5 year old children. These include Te Whariki (New Zealand Ministry of Education, 1993), the European Commission Childcare Framework (Balageur et al, 1992), Quality in Diversity (Early Childhood Education Forum, 1998), the Northern Ireland Key Stage 1 Curriculum (DENI, 1996) and
the English (DfEE and SCAA, 1996 and DfEE, 1999), Scottish (CCC, 1999)\(^5\) and Welsh (ACAC, 1996 and ACCAC, 2000)\(^6\) pre-school documentation. Several of these documents differ in content. Some e.g. Te Whariki are disposition-based; some such as the Early Learning Goals are skill-based and others e.g. the Northern Ireland Curriculum are more subject-based. Yet underpinning each of these curricular frameworks are a number of similar aims which, like the features identified in this present study, address the need to promote the young child's social, emotional and intellectual development, while at the same time initiating in children a positive attitude towards learning.

5.3 THE PILOT OBSERVATION STUDIES – THE EMPIRICAL EVIDENCE

5.3.1 Introduction
As highlighted at the beginning of this chapter the development of the QLI was informed by consideration of the theoretical background and by empirical evidence. A series of pilot observation studies was designed to allow the comprehensive ‘immersion’ of the researcher in the study contexts in order to identify the critical aspects for investigation and evaluation. Having identified features of a high quality learning environment, the purpose of the pilot observation visits was to evaluate the way in which these features were in operation and hence to enable the construction of the QLI itself. Criteria for each feature were also identified, considering the children’s actions, the teaching strategies and the role of the environment, to indicate what was deemed as high or low quality experiences. The features themselves were not intended to be measures, but evaluation of their manifestation provided an indication of the overall quality of the Northern Ireland Year 1 classes and Danish kindergartens. The findings are presented under the following main headings:

- Summary of Setting Details
- Pilot Observation Findings

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\(^{5}\) CCC is an abbreviated form for the Scottish Consultative Council on the Curriculum.

\(^{6}\) ACAC is an abbreviated form for the Curriculum Assessment Authority for Wales and ACCAC refers to the Qualifications, Curriculum and Assessment Authority for Wales.
5.3.2 Summary of Setting Details

In-depth observations were conducted in ten Year 1 classes in the Southern Board area of Northern Ireland (principally in the towns of Dungannon, Portadown and Lurgan) and eight kindergartens in the city of Ærhus in Denmark. Each of the Northern Ireland observations lasted one full school day i.e. 9am-2pm for Year 1 children (a total of 50 hours observation) and in the Danish kindergartens the observations were conducted over a period of two days from 8 am in the morning to 5pm in the evening (a total of 144 hours observation).

Demographic Details

The class sizes in the Northern Ireland observations, ranged from 18 to 28 children, with a mean of 24. Each class had one fully trained teacher (most of whom had a degree or equivalent in education) and at least one classroom assistant for half of the school day. All of the classroom assistants had a recognised qualification in childcare. The mean child-staff ratio was 12:1.

The eight kindergartens in the Ærhus area of Denmark, open from approximately 7:30 am to 5pm, ranged from 22 children to approximately 100 children in size. On average the child-staff ratio was 5:1, but this may have been slightly lower than normal practice due to the observations being conducted in the summer term when more students were available for temporary employment. There tended to be two qualified pædagogs to one unqualified in each of the settings.

Structure of the Day

The curriculum in all of the Northern Ireland Year 1 classes could be described as being subject-oriented, where the main intention was to deliver aspects of the Northern Ireland Curriculum. Formal activities assumed priority throughout the day in the majority of settings, the emphasis being placed on reading, writing and arithmetic.

The following diagram (5.1), based on data from all of the settings, attempts to identify a ‘typical’ day in a Year 1 class.
In 70% (n=7) of the observed settings the school day began with at least a 45 minute structured play session during which the teacher in many cases heard individual children read. These play activities were followed by more reading related tasks, which in many cases consisted of colouring in, copying from the blackboard and completing worksheets. Generally a break time of approximately 15 minutes would then be taken during which the children ate a snack, went to the toilet and if the weather permitted played outside. After this short pause the children would then return to a maths-related activity, followed by some form of letter instruction, often phonics or handwriting. The lunch break tended to take place at around 12:15pm and lasted for approximately 45 minutes. After lunch the activities generally included listening to a story, watching television and participating in singing and rhymes.
Observed deviations from this general routine of practice included children commencing work related activities immediately without any play session or in some cases a short play session took place at the end of the day. Other activities included two physical education lessons, two religious education lessons and one science-related activity. A less structured routine was followed in the Danish kindergartens. In most cases breakfast, on entry, was available, after which the children participated in long free play sessions. All children were obliged to spend at least an hour outdoors per day and in many settings, particularly those observed in better weather, children were outdoors for the most part of the day. Other activities included excursions to the park and woods, listening to stories, participating in drama, dancing and music.

Setting Lay-out
The Northern Ireland Year 1 children spent the majority of their day in one classroom, which was always part of a larger school. The classroom varied in size and was particularly school-like in orientation, consisting principally of desks, chairs, teacher's table and chalkboard. In most cases play materials were placed around the periphery of the classroom. Toilets and cloakroom facilities were also available and in some cases were attached to the Year 1 classroom.

The Danish kindergartens were spacious and home-like, comprising a selection of different rooms. In some cases these rooms were allocated a specific purpose such as art/craft, construction and games, role-play and 'rough and tumble', (an area filled with soft furnishings where the children were free to 'let off steam'). In other kindergartens the children were divided into groups and each group was assigned a different room which contained many of the latter facilities. A kitchen, several bathrooms and in most cases a basement, was available.

Furthermore, all but one, of the kindergartens possessed an outdoor play area, which ranged from a small compact plot at the rear of the institution to an expansive five acre setting encompassing the entire building.

5.3.3 Pilot Observation Findings
The format of the findings from the pilot observation studies is based on the features of quality learning stimulated by the theoretical basis of an experiential model of learning e.g. motivation, concentration, higher order thinking skills etc. The findings are intended to present a generalised picture of good and bad practice, common to both contexts, and
are not meant to be representative of each and every individual setting. The layout of the
data below is based on the approach taken by the Department of Education for Northern
Ireland with guidelines on school evaluation. This approach lists examples of activities to
be observed when good and bad practice is in evidence. The findings are therefore set out
in two columns: the derived indicators of good or bad quality experience in one column,
and actual observation data as an exemplification of the indicators in the second.

Motivation
The observations suggested that a high level of motivation was in evidence when:

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<tr>
<th>Characteristics</th>
<th>Examples of high motivation:</th>
</tr>
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<tbody>
<tr>
<td>- the children were eager to participate in the activities;</td>
<td>1) In kindergarten (5) (Denmark, hereafter known as D) many children spent most of the afternoon outdoors. Some were running through the bushes, pretending to be cowboys and Indians. Others were busy helping a pedagog in the greenhouse, or watching in anticipation as a pedagog lit a campfire. Another group was splashing about in the sandpit, which was saturated with water, getting themselves as wet and dirty as possible.</td>
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<td>- they were energetic, enthusiastic and they displayed a degree of curiosity and interest in the activities</td>
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<td>- adults offered stimulating, relevant and age-appropriate activities;</td>
<td>2) In classroom 4 (Northern Ireland, hereafter known as NI), during structured play, a group of children were eagerly looking at photographs of their trip to the zoo. After chatting about their experiences, they painted pictures of the animals they saw to add to the zoo display.</td>
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<td>- they showed a degree of interest and interacted appropriately, allowing the children some degree of freedom and choice;</td>
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<tr>
<td>- they were cheerful and enthusiastic.</td>
<td>3) A group of five boys were playing on trucks in kindergarten 2 (D). They were making the sound of a fire siren and added a rope and some buckets to their trucks. A pedagog provided them with a hose and they pedalled hastily to the sand tray to put out 'the bush fire'.</td>
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<tr>
<td>- the environment was spacious, airy and aesthetically pleasing;</td>
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<td>- resources tended to be plentiful, attractive and age-appropriate;</td>
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<td>- some exciting areas were available e.g. an Aladdin's cave reading corner, a cellar;</td>
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<td>- children got the opportunity to use their environment, both inside and outside.</td>
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The observation data suggested that the level of motivation was low when:

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<tr>
<th>Characteristics</th>
<th>Examples of low motivation:</th>
</tr>
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<tbody>
<tr>
<td>- the children appeared apathetic and unenthusiastic e.g. lying over the tables, wandering around the room, yawning etc.;</td>
<td>1) The children in classroom 8 (NI) had been asked to complete a worksheet, which involved them colouring a snake red, to allow the teacher to hear reading. Having completed the activity quickly, easily and in many cases carelessly, a group of boys began to hide under tables and throw books across the table at one another.</td>
</tr>
<tr>
<td>- they seemed to complete the activity out of obligation rather than interest.</td>
<td></td>
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<tr>
<td>- adults either showed little interest in the children's activities or totally dominated them;</td>
<td>2) In kindergarten 2 (D), the children, before lunch, were standing in a circle, singing songs, which did not seem to appeal to the children. Several children started to fidget</td>
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<tr>
<td>- activities were uninteresting, neither age-appropriate nor relevant to young children;</td>
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</table>
- little variety was offered and little or no choice was given;
- the environment was dull and lacking in character;
- resources tended to be routine and uninspiring;
- space was limited;
- children had little opportunity to use the environment available.

3) In classroom 1 (NI) the entire class was involved in playing the ‘farmer wants a wife’ in the assembly hall during a PE lesson. The children sang the song repeatedly (approximately five times) showing little signs of enthusiasm in the process. A group of boys started to pull the others in the circle and ran to the toilets. Other children then left the circle and went to the toilet.

### Concentration

The level of concentration was considered high when:

- the children were attentive and ‘lost’ in what they were doing;
- displayed signs of mental engagement such as an intent gaze, protruding tongue, pursed lips;
- showed perseverance in the face of difficulty;
- showed at an activity until they felt they had completed the activity satisfactorily, showing precision and care in the process.
- the adults allowed appropriate time for completion of activities;
- provided some form of open-ended activities and ensured that they were pitched at an appropriate age and ability level;
- offered a degree of challenge and diversity of response;
- adult(s) were available for intervention if and when required;
- children were encouraged to remain at the activity until they were satisfied with the conclusion;
- few distractions were evidenced;
- the environment was adequately spacious and little distraction and disturbance was in evidence.

### Examples of a high level of concentration:

1) In kindergarten 5 (D) four children were completely absorbed in painting pictures of an arrangement of flowers. One paedagog was present in the art room. Not only were the leaves painted in various shades of green and each tiny intricate detail included, (whether it be the individual sunflower seeds, a snail in the grass or a butterfly in the sky). There was also evidence of much deliberation during the painting process, e.g. choosing the appropriate mixture of paint and the size of paintbrush to use. The children were mainly silent except when they were discussing their plans with the paedagog and they remained at the activity for at least one hour.

2) In classroom 4 (NI) two boys and one girl were adding the finishing touches to a car they had created from an old cardboard box. The teacher explained how they had spent the previous morning’s playtime planning the activity, and on entry, Shane’s first words were “when can we start our car”. Sarah spent 45 minutes making a number plate for the car, carefully writing the letters and numbers and then colouring them in. David was involved in painting paper plates for the wheels and Shane made a steering wheel.
Based on the observation data the level of concentration was considered low when:

- **the children** moved quickly from one activity to another and tended to be lethargic and inactive;
- were easily interrupted and distracted, completing activities carelessly.

- **the adults** ignored or interrupted the learning process;
- timing of the activities was inaccurate and inappropriate thought was given to stretch and challenge;
- were engaged elsewhere when their attention was required by the children;

- **the environment** lacked space and there were frequent interruptions.

**Examples of low concentration:**

1) In setting 2 (NI) a little boy was in the process of building a motorbike from stickle bricks when the teacher approached. Having admired his effort she began to show him how it should stand properly and then asked what letter the word motorbike begins with. When the teacher left Jack broke up his motorbike and left to play elsewhere.

2) In setting 5 (D) the children, with the help of some of the pedagogues, were practising a play for parents’ day. After one or two attempts some of the children walked off and decided to go and play elsewhere.

As expected, the observations indicated that there tended to be a close correlation between the overall level of motivation and concentration, e.g. when children were interested in what they were doing, they tended to remain longer at the activity. But this was not always the case. In three of the Year 1 classes the children appeared to display a higher level of concentration than motivation, completing the activities out of obligation rather than interest. In three of the Danish kindergartens it was the contrary that was observed, where the children appeared to be more motivated than concentrated. On some occasions the children may have been showing signs of excitement and enthusiasm within an activity, such as chasing one another around the kindergarten, swinging from the ropes in the rough and tumble facility etc. but if something caught their attention elsewhere they were prone to leave. For this reason, it was decided to keep motivation and concentration as separate features, rather than combining them.
Higher Order Thinking Skills

The level of higher order thinking skills (HOTS) was considered high when:

- the children occasionally reflected on past experiences and offered suggestions for improvement;
- set themselves goals within an activity and involved themselves in systematic planning and problem-solving to reach those goals.

- the adults promoted high levels of logical reasoning and problem-solving;
- encouraged the children on occasions to reflect on past experiences and to develop upon them;
- stretched the children's learning potential through appropriate interaction and questioning e.g. an adult acting as the shopkeeper in a play situation.

- the environment displayed samples of children's work which may encourage reflection and development of ideas;
- materials were accessible and choice available.

Examples of a high level of HOTS:

1) Two boys, in kindergarten 1 (D), fascinated by the insects they saw in the woods, discussed them in great depth and were anxious to find out more about them. A near-by adult suggested that they look up the encyclopaedia. Both the boys and the adult looked carefully through the book recalling the detail they had seen under the magnifying glass. One of the boys suggested that it might be a good idea to draw what they saw and then they could show it to their parents.

2) In setting 9 (NI) after having been involved in structured play for approximately three-quarters of an hour, the children and the teachers got together and reflected on their experiences. The teacher drew the children's attention to a painting Anna had done. She was encouraged to relate to the other children why she had painted her house in this way. One of the boys commented that he thought the door looked rather small to which Anna replied “Sure it's a house for a mouse after all”.

Based on the observation data the level of HOTS was considered low when:

- the children completed activities in a simple fashion;
- rarely appeared challenge seeking;
- revealed evidence of repetition rather than elaboration.

- the adults placed emphasis on keeping children busy without encouraging them to think about what they were doing;
- provided little opportunity for children to reflect on their experiences and to build upon them;
- offered one-off activities with few signs of extension and progression apparent.

- in the environment there was little evidence of children's work on display;
- illustrations tended to be childish but lacked any real potential to encourage HOTS.

Examples of a low level of HOTS:

1) In setting 4 (D) three little girls came running up with a ladybird to a pedagog. Instead of expanding and developing this experience, the pedagog quickly looked at it and then continued to talk with the other adults.

2) In setting 6 (NI) the children spent a large part of the day in low-level activity. For example frequently colouring in, lining up sometimes fifteen minutes in advance for break, lunch and home time, sitting with their arms folded when they had finished an activity early and participating in toilet routines at frequent intervals.
Confidence
A high level of confidence was observed when

-the children tackled the activities without hesitation;
-expressed their emotions freely;
-displayed a sense of pride and self-satisfaction in the end product;
-were not afraid of failure;
-volunteered information easily and expressed their opinions freely.

-the adults established a warm and secure relationship, responding to children in a non-judgmental and sensitive manner;
-offered appropriate praise (i.e. not over or under praising children's endeavours);
-encouraged children to value their own work as well as that of others;
-valued all children's work according to effort rather than outcome;
-encouraged children to express themselves in front of others if they wished;
-did not place excessive pressure on the children.

-the environment tended to be relaxed and arranged appropriately for the children's needs;
-possessed a friendly and welcoming décor;
-allowed ample space for each individual children and their personal items.

Examples of a high level of confidence:
1) Having returned from watching a theatrical performance, a group of children in setting 3 (D) set to work to make their own theatre. They hastened to move furniture to and fro within the kindergarten and each put on a performance, which was watched by some of their paedagogs and peers.
2) In classroom 4 (NI) the children set about their work in a confident manner. Having discussed the activity in-depth with the teacher a member from each table got the crayons and the classroom leaders for that day gave out the worksheets. When they had completed the activity they knew to get a jigsaw, read a book or get a game from the back shelves.

While the overall level of confidence was not considered low in any of the Year 1 classes or the kindergartens, examples of low confidence were occasionally observed in some Year 1 classes in Northern Ireland. This was considered to be the case when:

-the children required constant reassurance and help;
-were reluctant to tackle activities on their own and relied heavily on the adults' guidance;
-displayed dejected and downhearted gestures e.g. lowered head, bursting into tears etc.

-the adults responded in a judgmental and insensitive manner;
)did not offer children the central position they deserved;
-placed the emphasis on getting the correct answer, with little respect being given to the children's emotional well being.

Examples of low confidence:
1) In setting 6 (NI) it was Johnny's turn to do his reading. He fiddled about with his book and then the teacher told him to start. The teacher told him the first word and then held his fingers under the words to focus his attention. Having stumbled his way through, the teacher asked him to read it again stating that he wasn't doing his best today and asked whether he practised it at home with his mum. He tried again, still showing signs of difficulty; his incompetence being reinforced by the ease at which his peers shouted out the correct version of his misread words. Johnny finally broke down and indicated that he
-the environment was not planned in accordance with the children's needs; did not display a warm and friendly atmosphere; parents were not welcome e.g. a sign in the hallway stating no parents beyond this point.

wanted to go home

2) In setting 6 (NI) the comments of the classroom assistant were overheard: “What sort of nonsense is that Ben. I wish you would take a look at Jenny's work. Look at the beautiful colouring in she has done. It's not a mess like yours”.

Well-being
The pilot observations suggested that some reference to the children’s physical well-being, defined as children’s contentment, comfort (including healthy eating) and safety, is also requisite in any description of a high quality learning environment. Based on this empirical evidence the level of physical well-being was said to be high when:

-the children appeared safe, comfortable, ate healthily and received ample fresh air; laughter was frequently in evidence; children often smiled but seldom cried.

-the adults possessed a strong rapport with the children by displaying warmth, patience and kindness; demonstrated affection by caring and gestures e.g. smiling, getting down to the children’s level, an appropriate level of touch if desired by the child; were always there for the children in a moment of crisis placed children at the heart of the programme; seldom raised their voices and encouraged self-discipline; attempted to make the children as comfortable as possible and encouraged them to eat healthily; took appropriate precautions for children's safety.

-the environment reflected a cosy, warm and calm atmosphere i.e. an extension of the home; provided ample space for children's comfort and relaxation; was as safe as possible without hindering the children's development.

Examples of a high level of physical well-being:
1) In setting 1 (D) a group of children were observed having great fun in the bathroom, splashing about in the showers, resulting in water being everywhere.

2) In setting 4 (NI) the children accompanied by both the teacher and classroom assistant were involved in playing follow the leader. Each child had a musical instrument and when one of the adults tapped it they were allowed to join the band. Much laughter was observed and when they finished they all lay down on the floor together.

3) In setting 4 (D) there were low lighting, comfortable sofas and soft chairs, cushions and mats to lie on the floors. One room was completely filled with cushions and mattresses.
Based on the observation data the level of physical well-being was considered low when:

- children appeared unnaturally quiet, subdued, tearful or unhappy;
- seemed uncomfortable, restricted by their surroundings.

- adults possessed little rapport with the children;
- appeared impatient, unfair and put the content of the curriculum before the children's needs;
- little emphasis seemed to be placed on children's physical and emotional well-being;
- children were told what to do little individuality was encouraged.

- the environment appeared dull and uncomfortable and on occasions signs of danger were apparent;
- movement was restricted and did not have freedom to go where they wished.

Examples of a low level of physical well-being
1) In setting 1 (NI) a child was sitting on a chair which was clearly too small for him. As he completed his worksheet he wriggled and twisted on the chair showing signs of discomfort. The teacher told him to stop moving around and get on with his work.

Independence
A high level of independence was in evidence when:

- children had the freedom to use the environment—the children appeared to use their own initiative and make simple choices;
- made decisions about what they wanted to do with the activity;
- used the adult(s) for support and advice rather than direction;
- made attempts to solve their own problems;
- showed a degree of personal independence e.g. putting on own coat and shoes, going to the toilet unsupervised, helping with the daily chores etc; the adults encouraged and guided the children to do things for themselves as often as possible;

- adults encouraged a degree of freedom and choice;
- encouraged children to make their own decisions and solve their own problems;
- encouraged the children to use their own initiative;

Examples of high independence include:
1) In kindergarten 4 (D) a group of children participated in the preparation for lunch. They washed the vegetables, cut them up, buttered the bread, garnished the plates and then set the table. After the meal children cleared the tables, washed the dishes and brushed the floor, ensuring everything was in its original place.

2) In classroom 4 (NI), on entry, the children collected their name card. At playtime they then selected the activity of their choice by hanging the card under the appropriate symbol.
-the environment was arranged to facilitate choice e.g. shelves were low-level or some measures had been taken to allow children access to the materials;

-it was well-organised e.g. a coding facility was available to allow easy finding of resources and small items such as scissors, cellotape, glue etc. remained in the same position;

-toilets were within easy access.

Based on the observation data the level of independence was said to be low when:

- **the children** showed little initiative, rarely made decisions, and depended on adults for almost everything.

- **the teaching strategies** tended to be both dictatorial and authoritarian or children were allowed complete freedom, and little constructive planning for the development of independence was evidenced.

- **the environment** was not child-appropriate e.g. shelving was high, space was limited and toilets were not accessible;

- children did not have the freedom to use the environment freely

**Examples of low independence:**

1) In classroom 8 (NI), the children were called up to the mat area and the teacher discussed the shape of the letter ‘e’ and words that started with it. She then showed them the worksheet, which they had to complete. It involved the children writing the letter ‘e’ and colouring in an elephant. Like the children, the teacher also had her own worksheet and began to show the children how it should be completed. She spent at least five minutes colouring in the elephant in front of the children, reinforcing the colours to be used and the strokes to be taken. The children then returned to their seats and were expected to do likewise.

**Social Interaction**

Based on the empirical evidence, the level of social interaction was said to be high when:

- **the children** participated and collaborated well in parallel and group activities;

- shared and took turns easily interacting confidently and freely with adults and peers;

- displayed few signs of aggression and misbehaviour.

- **the adults** were approachable and had available time to interact appropriately with the children;

- provided activities that were open-ended and practical in approach to allow for interaction;

- provided opportunities for working in groups

**Examples of high social interaction:**

1) There were about 24 children in the outdoor area in kindergarten 8 (D). One group of children was working with a paedagog looking for insects with magnifying glasses and discussing their habitats. Three boys were building a castle in the sand tray and trying to construct a tunnel through it. Another group of children was filling saucepans with water from the rain puddles. Although at first they were working individually, they soon began to help the three boys in the sand tray to fill their tunnel. Another group of children was chatting to each other in the ‘dolly house’. The children on the tricycles worked...
and in pairs; allowed ample time for group discussion and participation; empathy and consideration towards others were emphasised; self-control was encouraged. **The environment** allowed for group participation; contained resources which stimulated interaction and communication; contained areas which allowed for children's own 'private’ interactions

The level of social interaction was considered low when:

- **The children** worked/played individually and rarely interacted with others;
- took part in little constructive discussion;
- displayed some signs of contention e.g. telling tales on one another, calling each other names etc.
- **The teaching strategies** tended to be competitive rather than collaborative;
- allowed little opportunity for peer discussion and interaction; provided activities which tended towards individual completion rather than group participation.

Although the observations suggested that **the environment** in all the Year 1 classes and Danish kindergartens seemed to promote interaction, children sitting in groups etc., it was assumed that the environment might hinder interaction when it was:

- too small and/or too regimental to allow for positive social interaction among children and adults.

**Examples of low social interaction:**

1) In setting 9 (NI) the entire class were involved in playing "Kim's game". Each child was getting a turn to guess what object the teacher had removed from the selection sitting on the mat. After initial attempts at helping one another, the teacher soon intervened to say "Let Clare try it on her own". As a result the children soon became tired of either waiting for their turn or bored from listening to the responses of others. The teacher, recognising the children's fatigue, decided to cut the activity short, resulting in grumbles from some children who did not get a turn.

2) The children were involved in a colouring-in exercise in classroom 6 (NI). At one table there was some quiet discussion about the colour of crayon to use and the quality of their work, the teacher shouted "get on with your own work and stop all that talking". After approximately five minutes two girls then began to argue whose picture was better and when Helen told Katie that her work was ugly, Katie ran to tell the teacher who responded "What is all this fuss. Would you get on with your work and mind your own business"
Respect
The observations suggested that in addition to children's social interaction respect for others (i.e. child to child, adult to child and child to adult) was also a feature of any high quality learning environment. In many of the Danish kindergartens the child was placed firmly at the heart of the curriculum, where the emphasis is one of ensuring that the activities meet the children's needs. However in the more formal Year 1 classrooms in Northern Ireland, subject-content and attainment of specified targets assumed priority on many occasions. Based on the observations the level of respect was considered high when:

- the children displayed good manners in general;
- showed respect for the adults, peers and the environment;
- the adults established a trusting and fair relationship with all children;
- took into consideration the needs of all children;
- respected all children's work according to effort rather than content;
- the environment had a variety of materials catering for all children's needs e.g. gender and culture;
- allowed room for each individual within the setting;
- provided space for children to "let-off steam".

Examples of a high level of respect:
1) In classroom 2 (NI) one of the children in the class had spina bifida. The other children in the class helped him in the playground and in the classroom and at the same time interacted with him as any other member of the class.
2) In kindergarten 5 (D) several children were not Danish by origin. This was taken into account by displaying flags from each child's country of origin and frequently preparing Asian meals at lunchtime.

Although infrequent, some signs of low respect were observed. This was said to be the case when:

- the children were rude and unmannerly;
- they were disrespectful to equipment, adults and to one another.
- the adults were highly disorganised and poorly planned;
- they did not provide a good role model for the children.
- they showed poor regard for children's work;
- the ethos of the setting was competitive, hierarchical and unfair.

Examples of poor respect:
1) In classroom 8 (NI) a group of children hid under tables, threw books at one another, shouted at the top of their voices despite the teacher telling them not to do so. One of the boys even stuck his tongue out at the teacher.
-the environment offered a poor selection of materials with little consideration for gender and multi-cultural needs taken into consideration.

2) Some paedagogs in kindergarten 2 (D) were observed smoking in the company of the children and on a few occasions they continued to chat to one another and drink coffee instead of responding to the children’s requests.

Multiple Skill Acquisition
Skill acquisition as an objective was clearly evident in the observations but the evidence suggested that it was impossible to distinguish whether, for example, more mathematical competence was shown by children estimating the number of milk crates to reach a tree house, or completing a list of sums. It was decided therefore to evaluate multiple skill acquisition in terms of the opportunities that were available to promote language, literacy, and mathematical, scientific, creative and physical development. The level of multiple skill acquisition was considered high therefore when:

- a broad and balanced curriculum was on offer promoting the development of linguistic, scientific, mathematical, creative and physical skills;
- thorough planning and emphasis were given to each skill area;
- some evidence of continuous monitoring of children’s development took place; activities and materials appropriate to all skill areas were available;
- the environment allowed for the development of all skill areas.

Example of a high level of multiple skill development:
1) In kindergarten 5 (D) a broad and balanced curriculum was in evidence. Scientific development was promoted both in the outside area e.g. greenhouse, wild garden, farm animals and also inside in the kitchen (children were allowed to help the cook if they wished). A large room was set aside for physical development, equipped with climbing bars, rope swings, gymnastic mats etc. An art room was also available where children were free to paint if and when they pleased under the guidance of an experienced artist and musical instruments were also in plentiful supply.

There was also a room in the basement where children could play drums as loudly as they wished. Jigsaws, construction toys, games, books etc. allowed for mathematical and literacy development, while role-play areas promoted linguistic and imaginative skills.
Based on the observation data a low level of multiple skill acquisition was in evidence when:

- a narrow curriculum was on offer which failed to cater for all skill areas;
- planning for Skill Acquisition rarely took place;
- observation and assessment were rarely undertaken or in some cases over-emphasised;
- the environment allowed for little Skill Acquisition.

**Examples of low multiple skill development:**

1) In kindergarten 2 (D) the curriculum on offer was narrow in focus, children spending the entire day outdoors, playing on tricycles, swings in the sand or on the climbing frame.

2) In classroom 3 (NI), with the exception of three-quarters of an hour on play-time in the morning, the rest of the day focused on reading, writing and arithmetic, mainly in the form of completing worksheets.

5.4 **Early Years Experts' Role in the Development of the Instrument**

Based on the empirical evidence from the pilot observation studies, the researcher judged nine features of the holistic experience as appropriate for examining the Northern Ireland Year 1 classes and Danish kindergartens. The next stage in the development process was to send the instrument to a group of early years experts (both in Northern Ireland and Denmark) to comment on its validity. The sample of experts was all in agreement that the QLI addressed key indicators of quality practice in the early years. Overall they expressed the view that the examples relating to each indicator were relevant and comprehensive. The Danish experts expressed their satisfaction with the way in which the schedule referred to skill areas other than reading, writing and arithmetic. Both the Danish and Northern Ireland experts agreed that the format was simple and straightforward.

The Northern Ireland experts did advise, however, that some wording alterations should be made to allow for clarity and ease of comprehension. Their recommended changes included:

- changing the example “remaining at an activity for at least 20 minutes” to “remains at an activity until a satisfactory conclusion is reached”;
- “bored expressions” were replaced by “appears bored” as it was felt that a bored expression on a child might be difficult to determine; and
- caring gestures were itemised as smiling, physical contact and talking quietly to the children.
The final collection of features, categorised along the axes of child, adult and environment, was then ready for use as the Quality Learning Instrument, QLI. The full instrument is shown in appendix 4.2.

As the criteria and the judgements made when using the QLI were based on only one judge some form of calibration had to be undertaken. This is explained in the next section.

5.5 CALIBRATION OF THE INSTRUMENT

5.5.1 Introduction
To ensure as objective a judgement of quality as possible, the researcher’s judgements were calibrated against a panel of ten Year 1 teachers. Each individually watched an excerpt of Danish practice (by means of a video recording) and rated it in accordance with the Quality Learning Instrument, giving a score from 1 to 5 and writing comments to support the score given. This process had been carried out in advance by the researcher, but the raters did not know her results. The raters’ individual scores and the totality of their comments were then compared to those of the researcher in an attempt to draw out commonalities and differences. The findings from the calibration study are presented in this section under the following headings:

- the teachers’ scores
- the teachers’ comments

5.5.2 The Teachers’ Scores
Although some teachers might only give full marks (i.e. a score of ‘5’ in exceptional circumstances, while others might be of the opinion that a ‘5’ is reflective of good quality practice), the Year 1 teachers’ (from here on referred to as raters) and the researcher’s scores tended to be very similar. In relation to each category (i.e. children’s actions etc.) of motivation, concentration and confidence, the agreement between the raters was never lower than 7:3 and in most cases the difference could be explained in a single score e.g. giving a ‘5’ instead of a ‘4’ or a ‘4’ instead of a ‘3’.

The researcher’s scores also corresponded highly with the raters’ mean scores for each of these features as is illustrated in table 5.2. The scores were multiplied by 20 to give a score out of 100.
Table 5.2: Raters’ mean scores and the researcher’s scores for motivation, concentration and confidence:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Motivation</th>
<th>Concentration</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CA*</td>
<td>TS</td>
<td>E</td>
</tr>
<tr>
<td>Mean score</td>
<td>84</td>
<td>76</td>
<td>64</td>
</tr>
<tr>
<td>Researcher</td>
<td>80</td>
<td>80</td>
<td>60</td>
</tr>
</tbody>
</table>

*CA = Children’s Actions

TS = Teaching Strategies

E = The Role of the Environment

This appeared also to be the case for ‘skill acquisition’, ‘higher order thinking skills’ and ‘respect’. The agreement between the raters’ scores was never lower than 7:3, and as before, the variance could be explained in a single point. The high level of correspondence between the researcher’s scores and those of the raters is illustrated in table 5.3.

Table 5.3: Raters’ mean scores and the researcher’s scores for ‘skill acquisition’, ‘higher order thinking skills’ and ‘respect’:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Skill acquisition</th>
<th>Higher order thinking skills</th>
<th>Respect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CA</td>
<td>TS</td>
<td>E</td>
</tr>
<tr>
<td>Mean score</td>
<td>78</td>
<td>64</td>
<td>60</td>
</tr>
<tr>
<td>Researcher</td>
<td>80</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

Agreement was also shown for ‘independence’, ‘social interaction’ and ‘happiness’ in relation to the children’s actions and teaching strategies. Once again the agreement between the raters was never lower than 7:3 (the score difference only being one point) and on two categories (i.e. teaching strategies for social interaction and happiness) the agreement of the raters’ scores was 9:1. The researcher’s scores were also similar to those of the raters on each of these features for the children’s actions and teaching strategies.

The results revealed however, a degree of disagreement in relation to the environment. For ‘social interaction’, six of the raters agreed with the researcher that the environment should receive a score of ‘3’, with three raters giving a score of ‘4’. Another rater gave a score of ‘2’ which added some ambiguity to the evaluations. For ‘happiness’, six of the raters agreed with the researcher’s score of ‘4’; while three of the raters gave a score of ‘3’. Another rater, believing the environment not to be conducive to happiness, gave a score of ‘2’ in sharp contrast to one rater who scored the environment for ‘happiness’ as
'5'. Nevertheless as Table 5.4 shows, the extent of agreement between the raters' mean score and the researcher was very strong.

Table 5.4: Raters' mean scores and the researcher's scores for 'independence', 'social interaction' and 'happiness':

<table>
<thead>
<tr>
<th>Feature</th>
<th>Independence</th>
<th>Social interaction</th>
<th>Happiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>CA</td>
<td>TS</td>
<td>E</td>
</tr>
<tr>
<td>Mean score</td>
<td>86</td>
<td>86</td>
<td>82</td>
</tr>
<tr>
<td>Researcher</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Due to the high level of agreement in the other areas of practice, it was considered more likely that the disparity of opinion on the environment issue might be explained by the lack of adequate evidence shown on the video extract. Perhaps some of the raters concentrated more than others on the additional background information and photographs, which might have influenced their findings.

5.5.3 Teachers' Comments

Although the raters' and researcher's scores gave a more precise indication of the level of their correspondence, the written comments clarified the thinking behind the raters' raw scores on several occasions. Aspects of the commentary are considered next.

On all aspects of the children's actions, there was a high level of agreement between the raters' and researcher's comments. For example the researcher's comments and raters' for 'motivation' could be described as being high. They commented on the eagerness and enthusiasm displayed by the children at the painting activity and the curiosity and interest shown by the boys making a boat out of wood.

Like the researcher, the raters' comments for teaching strategies on most of the features of a quality learning experience could be described as satisfactory to high. For 'motivation', the researcher referred favourably to the variety of stimulating activities that were available for the children, but suggested that more interactions on the part of the staff might have been helpful. The raters made similar comments.

There appeared to be quite a high level of agreement between the researcher's comments and those of the raters on most aspects of the environment. Like the researcher, for 'happiness', the raters made reference to the friendly atmosphere that permeated the kindergartens and the cosy, yet spacious surroundings within. Two of the raters appeared
to stress the safety aspect of the environment, more than either the other raters or the researcher. They referred to the lack of adequate safety precautions, children using scissors unsupervised and playing with drain water outside. These remarks were made by the oldest raters in the sample and might be explained therefore, as arising from an over-protective nature.

5.5.4 Summary
The results from the calibration study allowed the researcher to consider that her judgements arising from the use of the QLI were reliable in early years settings as the high level of agreement obtained on most of the features indicated a strong inter-rater reliability. The security of this deduction is strengthened by the fact that the raters were unknown to each other and came from different education and library board areas. They also had different levels of Year 1 experience and in some cases training. Furthermore they completed the task individually by post and had no indication of the researcher’s or each others’ ratings.
CHAPTER 6: FINDINGS FROM THE MAIN OBSERVATION STUDIES

This chapter presents the findings of the main observation studies. The Quality Learning Instrument (QLI) was used in 50 settings in total i.e. 28 in the Greater Belfast area in Northern Ireland and 22 in the Greater Copenhagen area in Denmark. The contextual features of the settings observed are briefly described. The main findings of the observation studies are then presented under the nine features of a quality learning experience i.e. motivation, concentration, confidence etc. Throughout the chapter tables and cameos are included in an attempt, where possible, to illustrate the findings more clearly and make them more amenable to the reader.

6.1 INTRODUCTION

The second phase of the study was designed to allow the quality of the learning experiences in both the Northern Ireland Year 1 classes and the Danish kindergartens to be examined by using the Quality Learning Instrument (QLI) in a total of 50 settings. Aspects of quality to be evaluated included motivation, concentration, confidence etc. The analysis of the data was conducted as set out in chapter 4. An overall rating of each feature of quality was made, taking into consideration, where appropriate, the children’s actions, the teaching strategies and the environment on offer. In an attempt to contextualise the evaluations, it is necessary to provide a brief summary to the background of the Year 1 classes and kindergartens, much of which overlaps with the findings of the pilot observation studies. This chapter is divided into two main sections:

• summary of setting details
• observation findings

6.2 SUMMARY OF SETTING DETAILS

As for the Phase 1 observation studies the structural details of the settings are summarised under the following headings:

• demographic features;
• structure of the day; and
• setting lay-out.

6.2.1 Demographic Features

Northern Ireland – Demographic Features

In Northern Ireland, 28 Year 1 classes were observed using the QLI. The schools were situated in Greater Belfast, mainly in both inner-city and suburban areas. The Year 1 class sizes ranged from 17 to 30 children, with a mean of 24. Like the pilot observations, the children attended from 9am-2pm, the child-staff ratio was approximately 12:1, with one
trained teacher and an appropriately trained classroom assistant for at least half of the day (all of whom were female).

Denmark – Demographic Features
In Denmark, 22 kindergartens in Greater Copenhagen participated in the study. The sample consisted of 13 kindergartens (catering principally for three to five/six year olds) and nine integrated centres (catering for children aged from approximately nine months to five/six years). Like the pilot observation studies, all of the kindergartens, (except kindergarten 15 which closed at 3pm), were open from approximately 7:30 in the morning to 5:00 in the afternoon, with parents being free to deliver and collect their children whenever they pleased. The child-staff ratio (consisting of qualified and unqualified paedagogs) was slightly higher than that of the pilot studies, which may be explained by the fact these observations were not conducted in the summer term. The kindergarten size varied from 19 to 120 children with a mean of 55.

6.2.2 Structure of the day
The structure of the day in both the Year 1 classes and Danish kindergartens followed a similar pattern to that detailed in the pilot observation studies. The daily routine in all of the Year 1 classes was quite structured with a specific time set aside for different subjects. Play was observed in three-quarters of the Year 1 classes (57% in the morning and 18% in the afternoon). As for the pilot observation studies, this contrasted with the more flexible approach that was found in the Danish kindergartens where the only disruptions to free-flow play were mealtimes and outdoor trips.

6.2.3 Setting Lay-Out
Few changes to the setting layout, described for the pilot observation studies in both contexts, were observed. Northern Ireland Year 1 children spent the most part of their day in a classroom whereas the Danish children had access to more spacious and home-like surroundings.

7 To facilitate the reading process, the word ‘kindergarten’ is used to describe both the integrated centres and the kindergartens hereafter.
6.3 EVALUATIONS

These contextual issues, in particular that of child-staff ratio and available space, may influence each individual evaluation. Although to avoid repetition these structural features are only referred to on occasions throughout this chapter, it is necessary that such features of practice are kept in mind to help explain the findings. The data (which may for obvious reasons overlap with the pilot observations from time to time) will be presented under the following headings:

- motivation
- concentration
- higher order thinking skills
- confidence
- independence
- well-being
- social interaction
- respect
- skill acquisition

each of which will be discussed in turn.

6.3.1 Motivation

To assist with the analysis and interpretation of the findings, Table 6.1 details the overall level of motivation observed in the Danish kindergartens and Northern Ireland Year 1 classes.

<table>
<thead>
<tr>
<th>Motivation level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Denmark Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>6 (21%)</td>
<td>11 (50%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>11 (39%)</td>
<td>10 (45%)</td>
</tr>
<tr>
<td>Low</td>
<td>11 (39%)</td>
<td>1 (5%)</td>
</tr>
</tbody>
</table>

Northern Ireland - Motivation

In nearly all of the Northern Ireland Year 1 classes the level of motivation was considered as satisfactory or less. Although on a few occasions it was noted that children were so excited with their new reading book that they couldn’t wait to show it to their parents or were so intrigued with their maths game that they requested playing it over and over
again, this did not appear to be common practice. In several cases unenthusiastic
comments were overheard such as "oh no not this again", "I wish we could play now" or
"I hate all this work" and bored and repetitive gestures were frequently observed.

In most of the Year 1 classes, the emphasis seemed to be placed on delivering the
curriculum and ensuring a successful outcome with little, if any, thought being given to
the children's innate interest. It was the teachers who in most cases decided what
activities should be undertaken and how they should be completed, allowing the children
little freedom and choice in the process. Most of these activities, with the exception of
structured play, tended to be written exercises, offering little variety to the school day.
Instead of appealing to the children's intrinsic interest, Year 1 teachers occasionally were
observed using extrinsic methods of motivation to ensure that the children completed the
activities, whether it be the use of rewards such as stars and stampers or in some cases the
threat of punishment e.g. "if you don't get on with that work I'll have to tell your mum".

In most cases, despite efforts to make the environment bright and colourful, it appeared to
do little to motivate the children, as they did not have the freedom to use it. The
classrooms tended to be quite cramped, desks and chairs taking up most of the space and
it was only in two schools that there was a garden plot which was mainly used only at
break and lunch time. In class 11 there was also a greenhouse, but like the PE hall, this
had to be shared with the rest of the primary school children and as the Year 1 teacher
said "we're lucky if we get there three times a year". According to the teachers outside
trips beyond the school surroundings were also limited, three times annually being the
norm.

In six of the Year 1 classes, a high level of motivation was observed, where the teachers
attempted to make the activities as stimulating and game-like as possible, employing a
variety of teaching techniques. This practice is reflected in the following cameos:

Cameo 1

In class (10) the teacher had devised a crocodile game as a word revision exercise. The
purpose of the activity was for individual children to make their way across the crocodile, by
reading the words on the crocodile without waking it up. The children showed their
enthusiasm by raising their hand in anticipation of being chosen, and shouts of laughter as
the classroom assistant pretended to have difficulty reading the words and requested the
children's help.
Cameo 2

In class (11) the children displayed their interest and enthusiasm as they eagerly counted the numbers one to 10, initially by whispering, followed by shouting. When counting the numbers backwards the children could not wait to get the opportunity to scream blast-off. The climax of the lesson came when the teacher gave the children the opportunity to guess the number of sweets in the jar and their faces shone when they were allowed to take a sweet each.

It was interesting to note that the children’s level of motivation tended to be higher during structured play activities as is revealed in the following cameo:

Cameo 3

A number of practical activities such as painting, sand, construction and jigsaws, were on offer in class (4) during structured play. As compared to the rest of the day when children were less actively involved the children’s faces were much more alert and enthusiastic and there appeared to be a greater degree of urgency about them. A hum of purposeful activity was overheard as children eagerly engaged in these playful tasks. A group of three were curiously discovering the properties of dry sand, another was carefully painting pictures of the letterland character Annie apple; but it was the group of children with the construction material that particularly revealed a high level of motivation. Having decided to use both the blocks and the farm animals, the children built a rescue service, and attempted to save the animals, displaying much imagination and animation in the process.

Denmark - Motivation

Overall the level of motivation in the Danish kindergartens appeared to be higher with the majority being considered as either satisfactory or high. It was commonplace to find busy children pursuing an activity of their choice without any need of adult persuasion. On several occasions, alert and enthusiastic expressions were frequently noted and excited tones were overheard. The following cameo illustrates this more fully:

Cameo 4

Three pedagogues and 15 children in kindergarten (6) set off for a walk to a nearby play park. As they approached the gate of the park they began to quicken their step and ran to the activity of their choice. One group rushed to the slide, jumping from one foot to the next as they waited in anticipation for their turn; several children went to observe the animals, others played on the wheeled vehicles and some were in the paddling pool. Screams of excitement and laughter could be heard as they filled buckets of water and threw them over one another.

The teaching strategies, in most of the kindergartens, seemed conducive to developing motivation. The children had freedom and choice to pursue the activities to their own liking and to play with whatever they wished, with little control from an adult. It could be argued that best practice was observed in those kindergartens where the children had access to a wide and varied range of activities both indoor and outdoor, and where adults interacted and played with the children.

The environment in most cases could also be described as stimulating. A variety of private areas were available, where children could play without the presence of adults or
the attention of other peers e.g. in kindergarten (21) the entire basement had been converted into a children’s grotto where adults were forbidden. Similarly in several of the outdoor play areas, weeping willows were planted to allow for privacy and it was quite common to find some form of underground tunnel. The following cameo illustrates the level of stimulation that was offered in one of the high quality settings:

Cameo 5
In setting (7) the environment was not only spacious, but also careful consideration had been taken in the choice of decor, to ensure that it was aesthetically pleasing to the young children? In the centre of the welcome room was a large table adorned with burning candles, decorative ornamental arrangements and baskets of flowers. A large chandelier hung over the table to complement the low lighting that was evident throughout the setting. Samples of children’s work and special toys including a china tea-set and china dolls were displayed in little glass cases and a pirate in a colourful cage and a large spider hung from the ceiling. The art room was also tastefully decorated with samples of both professional artists’ and the children’s work and the brightly coloured walls had been specifically chosen, according to the leader, to inspire the children’s creative mood. A rough and tumble facility was available equipped with large ropes, cushions and climbing frames and an adjoining senses area was filled with colourful lights and an array of objects that made interesting sounds to inspire the children’s senses of sight and hearing. The kindergarten also had its own theatre containing a stage and a variety of costumes, puppets, musical instruments and CD player. There was also a make-up room, equipped with a kidney-shaped dressing table, decorative ornaments, flowers and bridal magazines. The large construction area possessed an array of building apparatus and even the toilets did not go unnoticed. They were decorated according to a sea theme, with paddling pool, fish, ducks and rubber ring which were also available for use.

These experiences were complemented by frequent outdoor trips, which were used in all of the settings at least once weekly to arouse the children’s interest and curiosity. In fact in setting (1) the children were taken outdoors everyday. As one of the pedagogues stated “in Denmark we place much emphasis on using our environment. We go out and you never know what you might experience”.

In the one setting where the overall level of motivation was said to be low, fewer children than normal were present as the Easter holidays were approaching. For this reason no specific activities had been set up for the children and they were expected to play outdoors for most of the day with very few resources and little interaction from the staff. The following cameo provides an insight into what was happening there:

Cameo 6
Three adults and approximately 12 children were outdoors on a pleasant spring afternoon. The adults were seated with some children on their knees. In general the children’s actions were slow and aimless and there was evidence of children wandering about. Even the children on the swings displayed little energy and one three-year-old child actually lay down on the swing and fell asleep. The adults chatted to the children on their knees and ran to one child’s attention when he fell, but little attempt to stimulate the children’s play was observed.
Summary - Motivation
It would appear that the Danish children were displaying a higher level of interest and enthusiasm compared to their Northern Ireland counterparts. The observations suggested that the structured and sedentary activities mainly practised in the Northern Ireland Year 1 classes, seemed to hinder the children's level of innate interest, causing the teachers to rely on extrinsic sources to initiate the children's enthusiasm. The freedom to choose their own activity in the Danish settings and the more spacious environment seemed to appeal to the children’s interest, especially when an array of stimulating activities were on offer and some interaction on the part of the educators took place.

6.3.2 Concentration

Table 6.2: Overall level of concentration observed in the Northern Ireland and Danish sample

<table>
<thead>
<tr>
<th>Concentration Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>6 (21%)</td>
<td>6 (27%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>17 (61%)</td>
<td>13 (59%)</td>
</tr>
<tr>
<td>Low</td>
<td>5 (18%)</td>
<td>3 (14%)</td>
</tr>
</tbody>
</table>

Northern Ireland - Concentration
The overall of concentration in most of the Northern Ireland classes was satisfactory. Although in some cases the children engaged in a number of time wasting activities (such as requesting to go to the toilet in the middle of an activity, sharpening pencils etc.), in the majority of settings a certain level of precision was expected. Children were obliged to complete the activities whether they were interested in them or not, as is evidenced in the following cameos:

Cameo 7
In class (1) after some initial moans and groans the children started to colour four shapes yellow, taking as much care as possible to ensure that no white gaps were left as both the teacher and classroom assistant hovered behind them to keep them on-task.

Cameo 8
The teacher in class (9) gave children a worksheet and explained to them what they had to do and what they were to go on with if finished. She then proceeded to test each child individually on his or her words. During this time the children began to get very restless, and the noise level began to rise. In order to get the children back on task, the teacher raised her voice and this resulted in sudden quietness and the children continued with their work.

When there was a breakdown in discipline, and the children appeared uninterested in what they were doing, much inattentiveness was observed as is illustrated in cameo 9.
Cameo 9

During a reading activity in class (12), the children were asked to complete a letter writing and colouring-in exercise while the teacher heard groups of children read. Several of the children completed the activity quickly, showing little precision in the process. A group of boys used the opportunity to misbehave. Despite the teacher’s efforts to encourage them to get on with their work, they started to throw books at one another, shout out loudly and scribble over their peers’ work. One boy hid underneath the table.

It seemed that a high level of concentration was observed only in those classes where the children displayed a high level of motivation. The practical aspect of the activities on offer and the probing input of the teacher, appeared, not only to appeal to the children’s level of interest and in so doing ensured a greater degree of attention and perseverance in the process. This was especially the case when children received an appropriate amount of time in order to complete their tasks.

The observations revealed, that in many of the Northern Ireland Year 1 classes, children were frequently interrupted throughout the day, especially during structured play, and this seemed to distract their flow of thought. This is illustrated in the following cameos:

Cameo 10

In class (23), a group of four children were actively involved and mentally engaged in playing a tabletop game. ‘Johnny’ had only one last shape in order to win, when the teacher called him up to read.

Cameo 11

In setting (28) the teacher had set up five activities for structured play. The children were divided up into groups and assigned an activity. The whistle was blown at ten-minute intervals and the children had to proceed in a clockwise direction to the next activity.

The adherence to a structured timetable also caused some interruptions where children were obliged to finish off an activity quickly or complete it the next day to enable the teachers to continue with explaining another task.

Denmark - Concentration

Like the Year 1 classes, a satisfactory level of concentration was also observed in most of the Danish settings. According to the observation data, if interested in an activity, the children tended to remain at it for a relatively long period of time, showing a degree of precision and perseverance in the process. The following cameos illustrate this more fully:
Cameo 12

In setting (3) two boys and a male paedagog had spent the entire morning creating a barge from wood. In the afternoon the boys brought the finished product out into the sand and set to work in an attempt to make it float. Having dug a canal in the sand, the boys proceeded to carry over buckets of water to fill the track. However, they soon discovered that the more water they poured in the more it disappeared. By this time they were joined by some friends and after much discussion and deliberation they decided to use a hose but to no avail. During consultation with the paedagog they then decided to insert some plastic bags in the track. Much to their delight that the plastic retained the water. When they placed the boat in the canal, they found the track was too narrow. They then widened the using their hands and spades. This hard work continued for the rest of the afternoon and finally they were successful.

Cameo 13

In setting (17) one of the morning activities was face painting. But it was not only the children who were getting their faces painted some of the children were engrossed in painting the faces of the paedagog. The facial expression of one little girl revealed her intense concentration, as she carefully painted the leader's nails and attempted to put mascara on without leaving any smudges.

Few distractions were in evidence in any of the settings, where paedagog tended to allow children as much time as possible to complete their tasks. (In approximately a quarter of the settings even mealtimes had been abandoned as the paedagog took the view that stopping the children to eat at a specific time was disturbing their play. Instead they provided an ‘open’ mealtide where children could eat whenever they pleased).

It appeared from the observations that the spacious surroundings of the Danish kindergartens seemed to play a role in reducing the amount of distractions. The variety of rooms allowed the children to find some ‘nook’ which enabled them to read a book quietly, listen to music or have a quick snooze without too much disruption. Furthermore the space both inside and out ensured that large groups of children were rarely together for a long period of time.

However relying on the children’s interest and offering few interruptions did not always seem sufficient to maintain the children's attention as evidenced by the lower ratings in concentration than in motivation in seven of the settings. The observation data suggested that although children may have been initially interested in the activity, they were prone to leave when they lost interest or encountered a difficulty, especially in those kindergartens where paedagog interaction was lacking. A lack of concentration was evidenced by the unfinished jigsaws and games and by the children being observed leaving a game or a story before they had reached the end. As identified in the pilot observations, some of the activities on offer were successful in arousing a high level of
motivation, arising from excitement and great fun, yet little mental engagement was demanded. The following cameo illustrates this in more detail:

Cameo 14
In setting (10) a group of boys were playing in the rough and tumble area, displaying much energy in the process. They were bashing each other with cushions, swinging about on ropes and jumping on top of each other in a friendly manner. Although this activity inspired much action and enthusiasm, it involved a lot of 'horsing around' with little signs of mental engagement and precision being observed.

Summary - Concentration
In most Northern Ireland Year 1 classes and Danish kindergartens, the overall level of concentration observed tended to be satisfactory. Unlike the Danish children who appeared to concentrate on the activities of their own accord, the Northern Ireland children in several of the classes remained on task, due to the discipline and control of the teacher.

The observations suggested that the overall level of concentration in the Danish kindergartens could have been enhanced by more pedagog intervention to extend the children's thinking more fully. In the Northern Ireland Year 1 classes, it appeared that fewer interruptions on the part of the staff, more practical and stimulating tasks, and a less structured environment, may have allowed for a greater level of concentration.

6.3.3 Higher Order Thinking Skills

Table 6:3 Overall Level of Higher Order Thinking Skills in Both Contexts

<table>
<thead>
<tr>
<th>Higher Order Thinking Skills Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>6 (21%)</td>
<td>6 (27%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>14 (50%)</td>
<td>9 (41%)</td>
</tr>
<tr>
<td>Low</td>
<td>8 (29%)</td>
<td>7 (32%)</td>
</tr>
</tbody>
</table>

Northern Ireland - HOTS
The overall level of HOTS in the Northern Ireland Year 1 classes was considered to be quite low. The observations suggested that children were frequently involved in low-level activities, which offered few opportunities for reflection and logical thinking. In some cases, children spent most of their day completing worksheets, having been told exactly how this should be done to ensure a successful outcome. This is reflected in the following cameo:
Cameo 15

In class (2) the teacher was explaining to the children how to complete their worksheet which involved children writing a list of number ‘2’ s and drawing the appropriate number of apples in the box. The teacher asked the class as a whole first and then wrote each answer on the chalkboard from which the children copied. She or the classroom assistant then held the hand of those children who had difficulty writing the number ‘2’.

Cameo 15 also illustrates the way in which some of the activities on offer were over-challenging some children e.g. expecting them to copy from the board when they were not physically capable.

Denmark - HOTS
In most of the Danish kindergartens, the level of higher order thinking skills was also considered to be satisfactory or low, the children in general, appearing to be content with the routine. It was rare to observe children who were highly challenge seeking and engaged in much systematic planning and deliberation. In most of the Danish kindergartens, the activities tended to be one-off in nature and if the children appeared to be displaying a certain degree of satisfaction and deriving some fun from the activities that seemed to be sufficient. In the main, a caring environment was being promoted in the Danish kindergartens, with little demands being placed upon the children.

It was only in approximately 21% of the Northern Ireland Year 1 classes and 27% of the Danish kindergartens where the level of higher order thinking skills was said to be high. In these cases the children were getting several opportunities to use their metacognitive powers such as planning, reviewing, problem-solving etc., in the presence of supportive adults, in an environment which offered much stimulation.

Summary - HOTS
The observations suggested that in both the Danish kindergartens and the Northern Ireland Year 1 classes, the overall level of HOTS was quite low. Although this might be expected in Denmark, where there is little emphasis placed on ‘learning’ in the kindergartens, it should not be the case in Northern Ireland. On some occasions in the Year 1 classes, the adults seemed so engrossed in meeting targets e.g. listening to children read, that the children spent the most part of the day in low-level tasks to avoid interrupting the teacher.
6.3.4 Confidence

Table 6.4: Overall level of confidence in both contexts

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0</td>
<td>21 (95%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>28 (100%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Northern Ireland - Confidence**

In the Northern Ireland Year 1 classes, few of the children appeared withdrawn or reticent. Little apprehension on entering the setting was noted and in most cases the children had developed a sound relationship with the staff, approaching them with relative ease.

However in several cases the Northern Ireland children showed signs of hesitation when tackling certain activities, suggesting that already the fear of failure was setting in. Utterances such as “Can I start now teacher?” “Will I colour it yellow?” or “Is mine nice?” were often overheard, displaying a need for reassurance as they completed each activity. The observations suggested that the children were aware that they could get the wrong answer and that their work did not only need to please them but also the teacher. This apprehension is explained in the words of a young boy in class (26):

**Cameo 16**

William had just returned from assembly and on meeting his teacher at the door of his classroom explained that today he was going to really try his best and that he hoped he would not make any mistakes at his reading. He went on to stress that he had practised writing the letter ‘W’ many times at home the previous night and would really try hard today not to put a loop in the middle.

An interpretation of the teaching strategies would suggest that in the Northern Ireland settings there were many attempts on the part of the teachers to instil in children a sense of importance and worth. These included praising the children’s efforts and encouraging the children to applaud the efforts of their peers.

The observations revealed that the emphasis placed on academic achievement in all of the classes seemed to suppress, to a degree, the children’s overall level of confidence as there were expectations on the part of the staff that children should achieve the correct answer and complete activities in a certain fashion. This is exemplified in the following cameo:
Cameo 17

A group of children in class (14) were in the process of building a large wall from blocks when the classroom assistant approached. They had been involved in much discussion about how they would be able to reach as it got higher. On seeing the assistant they called her over to admire their building. The assistant told them that they had done it incorrectly and started to take it down. The children had previously built one block on top of the other and the assistant instead showed them how to do it like real builders so that the wall would be stronger. The children started to do so but on seeing them encounter some difficulties the assistant intervened telling the children to hand her the bricks and she would do it for them.

On some occasions, the observations revealed that this emphasis on achievement actually raised the children’s sense of self-importance, especially when they received the right answer. In other instances these positive images appeared to be counteracted by the deflated looks on children’s faces when told that what they had done was wrong.

Similarly, it was observed in some settings that the pressure to complete the planned agenda prevented teachers from having time to listen to children’s requests. Occasionally, when children attempted to talk to the teacher, they were told to get on with their work and that perhaps they could discuss it another time.

Furthermore in many of the classes the children were grouped according to their ability, especially for reading. Although an attempt was made to disguise this, by calling the groups different names e.g. colours, animals, cartoon characters etc., the observations revealed that many of the children knew whether they were in the top or the bottom group. For example in class (2) Ben commented “I’m no good at reading. I’m in the bottom group”.

Denmark - Confidence

In contrast, in all but one of the Danish kindergartens, the overall level of confidence was said to be high. The Danish 4 to 5 year olds tended to be at ease within their environments where few signs of hesitancy were noted as they approached the activity of their choice. There appeared to be a sense of self-assurance about the children. They entered the kindergarten and started an activity with few signs of apprehension, interacting freely with the adults whenever they considered it necessary.

The observations revealed that in most of the Danish kindergartens, the child was placed firmly at the centre of the curriculum. The pedagogues spent most of the day fulfilling the requests of the children and in several kindergartens the children were involved in the planning and decision-making process. Generally the children were free to go and play where and with what they liked. Few restrictions were placed upon them and this seemed to allow for a sense of ownership and belonging.
In all of the kindergartens the practical activities on offer did not require a right or wrong answer and although praise was used from time to time to reinforce the children’s efforts, the paedagogs encouraged the children to assess the quality of their own work, exemplified in the words of one paedagog “if it pleases you then it pleases me”.

Moreover at the end of the day it was common practice in the kindergartens to see paedagogs and parents chatting over coffee, in contrast to the Year 1 classes, where in many cases, the Year 1 teachers were rushing to teach another class. It was only in kindergarten (4) that any signs of lacking in confidence were observed and this might be explained by the fact that the children had just returned from their Easter vacation.

**Summary - Confidence**
The findings would suggest that the Danish kindergartens appeared more conducive to developing confidence than the Year 1 classes. Although the Northern Ireland teachers went to great lengths to make the children feel as secure as possible, the more structured and academic-oriented programme as well as the pressure on teacher time seemed to suppress the children’s feelings of self-importance and in some cases self-esteem as a whole.

### 6.3.5 Independence

**Table 6.5: Overall level of independence in both contexts**

<table>
<thead>
<tr>
<th>Independence Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0</td>
<td>20 (91%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>12 (43%)</td>
<td>2 (9%)</td>
</tr>
<tr>
<td>Low</td>
<td>16 (57%)</td>
<td>0</td>
</tr>
</tbody>
</table>

**Northern Ireland - Independence**

Although the Northern Ireland children appeared to show a degree of personal independence, few signs of decision-making and initiative taking were observed. The observations suggested that this was not due to a lack of competence on the part of the children but rather a lack of opportunity to do so.

The structured programme appeared to prevent the children displaying independent actions, not only in the formal written tasks, but also in many cases during playtime. The following cameo evidences the level of excessive control that was observed on some occasions:
Cameo 18

During break time in setting (18) the children were accompanied by their teacher to the outside play area. The children immediately began to run about, some pretending to be flying aeroplanes, others trains etc. but were soon interrupted when the teacher, shouting at the top of her voice, ordered the children to walk. A group of children then decided instead to play ‘what time is it Mr Wolf?’ to occupy themselves. When the teacher caught sight of what the children were doing she exclaimed “would you stop doing that and go and play”. Soon afterwards some children came walking over to the teacher showing the worm that they had just found in the garden area. The teacher retorted “please put that thing back and go and play or we will go indoors”. The children walked around for a few minutes when the bell rang and they lined up and returned to their classroom.

It was also apparent how the pressure of time seemed to limit the children’s independent efforts. In some instances teachers were forced to complete the activity for the children in order to hurry the process along, e.g. putting on gym shoes to allow the children to get back to their reading as in (class 3).

In most classes the environment seemed conducive to children’s independent actions. The furniture and shelving in all of the Year 1 classes tended to be child-sized to allow for easy access. However as children were only allowed to use the materials under the teacher’s direction, the development of independence was hindered.

Denmark - Independence

In all but one of the Danish kindergartens, it was commonplace to observe highly independent children who not only made their own decisions about what activity they were going to play with, but also used their own initiative during the process when necessary. The following cameo illustrates this more fully:

Cameo 19

In class (3) a four year old girl was preparing for lunch. After seeing her friend sit down at one of the high tables she decided to do likewise only to find that there was no seat available. Without asking for help from an adult she searched around the room and found an empty chair. After kneeling on it and then standing on it, she decided it was too low. She went into the next room, got a higher chair, brought it back and ate her lunch.

The observations indicated that the freedom and choice that permeated all of the Danish kindergartens encouraged the children to act autonomously. Even when going on a trip it was the children who, with the help of the pædagogs, decided in advance where they wanted to go and what they wished to do there. In the majority of the settings the pædagogs, unrestricted by time, encouraged the children to do things for themselves as often as possible and to participate in the daily chores such as setting the table.

In most cases the environment also seemed to be conducive to developing independence and even in those settings where high shelving was observed, this did not seem to restrict
the children’s independent actions. Instead of asking for help from an adult, the children were frequently observed standing on chairs to get the activity of their choice. Clearly there may be safety issues involved in such freedom of action but they do demonstrate autonomous behaviour.

Summary - Independence
Unsurprisingly the observations revealed that the more informal and flexible approach that was practiced in the Danish kindergartens appeared to promote a greater level of independence than the more structured Northern Ireland Year 1 classes. The overemphasis on ensuring a successful outcome seemed to restrict the children’s independent actions where they were obliged to follow the teachers’ instructions. The following example clarifies the distinct contrast between the two programmes. A young boy in Denmark was overheard saying to a paedagog “I’m thirsty”, to which the paedagog replied “Well what are you going to do about it?”. Whereas in Northern Ireland when a young boy commented that he didn’t want to complete an activity, the teacher responded, “Well, dear, you have no choice”.

6.3.6 Well-Being

Table 6.6: Overall level of well-being in the two contexts:

<table>
<thead>
<tr>
<th>Well-being Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0</td>
<td>20 (91%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>28 (100%)</td>
<td>2 (9%)</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Northern Ireland – Well-being
In most of the Year 1 classes, the observations suggested that the children tended to be mainly content and few signs of real unhappiness, such as crying for most of the day and frequently asking to go home were noted. Yet, as referred to earlier, the bored expressions on the children’s faces from time to time and the level of anxiety displayed when they got something wrong implied that the overall level of well-being in most of the settings could only be said to be satisfactory.

Although the staff generally were approachable, sympathetic and kind towards the children (evidenced in the amount of treats given to the children and the endearing language used on many occasions), the more school-like atmosphere and the more formal style of classroom management that permeated the Northern Ireland settings seemed to put a certain pressure on the children. They were not only expected to remain seated for
the most part of the day, but in eleven of the settings (39%) the children came in and engaged in work-related tasks immediately.

Some signs of discomfort with the environment, as referred to in the pilot observation studies, were also noted in the Northern Ireland settings as children wriggled and fidgeted on their seats. On several occasions during teaching time, the children were observed sitting as an entire class on a small carpeted area, which did not provide adequate space for all children to sit comfortably. The following cameo illustrates this lack of comfort more fully:

Cameo 20
A little boy in setting (15), while working at his table had decided to remove his shoes, an action that had gone unnoticed by the teacher. After having completed their worksheets the teacher then began to read the children a story. During this time Robert lay back on his chair and placed his feet up on the table. When the teacher caught sight of this, she immediately stopped reading and exclaimed, "What way is that to behave in school. Get your shoes on immediately and sit up properly."

This contrasted with the actions of three Danish boys in kindergarten (6) who were seated on a cosy settee, reading some comics with their legs resting on a coffee table.

In most of the Year 1 classes, little attention appeared to be given to the children's physical well being. It was observed that in some of the settings the children spent approximately 30 minutes outdoors per day, (15 minutes at break time and another 15 minutes at lunchtime) if it wasn't raining. In fact in ten of the settings (36%) the children had to stay indoors because it was considered too wet to play outside. During this time the children mainly remained seated in their classroom eating their lunch and playing with a tabletop activity.

Healthy eating did not always appear to be encouraged, as children were observed eating crisps and sweets at break and lunchtime. As teacher (1) explained "My role is to teach the children to read, write and count. I can't be held responsible for the children eating unhealthily. Surely that at least is up to the parents".

Most of the Year 1 classes appeared safe, though in some incidences it seemed that the over-emphasis on safety was restricting, to a degree, the children's happiness and development. This is evidenced in the following cameo:
Cameo 21
A group of children in class (22) came running over to the teacher on duty outdoors, exclaiming that Matthew had climbed up the tree at the bottom of the playground. Both the teacher and classroom assistant ran to his attention and after some persuasion Matthew descended the tree. The classroom assistant then turned to the teacher and stated “I really feel that something should be done about this. I don’t necessarily mean that the tree should be cut down, but the principal should seriously think about surrounding the tree with barbed wire or something to that effect to prevent the children from climbing it. Something definitely needs to be done”.

This experience contrasted with the number of children climbing trees at their leisure in the Danish kindergartens.

Denmark – Well-being
In nearly all of the Danish kindergartens the level of happiness appeared to be high. It was commonplace to hear Danish children singing and laughing while they played, chatting to one another at ease, lying at length on the floor or stretched out on a ‘comfy’ settee. Activities tended to be completed with a smile and in some cases the children showed a reluctance to go home at the end of the day.

The high level of physical well-being observed in the Danish kindergartens can be partly explained by the relaxed atmosphere that was present there. The children seemed to be free from pressure in the company of generally caring adults who were frequently observed cuddling the children and holding them on their laps, and whom they addressed on first name terms. The following image depicts this caring approach:

Cameo 22
A male pedagog in kindergarten (1) sat on a cushion on the floor reading a story to three children, one leaning on either side of him and a third with his legs dangling around his shoulders.

A healthy eating policy was promoted in all of the Danish kindergartens where a typical meal was a slice of black bread garnished with beetroot, cucumber or raw carrot (smorrebrød). After all meals children were encouraged to wash their teeth. As previously mentioned all children had to spend at least one hour outdoors per day irrespective of the weather.

This caring approach was complemented by the homely environment that was evident in most of the Danish kindergartens, which often had a selection of plants, cushions and cosy chairs etc. The comfortable clothes that were worn by both adults and children alike also added to the relaxed atmosphere. The space both indoors and out as well as the rough
and tumble facilities, appeared to provide the children with an opportunity to release their inner emotions, which might explain the low level of aggression shown.

With regard to safety, as identified in the pilot observations, this issue did not appear uppermost in the adults’ minds, yet the observations suggested that few accidents seemed to occur. As one pedagog stated “life is not safe. Children need to learn to cope with such situations in an appropriate manner”.

It was only in the two settings where the children were returning from holiday or about to go on holiday that the overall level of happiness appeared only to be satisfactory.

Summary – Well-being
Overall it would appear that the children in both contexts displayed a degree of happiness in their settings. However the observations suggested that more effort was being made in the Danish kindergartens to take into consideration the children’s physical well being, by providing a more homely and relaxed environment. Yet in some cases the degree of safety appeared to be doubtful.

The emphasis placed on ‘learning’ in the Northern Ireland Year 1 classes seemed to reduce the amount of time spent by the staff on catering for the children’s comfort, which also appeared hindered by the more school-like environment. Perhaps if the teachers in Northern Ireland had more time, more space and less pressure to fulfil attainment targets, they too could cater better for the needs of the children and in so doing reduce some of the stringent rules on safety.

6.3.7 Social Interaction

Table 6.7: Overall level of social interaction in both contexts

<table>
<thead>
<tr>
<th>Social Interaction Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0</td>
<td>19 (86%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>22 (79%)</td>
<td>3 (14%)</td>
</tr>
<tr>
<td>Low</td>
<td>6 (21%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Northern Ireland – Social Interaction
The level of social interaction was considered satisfactory in most of the Northern Ireland Year 1 classes. During structured play activities (which tended to last not more than 45 minutes), group reading and, on some occasions, PE the children received some opportunity to socially interact but during most of the written activities they tended to work individually, despite sitting together as a group. In several of the classes there
appeared to be a competitive atmosphere, the tendency being to attempt to out-perform your peer, rather than working collaboratively with him/her, reflected in comments such as “mine’s better than yours”, “yours is ugly” etc. Tale telling was also quite common, with the comment “I’m telling” being uttered regularly.

Most of the activities offered to the children did not seem to allow for much co-operation. On several occasions, the teacher was overheard telling the children to get on with their work, as the children compared the colour of crayon they were using or the answers they got. It was the teacher who spoke for most of the day, leaving the children, in several cases, little opportunity to communicate and socially interact with one another. Although it could be argued that a high level of whole class teaching encouraged the children to take turns to answer questions, the time required to get around all the children frequently resulted in boredom and lack of participation.

This practice contrasted with the actions of the children at playtime, particularly in the role-play area, where e.g. they worked as a team carrying out a selection of home chores or having a birthday party. Similarly in some of the construction and sand activities the children were observed co-operating well together, whether it was building a farm, setting up a garage or creating a sweet factory. Nevertheless, the observations revealed that in approximately half of the classes, a role play activity was not available during the play session, and as mentioned earlier, in seven of the settings (20%) no structured play was observed.

In some Year 1 classes, even during lunchtime the children received little opportunity to socially interact, where the Year 1 children ate their lunch in a large canteen in the company of older children. The following cameo provides an example of the practice that took place there:

_Cameo 23_

_In setting (18) the Year 1 children were brought into the canteen by their teacher and were then shown to a table by one of the canteen assistants. Year 2, 3 and 4 children were also in the canteen. The children were quickly given their dinner and encouraged to eat it as quietly as possible. When the noise level began to rise, the teacher on duty hit one of the tables and shouting at the top of her voice, demanded silence and told them to eat up quickly if they wanted to get outside to play._

_Denmark – Social Interaction_  
The level of social interaction appeared to be more positive in the Danish kindergartens. The children tended to interact well with one another and few signs of aggression were noted. The observations indicated that in most cases the relaxed atmosphere and the
spacious surroundings were conducive to developing positive relationships and the play-based tasks that were available allowed for group activity.

In general the paedagogs placed much emphasis on encouraging the children to solve their own confrontations and in kindergarten (11) much time had been spent on video taping both the children’s positive and negative interactions, which were then played back to the children and their parents in an attempt to teach the children means of solving their conflicts independently. Circle time was also used in approximately half of the settings as a means of encouraging the children to learn how to participate in a group situation.

The mixed age groups offered the older children opportunities to help their younger peers, whether at mealtime or getting dressed for outside play. However, as in a home environment, the older children in the kindergarten liked to think of themselves as in control and, in some cases, were observed bossing the younger ones. This is illustrated in the following cameo:

Cameo 24
In kindergarten (3) a group of children were dancing to some music. Three younger children (three-year-olds) had come in to watch them and were sitting on chairs at the back. When the older children got tired dancing they encouraged the three year olds to sit on the floor and they took the seats. One of the paedagog said, “this is all part of growing up. In the home this kind of activity happens everyday so why should we intervene and stop it. This is natural and encourages the younger children to fight their own battles”.

Moreover, in contrast to several of the Northern Ireland settings, mealtime in most of the kindergartens appeared to be one of the major social events of the day. Children, seated in groups and accompanied by an adult, chatted freely to one another about daily events, told jokes or discussed a trip they had been on earlier. The children were given all the time required to finish their meal and no pressure was placed on them to rush.

Summary – Social Interaction
The observations would suggest that the more flexible and play-oriented approach of the Danish kindergartens appeared to promote more positive group activity than the more structured Northern Ireland practice. The individual tasks offered to the children in the Northern Ireland Year 1 classes seemed to encourage more competitive activity rather than group co-operation.
6.3.8 Respect

Table 6.8: Overall level of respect in both contexts

<table>
<thead>
<tr>
<th>Respect Level</th>
<th>Northern Ireland Settings (n=28)</th>
<th>Danish Settings (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>7 (25%)</td>
<td>20 (91%)</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>18 (64%)</td>
<td>2 (9%)</td>
</tr>
<tr>
<td>Low</td>
<td>3 (11%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Northern Ireland - Respect
The overall level of respect in most of the Year 1 classes tended to be satisfactory. Although in most cases, the staff appeared to respect the children and vice versa, the observations indicated that in general it was subject content that was emphasised, rather than the individual needs of the children. The lack of freedom and choice offered to the children, the pressure to fulfil outside demands on several occasions and the more school-like environment did not seem to provide evidence of a high level of respect for the children's needs.

In approximately half of the settings, the 'smug' comments that were voiced by a few children such as “Look at the baby reading book he’s on” or “She’s a real baby. Listen to the way she talks” revealed little respect on the part of these children towards their peers.

Few opportunities to show respect to different cultures were observed in the Year 1 classes, but when this was the case both staff and peers seemed to treat these children equally. Two of the schools were integrated i.e. both Protestant and Catholic children attended and the observations suggested that children from both religions were treated equally. All of the other schools specifically catered for Catholic or Protestant children.

Denmark - Respect
In nearly all of the Danish kindergartens, the overall level of respect appeared to be high. A trusting and fair relationship between children and staff was established in most of the kindergartens and the individual needs of children tended to be catered for successfully. The adults appeared to respect the children's rights to a period of relaxation where they were free to lie down and have a rest if desired. Similarly children's need for aggressive play from time to time seemed also to be respected with the provision of 'rough and tumble' facilities. In general children from different cultures appeared to be treated equally by both staff and peers, however toys specific to different cultures were limited. In fact in kindergarten (18) parents of children from a different culture were invited to cook lunch on occasions to allow the Danish children to become familiar with their
culture. Few signs of disrespectful behaviour on the part of the children appeared to be observed.

**Summary - Respect**
The more competitive and school-like atmosphere of the Year 1 classes seemed to restrict, to a degree, the overall level of respect shown. The more relaxed approach of the Danish kindergartens appeared to allow the paedagogs more time to cater for the individual needs of the children.

**6.3.9 Multiple Skill Acquisition**
In the majority of Northern Ireland settings, the curriculum tended to be narrow in approach with the greatest emphasis being given to reading, writing and arithmetic. Although more variety seemed available in the play-based programmes of the Danish settings, the observations suggested that it was scientific and physical skills that assumed major prominence. Each of these skill areas will be discussed in more depth.

Mathematical development (An activity was said to be mathematically oriented when it involved sorting, counting, matching, comparing, ordering, measuring, sequencing or problem-solving on the part of the children).
Mathematical lessons were undertaken in all but two of the Year 1 classes. In approximately two-thirds of the cases these tended to be number-oriented and involved some instruction on the part of the teacher and a follow-up written activity to be completed by the children. Practical tasks were few in number and when carried out related generally to measures and shapes concepts. Some mathematical opportunities were observed also during playtime, including setting the table, playing in the shop and capacity work in the water tray. A number video was occasionally used to complement the mathematical work as well as the computer.

In the Danish kindergartens, it appeared that little planning on the part of the staff had been undertaken to promote mathematical skills. In most of the kindergartens however, children participated in some incidental mathematical experiences through the medium of play and the daily routine e.g. estimating the number of milk crates required to reach the tree house, sorting farm animals and building a house large enough to get inside. However the jigsaw provision tended to be poor in most of the settings and none of the children were involved in using the computer to play mathematical games.
Language skills (i.e. talking and listening)
In the Northern Ireland Year 1 classes, it seemed to be listening skills that were prioritised, while the children received few opportunities to express themselves freely except during playtime. Generally the children received the opportunity to listen to at least one story which was followed by some structured questions and in a few settings a short period was set aside for discussion which addressed the entire class. The four musical lessons observed could also be said to have been facilitating the development of listening skills. A variety of high quality children’s books were available within all of the Year 1 classes and displayed in an attractive book area.

Like mathematics, much of the language development in the Danish kindergartens took place incidentally, children being given the freedom to express themselves whenever they desired throughout the day. Stories were frequently read at the children’s request and in approximately half of the kindergartens a short period of time was also set aside for children to come together to participate in some form of discussion and listen to a story as a group. The observations revealed however that in some of the Danish settings the quality and variety of books were of a poor standard. Few activities also appeared to focus specifically on developing the children’s listening skills with the exception of normal conversation.

Literacy skills (an activity was said to develop literacy skills when it involved the children in some pre-reading or pre-writing exercise e.g. nursery rhymes, stories observation and sound games, painting, cutting, role play etc).
Structured reading and writing tasks were carried out in all of the Northern Ireland settings. In general the reading tasks involved the teacher (and in a few cases the classroom assistant) listening to the children read, testing previously learned words and teaching the children their new words for the next day. In several of the settings individual reading was heard also at playtime. The written activities included copying from the board, completing worksheets or, as in a few settings, independent writing. In most Year 1 classes these activities were supplemented by the use of incidental activities during playtime.

Unsurprisingly no planned reading or writing activities were conducted in any of the Danish kindergartens but some opportunities arose through play and children got the opportunity to listen to stories whenever they wished.
Scientific skills (An activity was said to be scientific in nature when the children were involved in observing, exploring and investigating their environment).

Few scientific activities were available in the Year 1 classes. Those that were observed included tasting dulse, (a seaweed delicacy), making toast and completing a worksheet about where different food comes from and some of the play activities could also be described as being scientific. These activities included role-play floating and sinking in the water tray and cutting out summer clothes from magazines. In a few classes children were observed watching a science-related programme. However few outdoor activities were encouraged in any of the Year 1 classes and no baking activities were observed being carried out. According to teacher (22) baking was not offered due to health and safety reasons.

In contrast, within all of the Danish settings the observations revealed that the children took part in a variety of activities that could be described as scientific in approach. Children were frequently engaged in exploring and investigating their natural habitat e.g. planting and caring for vegetables etc. and frequently helping to prepare lunch. There also appeared to be much emphasis on encouraging children to use their senses as evidenced by the senses area in several of the kindergartens. Most of the children attended a science club once weekly.

Creative activities (An activity was said to be creative in approach when it involved some artistic, musical or dramatic expression).

Creative activities appeared to be quite limited in the Year 1 classes. Although in most cases some form of painting was observed during playtime, the observations indicated that children were mainly told what to paint. In a few classes they were actually told how to paint it e.g. in class (25) the teacher had a picture of a boat she had painted earlier in a childlike manner for the children to copy. With the exception of singing songs, other forms of musical expression appeared limited. In class (13) however, the children attended a musical recital. Some form of role-play was available during playtime but the observations revealed that the time limit on the play tasks seemed to restrict the degree of imagination shown.

Painting and drawing tended to be the most popular artistic activities in the kindergartens, but in a few cases, children were also observed playing with clay, pastels and ‘junk’ materials. Several role-play and construction activities were also observed where the children were engaged in using much imagination and in kindergarten (3) the children went to the theatre. The musical experiences, which appeared quite limited, including
listening to classical music, singing songs and on occasions dancing and playing musical instruments.

*Physical skills (i.e. gross motor development)*
The observations revealed physical activities were observed in only five Year 1 classes. These activities assumed, in all cases, the form of a structured lesson, where children were obliged to follow the instructions of the teacher. The only other opportunity for physical development appeared to be at break and lunchtime when children were free to play outdoors for a short time, weather permitting.

Many physical activities, on the other hand, were available in the Danish kindergartens, particularly in the form of outdoor play. These experiences included children climbing trees, riding tricycles, roller-skating, swinging on ropes etc. all of which provided the opportunity for gross-motor development. In most kindergartens the children also attended a gymnastics club once weekly and the rough and tumble facility could also be used as a kind of gymnasium.

6.4 OVERALL SUMMARY OF THE CHAPTER

The findings from the main observation studies can be summarised as follows:

*Northern Ireland*
- the overall level of motivation in the Year 1 classes appeared to be quite low; the over-emphasis on written activities, the pressure to meet targets and the lack of freedom and choice seemed to restrict the level of interest shown;
- although the overall level of concentration appeared to be marginally higher, it tended to be teacher discipline that ensured children remained on task, not a desire to do so;
- opportunities for children to develop their higher order thinking skills were restricted by the lack of challenge on offer – children were observed completing worksheets and colouring in for the most part of the day;
- few opportunities for children to interact socially and to act autonomously were displayed in the Year 1 classes;
- although the overall level of happiness was satisfactory, some children already appeared to fear failure, showing hesitancy as they approached their activities;
- subject-content appeared to be prioritised rather than the individual needs of children.
Denmark

- in the Danish kindergartens the overall level of happiness, confidence, social interaction and respect was high, the emphasis placed on securing a caring and supportive environment in which children can develop naturally;
- the children were offered many opportunities to act independently and in all kindergartens the children were at least satisfactorily motivated by the play-based activities that were available;
- the overall level of higher order thinking skills and concentration were less positive, the emphasis placed on enjoyment and fun, rather than ensuring that the children are intellectually challenged.

With these findings in mind about the quality of the learning experience, the next chapter presents the results of the interview studies, providing an insight into the perceptions of Year 1 teachers and Danish pædagogs.
CHAPTER 7: FINDINGS FROM THE INTERVIEW STUDIES

In-depth interviews were conducted with a sample of Year 1 teachers in Northern Ireland (38) and paedagogs in Denmark (30), concentrating on background issues such as training, job satisfaction etc. and on professional issues e.g. the content of the curriculum. This chapter begins with a review of the key purposes of the interviews and then details the findings that emerged from them, structured according to the seven main themes forming the structure of the interview schedule.

7.1 INTRODUCTION

The interviews were designed to enhance the observation studies and served two key purposes: to explore issues that arose from the observations and to develop an insight into the perceptions of Year 1 teachers in Northern Ireland and paedagogs in Denmark. Data arising from the educators’ responses were analysed within the seven themes which formed the structure of the interview schedule:

- Training and background profiles;
- Job satisfaction;
- Commitment and dedication;
- Planning;
- Content of the curriculum;
- Relationships; and
- Challenge.

These themes are examined in turn below.

7.2 PERSONAL ISSUES

7.2.1 Training and Background Profiles of the Sample

Northern Ireland

Most of the Year 1 teachers interviewed were aged between 41-50 years, were trained at Stranmillis University College Belfast and were Key Stage 1 specialists. Although only one of the interviewees held a masters qualification, all of the Year 1 teachers were trained to degree level or the equivalent. Most of the sample (60% n=23) had taught Year 1 children for more than 10 years. Only 23% (n=9) held a senior post of responsibility.

Denmark

In Denmark all paedagogs attend a similar training institution and receive the same qualification - Afgangsbevis for bornehavepædagoger i.e. Certificate in Pre-school Teacher Training (Pascal, Bertram and Heaslip, 1992). In recent years the length of
training has been extended from two to three years and since 1992 has been increased to three and a half years.

Perceptions of their Training
Some interesting findings emerged from the interviewees’ responses when questioned on how they perceived the usefulness of their training.

The majority of Danish respondents (60% n=18) described their training in positive terms, emphasising the opportunity it provided for maturation and personal development as evidenced in the following statements:

“I became much more confident - ready to go out into the world and behave as an adult”

“I particularly liked the opportunity to form our own opinion and develop our own personality”

However, 40% (n=12) of them indicated that more theory would be useful to complement the practical programme.

This positive attitude was in sharp contrast to the responses of the Northern Ireland sample, the majority (82%, n=31) of whom considered their training to be inappropriate. An analysis of their comments suggested that more time for practice was desired and more explicit information about how the basic subjects such as reading should be taught. This opinion is reflected in the following comments:

“It’s only when you come out and get experience that you really learn. All that theory is pointless”

“Anything I learned at college was on teaching practice. No one ever sat down and taught me how to teach reading”

The findings suggested that the Year 1 teachers wanted their training to provide them with a kind of “recipe book” as to how knowledge should be transmitted to young children.

7.3 JOB SATISFACTION

The discontent with their training programme was not reflected in their job satisfaction. The view of the majority of Year 1 teachers (67%, n=25) was summed up in the phrase “I love it. I just can’t see myself doing anything else”.

From an analysis of their comments, it appeared that their main source of satisfaction came from seeing the children happy and helping them to develop.
"My satisfaction comes from seeing a child who is totally dependent on you gaining confidence and the ability to work independently"

"I like the primary one children. I love the responses the children give you and the enjoyment they get from engaging in practical activity"

Two of the Year 1 teachers stressed that parent’s appreciation also added to their job satisfaction: “It's great when the parents tell you that you’re wonderful”.

Approximately 34% (n=13) of the Year 1 teachers, expressed dissatisfaction with their job, and external policy initiatives appeared to be the main source of concern. Their comments included: “There’s far too much emphasis in the curriculum on achievement. Children are too young for this”, “I think I’m getting too old to get my head around all these new ideas. There’s a new report coming in everyday to the staff room” and “I’m sick of all this legislation. We are always being told what you can’t do. I thought we were supposed to be professionals. I think because we are still working in a school environment that the Government is of the opinion that they can still treat us like children”.

All the Danish respondents were content with their job. Several of them derived satisfaction from the children's happiness and progress. Reference was also made to the variety in the school day, the new challenges that every day brings, and the opportunities to interact socially with peers.

7.3.1 Stress

When asked whether they ever felt stressed in their job the majority of Danish (73%, 22) and Northern Ireland (89%, 34) interviewees replied yes. However the reasons for feeling stressed appeared to be quite different.

Regarding the Danish respondents it is necessary to note that the majority interviewed were kindergarten leaders and for this reason were responsible not only for the children but also the organisation and administration of the kindergartens. This balance of paædagog and leadership duties was indicated by many of the interviewees as being their main source of stress, especially when one of the resident paædagogs was on sick leave. Reference was also made to the added stress that results during the winter months when children spend less time outdoors - the increased noise level and the added workload from planning a variety of indoor activities.

As previously mentioned, only 23% of the Year 1 teachers held a post of responsibility, one of which was a vice-principal. In spite of this, administrative duties were advanced as
the main reason for feeling stressed: “It’s not the children, but the paper work and all the peripheral demands that make me feel under pressure”. In fact teacher (8) expressed the view that “I feel as if the job is actually taking over my life. Even my family is fed up with the work”.

Other causes of stress included feelings of incompetence: “I feel stressed in so far as you cannot do everything as well as you should. When you go to courses you always hear what you should be doing, but it’s impossible to teach all the subjects to such a high standard”. The added workload involved with play was also considered a cause of stress: “I find play so taxing - having to plan all the activities and ensuring they are carried out effectively. I much prefer listening to the children read. I feel more in control then”. Two of the teachers referred to a general inspection as being one of the most stressful experiences they ever encountered.

A small number (11%, n=4) of the Year 1 teachers and 27% (n=8) of the Danish respondents stated they never felt particularly stressed by their job. The reason given by the Danish pædagogs (most of whom were not leaders) was the freedom to do their own thing, and colleague participation. The Northern Ireland teachers instead referred to good organisation and parental support.

7.4 COMMITMENT AND DEDICATION

7.4.1 Work Undertaken outside School Hours

When questioned about their commitment and dedication to their job, all of the Northern Ireland Year 1 teachers, except two, stayed late every day to prepare and plan for the next day. Their Danish counterparts, however, only stayed after hours at the most twice a month for group planning and two to three times yearly for parents’ meetings.

Approximately 72% (n=27) of the Year 1 teachers brought work home (e.g. marking books and administrative work) on a regular basis, compared with 7% (n=2) in Denmark. In fact the majority of Danish respondents (67%, n=20) remarked that they would rarely bring work home. This is summed up in the words of Leader 2: “I think I work hard enough in the kindergarten without having to start at home too”.

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Courses
Nearly all of the Danish paedagogs (93%, n=28) said that they enjoyed attending courses with the comment: “It’s so important to attend courses to keep up with new ideas and keep up with the times”. The Northern Ireland teachers’ reactions were more critical. Only 53% (n=20) said that they found courses helpful. Approximately 21% (n=11) found them “rather tedious”; while 18% (n=7) considered courses to be “a complete waste of time”.

Additional Training
The majority of the Danish respondents (93%, n=280) expressed interest in further study. Three of them (11%) had already got higher qualifications, 40% (n=12) were studying and 43% (n=13) were contemplating additional training. Only 6% i.e. two of the respondents were totally uninterested, both of them stating that they felt too old to return to study.

Of the Northern Ireland interviewees, 8% (n=3) had already acquired further qualifications and 28% (n=11) of them expressed an interest in engaging in additional study. The majority (64%, n=24) however, indicated that they were uninterested in further study, due to lack of time, lack of interest in promotion and family commitments as evidenced in the following selection of comments:

“Take even more work on. I couldn’t stand going back to study. Where on earth would I get the time”

“I’ve no real interest in becoming a principal or vice-principal so why bother”

“I’d never think of doing extra study. I’ve a family of three and I think that’s enough to keep me out of mischief”

7.5 PLANNING

Although all of the Northern Ireland and the majority of Danish interviewees indicated that they undertook weekly, monthly and yearly planning, it is necessary to highlight that the content of these plans appeared to be different.

The Danish respondents emphasised that their plans tended to be informal acquired by means of colleague discussions and rarely written down. It appeared that these plans focused mainly on the needs of the children and as leader (10) stated “we make the plans so wide that there is room for the children to decide how activities should actually be carried out”.

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In contrast, the Year 1 teachers affirmed that all of their plans had to be recorded and detailed, with reference to the subject area content to be covered, in accordance with the Northern Ireland Curriculum (DENI, 1996). An analysis of their comments also suggested that initially the plans were carried out individually or, if applicable, with other year group teachers. The plans were then discussed in more detail at Key Stage meetings and scrutinised by subject co-ordinators to ensure that all aspects of the curriculum were covered.

Danish and Northern Ireland respondents considered assessment, planning and observations as useful, in particular observation. Approximately half of the Danish interviewees indicated that they used the camcorder on a regular basis to record the children’s actions, and several (87%, n=26) stressed that formal assessments were rarely conducted in the Danish kindergartens.

Although all of the Year 1 teachers indicated that observation was important, 56% (n=21) emphasised that adequate time was not available to undertake it fully as evidenced in the following comment: “when children come into school in September much observation is undertaken. But as soon as the formal reading commences that soon puts a stop to it”.

They all agreed that formal assessment by means of questioning and year group tests was necessary, but just under a half of the Year 1 teachers indicated that they felt on occasions that too much testing can be carried out. The following comments illustrate this opinion more fully:

“I feel we are inundated with 'tick charts' and on many occasions I ask myself who is it actually for. I feel the time could be better spent sitting and talking to the children”

“Assessment is okay but sometimes it can actually take over the day”

7.6 CONTENT OF THE CURRICULUM

7.6.1 Northern Ireland

Although 35% (n=13) of Year 1 teachers defined a high quality programme in terms of basic skill acquisition - (reading, writing and arithmetic), the majority (65%, n=25) stressed the need for a balanced approach, encompassing both the affective and intellectual needs of young children. The comment “learning and happiness both go hand in hand” captured the mood of most respondents.

What was particularly interesting, was the number of Year 1 teachers (approx. 53%, n=20) who expressed concern that the programme they were offering did not fully cater
for all the 4 to 5 year olds' needs. An analysis of their comments suggested that this was due mainly to the demands of the Northern Ireland Curriculum (NIC) i.e. both the subject content to be covered as well as the emphasis placed on attaining targets as evidenced in the following comments:

"In my opinion the programme is far too crammed. There is far too much emphasis on subject content. Sometimes I wonder what the NIC is doing to children"

"Children are made rush too quickly in an effort to meet targets set by the Northern Ireland Curriculum"

"I used to do a lot of art and music but since the implementation of the Northern Ireland Curriculum I seem to be doing this less and less. Northern Ireland has become so into accountability. If there's no proof, there's no point doing it"

Approximately one third of the Year 1 teachers (n=12) felt pressurised by parents to begin formal reading, writing and arithmetic. This is summed up in the words of teacher 12: “I'm sick of dealing with pushy parents who want their children to have a reading book the first day they enter school”.

An interesting remark was made by one of the teachers. Referring to the pressure to meet targets in reading, writing and arithmetic she stated “I know so many of my colleagues blame the curriculum for this pressure, but I don’t know if I would agree. There is nowhere in the curriculum that it states children should have read all Link Up level 3 before they go into Primary 2. I wonder sometimes if we are putting this pressure on ourselves”.

Several changes to the programme and its delivery were proposed by the Year 1 teachers, the three most significant being:

- more practical activity
- more emphasis on the basics
- better staff-child ratios

**More Practical Activity**

A greater hands on approach was suggested by 43% (n=16) of the teachers to ensure that the needs of the 4 to 5 year old children were fully met. As teacher (15) stated: “Less formal activity is needed in Year 1. More time should be spent on encouraging the children to express themselves through practical activity”.

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More Basics
In contrast 35% of the teachers requested a return to the basics, concentrating solely on reading, writing and arithmetic in the Year 1 classroom. This opinion is summed up in the comments of teacher (17) who stated “I would cut out all the fringe subjects such as History and Geography, until children are at least seven. Evidence shows that reading standards have fallen because of this additional content”.

Better-Staff/Child Ratios
Reference was made by 26% (10) of the teachers to the need for better staff-child ratios to improve the quality of the programme available: “The only means of improving the programme on offer is to reduce class sizes and provide additional help” (teacher 1).

7.6.2 Denmark
All of the Danish respondents except two (who emphasised the need for more learning), defined a high quality programme in terms of happiness, enjoyment and care, evidenced in comments such as:

“It’s important that children do not see what they are doing as a kind of education. The essence of quality practice is to ensure that children are having a good time”

“Our main priority is that children are happy and they know that we care for them. Then when they are confident, they will begin to learn from one another”.

They did not see the need for academic learning at this stage, as pædagog (5) commented “in other countries children learn to read and write at this age but in Denmark children learn to live”.

The majority of the Danish respondents were satisfied that the children’s needs were being catered for as well as possible, due to the variety of practical activities on offer and the freedom of choice available. Despite this complacency, the following changes were proposed:

• Better facilities
• Better trained staff
• Less interruptions

Better Facilities
The respondents (40%, n=12) indicated that more space and a better child-staff ratio was needed to ensure that the programme on offer fully catered for the children’s needs.
Better Trained Staff
Approximately a quarter of paedagogs (24%, n=7) referred to the need for staff to undergo more extensive training to ensure that they were better aware of their role in the children's development: “There is no point standing drinking coffee everyday. After all we are paid to interact and communicate with the children”.

Less Interruptions
Five of the respondents expressed the desire to have fewer interruptions in the day to allow more time to be spent with the children. Leader (27) stated “Our time as paedagogs is constantly taken up with preparing breakfast, getting ready for lunch and then snack time. If only we could have a day when children's play was totally uninterrupted”.

7.7 SOCIAL RELATIONSHIPS
When asked about their relationship with the children, the majority of Year 1 teachers (86%, n=33) emphasised the need to adopt a friendly but firm approach, as evidenced in the variety of comments including:

“I try to establish a friendly and happy relationship with the children, but at the same time they have to know who is boss”

“There are times when a motherly approach is necessary in primary one. But there are also times when you need to be more formal and strict. You have to be adaptable here”

These respondents referred to the need for a degree of discipline to ensure that children would focus on the given task and do what they are told. Comments were made such as “if you let children in too close you’re only asking for trouble” and “a certain amount of control is necessary to get the best out of children”.

Disciplinary measures referred to included positive reinforcement, reward systems, staying in over break time and being excluded from PE or structured play. As one of the teachers stated “…children know where to draw the line with me. They know I will not let them get away with certain behaviour. They know they will miss out on PE, television or whatever is appropriate at that time”.

A small number (12%, n=5) of Year 1 teachers expressed a desire to practise a more informal relationship with the children, but felt constrained by the pressure of time and emphasis placed on attaining targets:

“I would love to be more open and free, allowing children a little more lee-way, but a strict relationship is necessary due to the demands of the curriculum”
"Perhaps if there wasn't so much emphasis placed on reading and writing in primary one, we would have more time to act as a friend to the children”

Teacher (12) however saw her role as an authoritarian, indicating that discipline is the necessary ingredient for any teacher. She continued “...so many children are lacking this both in the home and school that it’s of small wonder that society is the way it is today”.

The Danish respondents, in the main, indicated that they endeavoured to create an informal relationship with the children: “we have a very huggy relationship, showing children at all times that there is somebody there who cares”. Most of the Danish interviewees (96%, n=29) expressed their distaste for disciplining children: “If you discipline children they only learn what you say, they don’t form their own opinion of what is right and wrong” and “demanding specific behaviour from children only encourages them to misbehave behind your back. Telling somebody not to do something will never result in a good democrat and that's what we are trying to achieve”. Instead they advocated the need to provide a good role model for children, encouraging self-discipline. Leader (1) summed up this opinion stating that “our role is to be like gardeners - nourish soil, give water and turn to the sun. We are the people who inspire children with feelings that life is strong and possible to do many things, possessing many capabilities where good confidence has healthy impulses to development”.

7.8 CHALLENGE

7.8.1 Expectations

Most of the Year 1 teachers (76%, n=29) defined their expectations for 4 to 5 year old children as learning outcomes, in line with level 1 of the Northern Ireland Curriculum. Based on the interview data, these expectations included that average children should understand fully the concept of 1-10 including written addition and oral subtraction, and recognise and be capable of writing all numerals to 10. They should also be capable of sorting for one and two criteria; write in correct letter formation and be able to copy from the chalkboard independently. Reference was also made to the need for 4 to 5 year olds to be able to express themselves independently in short stories and to read at least stage 1 and 2 of their reading scheme.

Most of the Danish paedagogs (74%, n=22) gave priority to social, emotional and physical well being. They stressed the need for children to be able to care for themselves and for others, to express themselves clearly and effectively and to have the confidence to
say yes or no. Decision-making was also emphasised, as was the need to be in a good physical condition, to dare to try out new things and be happy, curious and want to learn more.

7.8.2 The Importance of Challenge

The need for a challenging programme was stressed by all of the Year 1 teachers: “it’s so important that children are fully stretched, otherwise they will start to stagnate and get bored”, summed the content of their comments.

An analysis of their comments suggests that the following methods are envisaged as ways of challenging young children:

- increasing written work
- homework
- neat presentation
- adult questions and probes

*Increasing Written Work*

There seemed to be an opinion among several of the Year 1 teachers that increasing the amount of written work acts as a means of extending young children’s learning:

“I’m renowned for pushing my children as far as they can go in reading and maths”

“There are always extra busy sheets available. I would hate to see children sitting about doing nothing”.

*Homework*

It was not only extra written work that was considered as a means of challenging young children, but homework was also referred to. As teacher (15) stated “It’s so important to give the children extra work at home, especially in reading, because children can forget so quickly. Some children here are getting six new words a night and if that’s not challenging young children fully, I don’t know what is”.

*Neat Presentation*

Whether it be written work conducted in school or in the home there seemed to be an underlying assumption within many of the comments that challenge was associated with neat presentation: “Children need to realise that their best is always expected from them. If this is not the case they will get used to delivering poor, untidy work and think that this is, and always will be acceptable”.

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Adult Questions and Probes

The need for adults to interact with the children and extend their learning by means of appropriate questions and probes was referred to by six Year 1 teachers. Teacher (3) emphasised the need for more open tasks to allow children to make their own decisions and form their own opinions. However she stressed that pressure of time restricted her from putting these strategies adequately into practice.

Approximately 36% (n=14) of the Year 1 teachers maintained that brighter children tended not to be adequately stretched in their classes. They appeared to be of the opinion that the basis of the Northern Ireland Curriculum as well as the emphasis on whole class teaching in Year 1 result in activities being pitched for the average children, causing the more capable child to be overlooked.

All of the Danish interviewees (except two), stated that challenge was not of major importance in the kindergarten. Although they expressed the need to extend the children’s learning occasionally, they also emphasised the importance of relaxation:

"If children are challenged too much academically they end up being able to work only in the brain and not in the heart"

"It’s nice to see the children working to the best of their ability. But it is also legal just to do nothing for a day. Children should be allowed to be themselves and simply listen to their emotions"

An interpretation of their comments suggested that a variety of strategies were proposed as means of challenging young children including:

- encouragement: urging the children a little further than they do themselves;
- adult and peer interaction: joining in the children’s play and learning from one another;
- small groups: dividing the children up into small groups from time to time so that more individual attention can be given;
- autonomy: allowing the children to act independently to think for themselves; and
- play: providing the children with an array of activities to stimulate their thinking and learning.
7.9 SUMMARY

An analysis of the interview data would suggest that despite the majority of educators in both the Northern Ireland Year 1 classes and Danish kindergartens being satisfied with their job, there was a large minority of the Year 1 teachers who expressed concern with the increase in policy initiatives. Several felt stressed due to the emphasis placed on administrative duties. Many of the pædagogs also stated that they were frequently stressed, but they did not appear to engage in the same degree of planning and preparation as their Year 1 counterparts. The Northern Ireland teachers had to ensure that their plans fulfilled the demands of the Northern Ireland Curriculum compared to the more child-centred focus in the Danish settings. The over-demanding workload placed on Year 1 teachers may have been one of the reasons why several did not wish to embark on further study.

There was a degree of uncertainty among Year 1 teachers as to what constituted a high quality programme for 4 to 5 year old children. Although some proposed the need for more informality, others requested a return to the basis i.e. reading, writing and arithmetic. This was in contrast to the view of the pædagogs who emphasised the importance of happiness, enjoyment and care. Academic expectations and the need for a formal style of classroom management appeared to be uppermost in the Year 1 teachers’ minds. The affective aspect of learning seemed to be of greater concern to the Danish pædagogs, who indicated the importance of an informal relationship with the children. This was also reflected in the lack of emphasis the pædagogs placed on challenging young children, an aspect Year 1 teachers considered to be of great importance. The implications of these findings will be discussed in Chapter 11.

Further reference to Northern Ireland Year 1 teachers’ and Danish pædagogs’ perceptions of quality practice are presented in the subsequent chapter which details the results of the questionnaire surveys.
CHAPTER 8: FINDINGS FROM THE QUESTIONNAIRE SURVEYS OF THE YEAR 1 TEACHERS AND PÆDAGOGS

The Year 1 teachers' and Danish pædagogs' survey was based on a questionnaire derived from a preliminary analysis of the observation and interview studies, addressing the respondents' biographical profile, teaching experience etc., as well as 48 attitude-scale items. The full questionnaire was sent to an initial cohort of 180 Year 1 teachers and a shorter version of the questionnaire (containing 28 attitude-scale items) to a further 300 Year 1 teachers. A Danish version of the full questionnaire was distributed to 150 Danish pædagogs for comparison purposes only. This chapter details both the descriptive and statistical analyses of the survey data. The findings relating to the Year 1 teachers' and to a lesser degree the Danish pædagogs' perceptions of a play-based versus formal programme for the 4 to 5 year old child are presented.

8.1 INTRODUCTION

The questionnaire surveys were designed to serve a number of purposes including collecting details of a sample of Year 1 teachers' and Danish pædagogs':

- age, qualifications and training background;
- experience in the field;
- schools/kindergartens e.g. size and type of area where located;
- perceptions towards a play-based or more formal programme for 4 to 5 year old children.

Two sets of data were derived from the survey instruments: the biographical profile of the respondents and their schools/kindergartens and their responses to the attitude scale items. The analysis of this collated data was also two-fold i.e. both descriptive and statistical. The descriptive analysis included the frequencies of responses relating to the biographical detail as well as the individual attitude scale items. The latter were also statistically analysed, factor analysis being conducted in an attempt to identify factor-based sub-scales which could then be interpreted as possible latent traits that existed among the respondents. When these sub-scales were established comparisons and appropriate statistical tests were then carried out to determine whether particular groupings such as age, training, experience within the field etc. could be said to have affected the stated opinions. The analysis and findings are presented in this chapter as follows:

- Sample Size
- Descriptive Analyses
- Factor Analyses
8.2 SAMPLE SIZE

As no database relating to the number of Year 1 teachers in Northern Ireland existed, the sampling frame for the survey was based on the number of primary schools in Northern Ireland i.e. 910, excluding the seven Irish medium schools (DENI, 2000)

Using a process of random sampling, questionnaires (containing 48 attitude-scale items) were distributed to 150 schools and 30 of the larger schools received two questionnaires (i.e. 180 Year 1 teachers targeted). Only 91 Year 1 teachers responded (i.e. a 50% response rate), leaving the number of variables to respondents less than 2:1. The researcher was then forced to conduct a second survey, the reasons for which will be discussed later. A shorter version of the questionnaire (i.e. 28 items) was sent to 300 Year 1 teachers and 195 responded (i.e. a 65% response rate). Table 8.1 details the response rate of the Year 1 teachers in relation to each education and library board to provide information on the distribution of response.

<table>
<thead>
<tr>
<th>Board area</th>
<th>First survey</th>
<th>Second survey</th>
<th>Combination of both surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Response</td>
<td>Target</td>
</tr>
<tr>
<td>BELB</td>
<td>15</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>WELB</td>
<td>33</td>
<td>13</td>
<td>66</td>
</tr>
<tr>
<td>NEELB</td>
<td>47</td>
<td>34</td>
<td>74</td>
</tr>
<tr>
<td>SELB</td>
<td>45</td>
<td>17</td>
<td>80</td>
</tr>
<tr>
<td>SEELB</td>
<td>40</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

A variety of Year 1 teachers from different school localities responded. This information was taken from the teachers’ response to question 11 which asked them to indicate the type of area which best described the area in which their school was situated, and is detailed in the following table.

<table>
<thead>
<tr>
<th>School locality</th>
<th>Survey 1</th>
<th>Survey 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>frequency n=87</td>
<td>%</td>
</tr>
<tr>
<td>deprived city area</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>affluent city area</td>
<td>17</td>
<td>19%</td>
</tr>
<tr>
<td>rural area</td>
<td>23</td>
<td>25%</td>
</tr>
<tr>
<td>based in a town</td>
<td>35</td>
<td>39%</td>
</tr>
<tr>
<td>mixed city</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>outskirts of a city</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>suburb</td>
<td>7</td>
<td>8%</td>
</tr>
<tr>
<td>large village</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>housing estate</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Questionnaires were distributed to 150 Danish paedagogs in the Greater Copenhagen area by means principally of convenience sampling (see Chapter 4: Methods) and 93 valid responses were received, giving a response rate of 62%.

8.3 DESCRIPTIVE ANALYSES

8.3.1 Biographical Profiles

Gender
The respondents were all female in both Northern Ireland surveys which is reflective of the entire Year 1 teacher population in Northern Ireland, and the field of early years education internationally where the majority of early years educators tend to be female. A similar trend was reflected in the Danish sample, approximately 95% of the respondents were female (n=88) and 5% (n=5) were male.

Age
In both surveys the Year 1 teachers’ ages ranged from 20 to 50+ years with the greatest frequency of responses falling into the 40 to 49 age group (survey 1=36%, survey 2=37%). Similarly the Danish paedagogs’ ages ranged from 20 to 50+ with the largest group falling also into the 40 to 49 age bracket (42%). This might be explained in both cases by the sampling procedures where the more experienced educator in both contexts might have completed the questionnaire (especially in the case of larger schools in Northern Ireland where there may have been more than one Year 1 teacher).

Only three (3%) of the Danish respondents were aged between 20 to 29 years. In spite of the small sample, this might be reflective of the population of Danish paedagogs in general who tend to be more mature on entering training. This did not appear to be the case for the Northern Ireland samples where approximately 22% of the respondents in both surveys (n=20 and n=43 respectively) fell into this age category.

Training Specialism
The majority of the Year 1 teachers, in both samples (survey 1=58%, survey 2=72%), were Key Stage 1 specialists as might be expected. Approximately 8.5% of the respondents in both surveys (n=7 and n=18 respectively) indicated that their specialism lay in the field of nursery education. The findings suggested, that approximately 32% of the first sample (n=29) and 17% of the second sample (n=34) were teaching Year 1 children, and possessed no specific training relating to the early years of education.
Place of Training
Approximately 82% the respondents in both samples (n=75 and n=157 respectively) were trained in Northern Ireland, with Stranmillis University College being the most popular training institution in both surveys (survey 1=54% and survey 2=45%). Only 16 of the respondents (18%) in the first survey and 36 in the second (20%) indicated that they trained outside Northern Ireland, most of them having attended training institutions in England with small numbers in Scotland and Wales.

Year of Training Completion
The year of training completion ranged from the 1950s to the 1990s, with large numbers clustering around the 1970s and the 1990s in both surveys (see table 8.3 for details). The emphasis on the 1970’s may be explained by the number of Year 1 teachers aged between 40 to 49 (n=105) in the sample. Although a significant number (though not in the statistical sense) of younger Year 1 teachers i.e. between 20-29 (n=63) also participated in the study, the clustering around the 1990’s may also be indicative of those who pursued post graduate level training and reported the completion date in terms of the last qualification amassed.

Table 8.3: Year of training completion in survey 1 and survey 2

<table>
<thead>
<tr>
<th>Year of completing training</th>
<th>Survey 1</th>
<th>Survey 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td>1950s</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1960s</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>1970s</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>1980s</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>1990s</td>
<td>27</td>
<td>30</td>
</tr>
</tbody>
</table>

‘Teaching’ Experience
The respondents’ teaching experience in Year 1 classes ranged from ≤5 years to 30+ years in both surveys. The distribution of response in each of the categories was quite similar, with 0 to 5 years being the lowest and 21 to 30+ being the highest in both surveys. This data is presented in table 8.4.
Table 8.4: Number of years' experience

<table>
<thead>
<tr>
<th>Experience in a Year 1 class</th>
<th>Survey 1</th>
<th></th>
<th>Survey 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>0-5</td>
<td>28</td>
<td>31%</td>
<td>71</td>
<td>36%</td>
</tr>
<tr>
<td>6-10</td>
<td>24</td>
<td>26%</td>
<td>44</td>
<td>23%</td>
</tr>
<tr>
<td>11-20</td>
<td>25</td>
<td>27%</td>
<td>46</td>
<td>24%</td>
</tr>
<tr>
<td>21-30+</td>
<td>14</td>
<td>15%</td>
<td>33</td>
<td>17%</td>
</tr>
</tbody>
</table>

Table 8.4 illustrates that the sample reflects a selection of relatively experienced and inexperienced Year 1 teachers. Approximately 42% of the teachers in survey 1 and 41% in survey 2 have spent ≥11 years teaching there while 57% in survey 1 and 59% in survey 2 have taught a Year 1 class for ≤10 years.

In survey 1, 91% (n=83) of the respondents and 88% (171) in survey 2 indicated that they had experience teaching in classes other than Year 1, with approximately 48% (n=44) and 50% (n=97) respectively, having experience in other Key Stage 1 classes. The previous experience of 31% (n=28) and 47% (n=92) respectively of Year 1 teachers, lay principally in Key Stage 2 classes, with approximately 7% in both surveys (n=6 and n=12) having previously taught in a secondary school. Only one of the respondents in survey 1 and eight in survey 2 indicated that they had experience teaching in a nursery school.

Regarding the Danish sample, experience as a pedagog ranged from 1 to 39 years, with 45% (n=42) of the respondents indicating that they had been a pedagog for 20 or more years. Further details of their experience are presented in table 8.5.

Table 8.5: Pedagog’s Experience

<table>
<thead>
<tr>
<th>Years’ Experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>17</td>
<td>18%</td>
</tr>
<tr>
<td>10-19</td>
<td>34</td>
<td>37%</td>
</tr>
<tr>
<td>20+</td>
<td>42</td>
<td>45%</td>
</tr>
</tbody>
</table>

"Your Class and School"
An analysis of the Year 1 teachers’ responses (Q9) suggested that class sizes ranged from 7-31 children, with the greatest number of classes (41%, n=118) falling into the 21-25 category (see table 8.6 for further details).
Table 8.6: Northern Ireland Class Size

<table>
<thead>
<tr>
<th>Class size</th>
<th>Survey 1</th>
<th>Survey 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>&lt;19</td>
<td>15</td>
<td>16%</td>
</tr>
<tr>
<td>20-25</td>
<td>40</td>
<td>45%</td>
</tr>
<tr>
<td>≥26</td>
<td>35</td>
<td>39%</td>
</tr>
</tbody>
</table>

It is necessary to note that particularly in the second sample, a small number of the Year 1 teachers (≤5) indicated that there were less than 10 children in their class. This may have been an inaccurate response, the teachers indicating perhaps the number of Year 1 children but excluding the other members of a composite class. This might explain why in the second survey 32% (n= 59) of the respondents indicated that they had less than 19 children in their class compared to only 16% (15) in the first survey.

With regard to the approximate size of the school, responses varied from ≤50 to ≥800 children. Table 8.7 details this information.

Table 8.7: Number of pupils in the sample of Northern Ireland schools

<table>
<thead>
<tr>
<th>No. of pupils in school</th>
<th>Survey 1</th>
<th>Survey 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>0-50</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>51-100</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>101-200</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>201-300</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>301-400</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>401-500</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>501-600</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>601-700</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>701-800+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8.3.2 Attitude-Scale Responses

Although the primary intention was to factor analyse the attitude scale responses, a descriptive analysis of individual item responses was considered worthwhile, to complement the findings. This relatively simple analysis could reveal in some cases significant information about the educators’ perceptions, especially when the item mean score was around ‘3’. This mid-point score might arise from a large majority of the respondents choosing ‘undecided’ or as a result of a split in opinion. Approximately half of the respondents might be positively disposed to the item (i.e. choosing a 4 or 5) and the other half might be negatively disposed (choosing a 1 or 2 combination) leading to a mean score of around ‘3’. 
For the purposes of this descriptive analysis, it was decided to concentrate principally on the frequencies gathered from the first questionnaire, as there were a greater number of item definitions (48).

Agreement among Respondents
The descriptive information highlights a number of items which had majority responses of approximately 70% or greater. These items can be categorised into key areas which represent definite positions being taken by the Year 1 teachers as a group, although in some instances the majorities were mitigated by a small but significant minority of about 20% who were undecided or opposed this point of view. The key areas into which these items fall are:

- the role of creativity and exploration in the learning process;
- the learning potential that lies within play;
- the development of the whole child; and
- the place of assessment in the early years.

The Role of Creativity and Exploration
The majority of Year 1 teachers in survey 1 agreed with the view that creativity and exploration have a role to play in the learning processes of a Year 1 classroom. This information is presented in table 8.8.

Table 8.8: Perceptions of Creativity and Exploration

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Definition</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Scribbling, painting, cutting and kneading are more important for the development of psycho-motor skills than letter formation</td>
<td>75</td>
<td>13</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Problem-solving activities play a crucial role in the development of mathematical skills</td>
<td>90</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Teachers should ensure that pupils are encouraged to develop their curiosity</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27</td>
<td>Exploratory methods may be fun but they have little impact on 4 to 5 year olds intellectual learning</td>
<td>2</td>
<td>7</td>
<td>90</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>Creativity and the use of the imagination are powerful vehicles for learning</td>
<td>98</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>42</td>
<td>Structured arithmetic lessons in Year 1 are more important than problem-solving approaches</td>
<td>7</td>
<td>15</td>
<td>77</td>
<td>-</td>
</tr>
<tr>
<td>43</td>
<td>Learning through creativity should be central to the Year 1 curriculum</td>
<td>10</td>
<td>17</td>
<td>74</td>
<td>-</td>
</tr>
</tbody>
</table>

The Learning Potential that Lies within Play
Several respondents not only emphasised the importance of creativity and exploration, but also recognised the learning potential that lies within play. This is reflected in the number of Year 1 teachers (79%, n=72) who rejected the view that a play-based programme places too much emphasis on looking after children and not enough on
learning. The majority (76%, n=70) of them also disagreed with the opinion that it is only in a formal teaching that children will realise the importance of learning. The majority of respondents (85%, n=77) were negatively disposed to the idea that play is a good activity for keeping children busy until they are ready to learn (item 21, 85%). Even greater majorities rejected the notion that play is good simply for developing social skills but has little impact on intellectual skills (item 45, 94%, n=85). Approximately 90% disagreed that playtimes provide the teacher with an opportunity (only) to listen to children read (item 54, n=82) and 97%, disagreed that play is a waste of valuable teaching and learning time (item 52, n=88). Not surprisingly 94% (n=85) of the Year 1 teachers expressed their agreement with the view that play in the early years lays the foundation for later learning.

**The Development of the Whole Child**

The majority of the respondents also seemed to agree that children should be emotionally secure in Year 1, not experiencing failure, but rather being happy and enjoying their learning experience. Many of the Year 1 teachers seemed to be of the opinion that physical activity is a requisite in the early years and indicated that the emphasis in Year 1 should not focus solely on reading, writing and arithmetic. The need to develop the whole child is evidenced therefore by their response to the following items. Table 8.9 details this information.

**Table 8.9: Year 1 teachers’ perceptions of developing the ‘whole child’**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Definition</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Failing is part of life so the earlier the pupil experiences it the better able they will be to cope with it as they grow up</td>
<td>5</td>
<td>9</td>
<td>85</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>4 to 5 Year olds have to realise that all learning cannot be enjoyable</td>
<td>12</td>
<td>9</td>
<td>76</td>
<td>3</td>
</tr>
<tr>
<td>30</td>
<td>Acquisition of gross motor skills is fundamental to 4 to 5 year olds learning</td>
<td>72</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>A happy child is a good learner</td>
<td>81</td>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>47</td>
<td>Children are only motivated to learn when they are given sweets or other incentives</td>
<td>2</td>
<td>1</td>
<td>96</td>
<td>1</td>
</tr>
<tr>
<td>48</td>
<td>There is no place in Year 1 for anything other than reading, writing and arithmetic</td>
<td>1</td>
<td>-</td>
<td>98</td>
<td>1</td>
</tr>
<tr>
<td>57</td>
<td>Physical education activities make 4 to 5 year olds too lively for effective learning</td>
<td>1</td>
<td>1</td>
<td>97</td>
<td>1</td>
</tr>
</tbody>
</table>

There was less agreement among the Year 1 teachers as to whether formal instruction places too much pressure on young children. This was reflected in their responses to item 44 “formal instruction in Year 1 introduces children to failure in the school system too soon”, 52% (n=47) disagreeing with the statement, 28% (n=25) undecided and 20% (n=18) agreeing. Similarly on item 60, 39% (n=35) of the sample agreed with the view
that 4 to 5 year olds are subjected to too much pressure in the context of learning to read, a sizeable minority (36%, n=33) disagreed and 22% (n=20) were undecided. This appeared also to be the case for item 41 “4 to 5 year olds show higher self-esteem when interacting in a play programme”, although the majority of the Year 1 teachers expressed agreement (66%, n=60), 22% (n=20) were undecided and a further 11% (n=10) disagreed.

The Place of Assessment in the Early Years
The frequencies of responses also indicated that the Year 1 teachers (96%, n=87) strongly agreed that play is an important tool for assessing children’s cognitive progress (item 18). Similarly a large majority (85%, n=77) were of the opinion that monitoring play allows for a record of children’s development to be kept (item 32). It is of small wonder therefore that 96% (n=87) of the sample rejected the view that tests are the only means of assessment for the 4 to 5 year child (item 37).

Disagreement between the Respondents
In contrast to this high level of agreement, some of the items revealed a split in opinion among the respondents (10% or less of a difference between those who are positively and negatively disposed to an item) or sizeable ‘undecided’ groupings of 25% or more of the sample. These items tended to fall into two key areas:

- the role of independence in children’s learning; and
- the benefits of play versus academic content in the early years.

The Role of Independence in Children’s Learning
There was a degree of uncertainty about the role of independence in children’s learning among the Year 1 teachers. In response to the relatively simple item “pupils should have a say in their learning programme” (item 19), 37%, (n=34) of the sample were undecided with the remaining responses being equally divided between those agreeing (30%, n=27) and disagreeing (30%, n=27).

Item 22 also attracted a similar ambiguous response, 43% (n=39) agreeing with the statement that “4 to 5 year olds concentrate better when they are carrying out tasks they choose themselves”, with 37% (n=34) disagreeing and a further 18% (n=16) being undecided. This was also the case for item 33, “4 to 5 year olds concentrate better when the teacher directs the activities”, 40% (n=36) agreeing, 31% (n=28) disagreeing and 28% (n=25) being undecided. Again this was the case for item 25, 43% (n=39) disagreed with the statement “pupils will not learn the right things if they choose what they do
themselves”, approximately a quarter of the respondents agreed (28%, n=25) and another quarter (25%, n=23) were undecided.

Item 40 hinted that this split in opinion on independence, related not only to ‘work activities’ but also to play. About 48%(n=44) of the sample disagreed with the notion that “to ensure maximum learning the teacher always needs to interact with the children when they are playing”, compared to an almost equal proportion who agreed (45%, n=41).

However, when confronted with the statement “4 to 5 year olds should have the opportunity to say no” (item 17) in spite of 60% of the Year 1 teachers (n=55) agreeing with this view, a sizeable proportion 22% (n=20) were undecided and a further 11% (n=10) disagreed. This appeared also to be the case for item 28, 64% (n=58) of the respondents disagreeing with the opinion that “a teacher-directed activity is always more challenging than a pupil chosen one”, with 19% (n=17) agreeing, and 15% (n=14) undecided.

This split in opinion contrasted with 91% of the Year 1 teachers (n=82) who disagreed with the statement “the teacher must always direct what the children are doing”. This suggested that although the sample were not agreed on the amount of choice young children should be given, they were united that children should not be told what to do all of the time.

The Benefits of Play versus Academic Content in the Early Years
Although the Year 1 teachers as a group seemed to associate play with learning, the distribution of responses to item 23 suggested that they were less agreed on the statement “children learn more through play than formal instruction”: 36% (n=34) of the sample undecided, 34% (n=31) agreeing and 29% (n=26) disagreeing. Item 53 also attracted an ambiguous response, a slim majority (51%, n=46) agreeing with the statement “formal teaching approaches in the early years ensure better success in later schooling”, 29% (n=26) undecided and 15% (n=14) in agreement.

There was a similar distribution in response to item 55, 50% (n=45) of the sample agreeing that “a play-based programme is the best preparation for later life”, with 29% (n=26) undecided and 19% (n=17) disagreeing. This may also be reflected in the frequency of response given to item 29 “there is too little time spent on play in Year 1”, a slim majority (51%, n=46) disagreeing, compared with 33% (n=30) who agreed and a further 15% (n=14) who were undecided. When confronted with the statement “play is
more important than reading, writing and arithmetic” (item 29), in spite of 23% (n=21) being undecided, 60% (n=55) of the sample disagreed, suggesting that most of the Year 1 teachers valued the ‘basics’ more than play.

8.3.3 Comparison with Danish Data
Differences between the perceptions of Year 1 teachers and the Danish pædagogs fell into two categories:

- the importance of independence in the learning process; and
- the need for play versus formal instruction.

The Importance of Independence in the Learning Process
As might be expected the Danish pædagogs were more in favour of children having a say in the learning process than the Year 1 teachers, as evidenced by their responses to the following items:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Definition</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>4 to 5 year olds should have the opportunity to say no</td>
<td>99</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Pupils should have a say in their learning programme</td>
<td>81</td>
<td>9</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>22</td>
<td>4 to 5 year olds concentrate better when they are carrying out tasks they choose themselves</td>
<td>73</td>
<td>10</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>25</td>
<td>Pupils will not learn the right things if they choose what they do themselves</td>
<td>12</td>
<td>8</td>
<td>76</td>
<td>4</td>
</tr>
<tr>
<td>33</td>
<td>4 to 5 year olds concentrate better when the teacher directs their activities</td>
<td>8</td>
<td>6</td>
<td>83</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>To ensure maximum learning the teacher always needs to interact with the children when they are playing</td>
<td>19</td>
<td>5</td>
<td>73</td>
<td>2</td>
</tr>
</tbody>
</table>

An analysis of these responses, (in comparison to those of the Northern Ireland Year 1 teachers), would suggest that the pædagogs, as a group, are of the opinion that children should have a degree of choice in their learning at all times where interaction on the part of the teacher should remain quite limited.

The Need for Play versus Formal Instruction
In comparison to the more ambiguous response of the Year 1 teachers, a large majority of the Danish sample (84%, n=78), agreed with the statement that “children learn more through play than formal instruction” (item 23). This view was also reflected in the proportion of pædagogs (81%, n=75) who agreed with the statement that play is more important than reading, writing and arithmetic (item 31), in contrast to their Northern Ireland counterparts, the majority of whom (62%, n=56) disagreed. Most of the pædagogs perceived play as central to the early years curriculum: 97% (n=90) of the sample
disagreeing with item 36, “Play during the school day should be kept to one hour in the morning”, compared with only 55% (n=50) of the Northern Ireland sample.

8.4 FACTOR ANALYSIS

8.4.1 Survey 1

Listwise Deletion or Substituted Mean
As discussed in Chapter 4: Methods, a number of decision rules were adopted and a series of conventions were followed in the process of factor extraction and interpretation. In total 91 questionnaires were coded and entered into the SPSS computer program. The program automatically defaults to a listwise deletion of cases, where items, which have been missed, are excluded. The operational sample, as a result, was reduced to 66 with the lowest response being 85 for item 17: “4 to 5 year olds should have the opportunity to say no”. Tabachnick and Fidell (1996) suggested the use of another facility in SPSS, especially when sample size after exclusion is small. This facility substitutes the sample mean for the missing value. Details of the findings as compared to the listwise deletion mechanism are provided in Table 8.11, using item numbers only (the first item in the scale was numbered ‘13’ as it came after 12 initial biographical items).

Table 8.11: Item mean scores, standard deviations and number of responding cases

<table>
<thead>
<tr>
<th>Item</th>
<th>Listwise Deletion Mean</th>
<th>Substituted Mean</th>
<th>SD (Substituted)</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>3.94</td>
<td>3.93</td>
<td>0.93</td>
<td>89</td>
</tr>
<tr>
<td>14</td>
<td>1.67</td>
<td>1.77</td>
<td>0.87</td>
<td>90</td>
</tr>
<tr>
<td>15</td>
<td>2.12</td>
<td>2.15</td>
<td>0.90</td>
<td>88</td>
</tr>
<tr>
<td>16</td>
<td>4.23</td>
<td>4.19</td>
<td>0.79</td>
<td>89</td>
</tr>
<tr>
<td>17</td>
<td>3.62</td>
<td>3.62</td>
<td>0.83</td>
<td>85</td>
</tr>
<tr>
<td>18</td>
<td>4.52</td>
<td>4.44</td>
<td>0.55</td>
<td>88</td>
</tr>
<tr>
<td>19</td>
<td>2.95</td>
<td>3.01</td>
<td>0.91</td>
<td>88</td>
</tr>
<tr>
<td>20</td>
<td>2.21</td>
<td>2.13</td>
<td>0.87</td>
<td>90</td>
</tr>
<tr>
<td>21</td>
<td>1.92</td>
<td>1.91</td>
<td>0.93</td>
<td>89</td>
</tr>
<tr>
<td>22</td>
<td>2.95</td>
<td>3.09</td>
<td>1.02</td>
<td>89</td>
</tr>
<tr>
<td>23</td>
<td>3.08</td>
<td>3.11</td>
<td>0.89</td>
<td>90</td>
</tr>
<tr>
<td>24</td>
<td>4.38</td>
<td>4.40</td>
<td>0.49</td>
<td>91</td>
</tr>
<tr>
<td>25</td>
<td>2.83</td>
<td>2.82</td>
<td>0.94</td>
<td>87</td>
</tr>
<tr>
<td>26</td>
<td>4.45</td>
<td>4.48</td>
<td>0.53</td>
<td>87</td>
</tr>
<tr>
<td>27</td>
<td>1.94</td>
<td>1.91</td>
<td>0.64</td>
<td>90</td>
</tr>
<tr>
<td>28</td>
<td>2.58</td>
<td>2.52</td>
<td>0.86</td>
<td>89</td>
</tr>
<tr>
<td>29</td>
<td>2.82</td>
<td>2.79</td>
<td>1.14</td>
<td>90</td>
</tr>
<tr>
<td>30</td>
<td>3.88</td>
<td>3.89</td>
<td>0.87</td>
<td>87</td>
</tr>
<tr>
<td>31</td>
<td>2.47</td>
<td>2.45</td>
<td>0.94</td>
<td>89</td>
</tr>
<tr>
<td>32</td>
<td>3.98</td>
<td>3.95</td>
<td>0.77</td>
<td>91</td>
</tr>
<tr>
<td>33</td>
<td>3.11</td>
<td>3.11</td>
<td>0.95</td>
<td>89</td>
</tr>
<tr>
<td>34</td>
<td>1.86</td>
<td>1.93</td>
<td>0.74</td>
<td>88</td>
</tr>
<tr>
<td>35</td>
<td>4.32</td>
<td>4.38</td>
<td>0.51</td>
<td>90</td>
</tr>
<tr>
<td>36</td>
<td>2.65</td>
<td>2.66</td>
<td>0.99</td>
<td>88</td>
</tr>
<tr>
<td>37</td>
<td>1.68</td>
<td>1.69</td>
<td>0.55</td>
<td>89</td>
</tr>
<tr>
<td>38</td>
<td>3.97</td>
<td>4.11</td>
<td>1.04</td>
<td>90</td>
</tr>
<tr>
<td>39</td>
<td>2.27</td>
<td>2.20</td>
<td>0.70</td>
<td>91</td>
</tr>
<tr>
<td>40</td>
<td>3.12</td>
<td>3.08</td>
<td>1.24</td>
<td>90</td>
</tr>
</tbody>
</table>
Examination of the two sets of means would suggest that little difference is found. Most of the changes that do occur are found in the second decimal place and in only four instances does the difference exceed more than 0.10. The factor structure also did not change or improve significantly and the number of cases did not fall dramatically. Furthermore, as Field (2000) warns that when the missing value is replaced by the mean it “can lead to significant results that would otherwise be non-significant” (p.452). Therefore, it was decided to retain the more accurate listwise deletion model.

### Factor Rotation and Decision on Number of Factors

Although the SPSS program’s default extraction method is Principal Components analysis, for the purposes of this study the more widely used method known as Principal Axis Factoring was applied (this accords with the advice of Pedhazur and Schmelkin, 1991). The Barlett Test of Sphericity proved highly significant (p< 0.000) and the possibility of the data correlating with the identity matrix was rejected. Oblimin oblique rotation was used to check the degree of correlation between the factors and the largest correlation was found to be 0.24. As this extent of correlation is very small, and the factor structure did not significantly change when using either the Varimax or Oblimin rotations, it was considered reasonable to employ the less complex orthogonal rotated solution.

Initially 16 factors were found with eigenvalues greater than 1.0, 11 of which contained less than three items. Indeed in three of the factors there was only one item. Reliabilities were less than 0.5 in at least four of the factors and in those factors containing only one item, reliability cannot be measured. Furthermore the decrease in reliability did not follow

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>3.64</td>
<td>3.63</td>
<td>0.78</td>
<td>90</td>
</tr>
<tr>
<td>42</td>
<td>2.26</td>
<td>2.24</td>
<td>0.69</td>
<td>91</td>
</tr>
<tr>
<td>43</td>
<td>2.26</td>
<td>2.23</td>
<td>0.84</td>
<td>91</td>
</tr>
<tr>
<td>44</td>
<td>2.73</td>
<td>2.66</td>
<td>0.90</td>
<td>90</td>
</tr>
<tr>
<td>45</td>
<td>1.80</td>
<td>1.79</td>
<td>0.66</td>
<td>91</td>
</tr>
<tr>
<td>46</td>
<td>3.47</td>
<td>3.45</td>
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<td>87</td>
</tr>
<tr>
<td>47</td>
<td>1.73</td>
<td>1.72</td>
<td>0.65</td>
<td>90</td>
</tr>
<tr>
<td>48</td>
<td>1.44</td>
<td>1.42</td>
<td>0.56</td>
<td>90</td>
</tr>
<tr>
<td>49</td>
<td>3.50</td>
<td>3.62</td>
<td>0.85</td>
<td>90</td>
</tr>
<tr>
<td>50</td>
<td>1.88</td>
<td>1.88</td>
<td>0.49</td>
<td>90</td>
</tr>
<tr>
<td>51</td>
<td>2.71</td>
<td>2.69</td>
<td>0.91</td>
<td>89</td>
</tr>
<tr>
<td>52</td>
<td>1.48</td>
<td>1.48</td>
<td>0.54</td>
<td>90</td>
</tr>
<tr>
<td>53</td>
<td>2.61</td>
<td>2.56</td>
<td>0.82</td>
<td>86</td>
</tr>
<tr>
<td>54</td>
<td>1.68</td>
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<td>0.76</td>
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<tr>
<td>56</td>
<td>2.17</td>
<td>2.17</td>
<td>0.70</td>
<td>89</td>
</tr>
<tr>
<td>57</td>
<td>1.59</td>
<td>1.57</td>
<td>0.58</td>
<td>90</td>
</tr>
<tr>
<td>58</td>
<td>2.52</td>
<td>2.58</td>
<td>0.96</td>
<td>88</td>
</tr>
<tr>
<td>59</td>
<td>3.26</td>
<td>3.17</td>
<td>1.06</td>
<td>87</td>
</tr>
<tr>
<td>60</td>
<td>3.23</td>
<td>3.10</td>
<td>1.08</td>
<td>89</td>
</tr>
</tbody>
</table>
in a linear pattern e.g. factor 6 had a lower reliability than factor 10. Based on an examination of the scree plot, different factor extractions were carried out i.e. 3, 6 and 7, but the factors still proved difficult to stabilise and interpret.

An accuracy check was conducted in an attempt to test the degree of response error and also to reduce the number of variables used. Two opposing items: (22) “4 to 5 year olds concentrate better when they are carrying out tasks they choose themselves” and (33) “4 to 5 year olds concentrate better when the teacher directs the activities”, called for two contrasting responses e.g. if a score of ‘4’ was given to item 22, a score of ‘2’ should have been given to item 33. Both items were removed on the grounds that some respondents had answered them exactly the same or just one score apart.

With these items excluded the program was re-run to produce a 12-factor model by default, and after consultation of the scree plot a variety of different factor extractions were conducted i.e. 3, 4 and 8. The factors, however, did not appear to be sufficiently internally consistent and the inspection for meaning proved unsuccessful. Having exhausted the possibilities of factor analysis and still unable to get stable confirmatory factors, the researcher had no alternative but to accept that the sample size was too small. The number of respondents to items had fallen just below the ratio of 2:1, which according to Foster (1998) was the lowest, acceptable sample size. The researcher was therefore forced to consider survey 1 as an extended pilot and re-run a further survey with a larger sample and with a reduced set of variables.

8.4.2 Survey 2

Reduction of items
To reduce the number of items, it was decided to omit all variables on which there was 80% or more agreement/disagreement and consider them only in the descriptive analysis. Although removing high agreement items can be criticised as in some circumstances they could be argued to strengthen a cluster or factor, it was decided to remove them for the purposes of this study as they did not contribute to differentiating among the respondents about contentious issues and attitudes. In ordinary ‘item analysis’ for tests (e.g. multiple choice) it is conventional to remove questions that large majorities of the sample get right or wrong as they are either too easy or too hard and do not spread the sample out.

Drawing on this argument, the revised questionnaire was reduced to 28 items in total (the two items that had been removed in the process of factor extraction being reinserted) and as indicated in Chapter 4: Methods, was then distributed among a random sample of 300
Year 1 teachers. Details of the items that were excluded with the corresponding percentage agreement or disagreement (rounded to the nearest whole number) are presented in Table 8.12.

**Table 8.12: Items excluded for second survey**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Failing is part of life so the earlier the pupil experiences it the better able they will be to cope with it as they grow up</td>
<td>85% disagree</td>
</tr>
<tr>
<td>16</td>
<td>Problem-solving activities play a crucial role in the development of mathematical skills</td>
<td>90% agree</td>
</tr>
<tr>
<td>18</td>
<td>Play is an important tool for assessing children’s cognitive progress</td>
<td>87% agree</td>
</tr>
<tr>
<td>21</td>
<td>Play is a good activity for keeping children busy until they are ready to learn</td>
<td>85% disagree</td>
</tr>
<tr>
<td>24</td>
<td>Teachers should ensure that pupils are encouraged to develop their curiosity</td>
<td>100% agree</td>
</tr>
<tr>
<td>26</td>
<td>Play in the early years lays the foundation for later learning</td>
<td>93.5% agree</td>
</tr>
<tr>
<td>27</td>
<td>Exploratory methods may be fun but they have little impact on 4 to 5 year olds intellectual learning</td>
<td>90% agree</td>
</tr>
<tr>
<td>32</td>
<td>Monitoring play allows a record of children’s development to be kept</td>
<td>85% agree</td>
</tr>
<tr>
<td>34</td>
<td>4 to 5 year olds need to learn how to read and write in school, they can develop oral and social skills sufficiently at home</td>
<td>85% disagree</td>
</tr>
<tr>
<td>35</td>
<td>Creativity and the use of the imagination are powerful vehicles for learning</td>
<td>98% agree</td>
</tr>
<tr>
<td>37</td>
<td>Tests are the only means of assessment for the 4 to 5 year old</td>
<td>96% disagree</td>
</tr>
<tr>
<td>38</td>
<td>A happy child is a good learner</td>
<td>81% agree</td>
</tr>
<tr>
<td>45</td>
<td>Play is good for developing social skills but has little impact on developing intellectual skills</td>
<td>93.5% disagree</td>
</tr>
<tr>
<td>47</td>
<td>Children are only motivated to learn when they are given sweets or other incentives</td>
<td>96% disagree</td>
</tr>
<tr>
<td>48</td>
<td>There is no place in year 1 for anything other than reading, writing and arithmetic</td>
<td>98% disagree</td>
</tr>
<tr>
<td>50</td>
<td>Young children’s confidence can only develop in a competitive atmosphere</td>
<td>95% disagree</td>
</tr>
<tr>
<td>52</td>
<td>Play is a waste of valuable teaching and learning time</td>
<td>97% disagree</td>
</tr>
<tr>
<td>54</td>
<td>Play times provide the teacher with an opportunity to listen to children read</td>
<td>90% disagree</td>
</tr>
<tr>
<td>56</td>
<td>Teachers must always direct what the children are doing</td>
<td>81% disagree</td>
</tr>
<tr>
<td>57</td>
<td>Physical education activities make 4 to 5 year olds too lively for effective learning</td>
<td>97% disagree</td>
</tr>
</tbody>
</table>

The ratio of respondents to variables now being approximately 7:1, survey 2 was considered to provide a stronger sample base on which to build the factor analysis. Listwise deletion of missing cases was once again used to create the data set. As before the Barlett Test of Sphericity proved to be highly significant (p<0.000) and the problematics of the data behaving as an identity matrix were discounted. The orthogonal (Varimax) model was again put into practice as the Oblimin oblique rotation displayed the largest correlation to be 0.28 while the factor structure remained unchanged. Seven factors were initially found to have eigenvalues > 1.0 and the details (with % of variance explained) are presented in Table 8.13.

**Table 8.13: Details of the 7-factor model**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.97</td>
<td>28.5</td>
<td>28.5</td>
</tr>
<tr>
<td>2</td>
<td>2.16</td>
<td>7.7</td>
<td>36.2</td>
</tr>
<tr>
<td>3</td>
<td>1.46</td>
<td>5.2</td>
<td>41.4</td>
</tr>
<tr>
<td>4</td>
<td>1.43</td>
<td>5.1</td>
<td>46.5</td>
</tr>
<tr>
<td>5</td>
<td>1.24</td>
<td>4.4</td>
<td>50.9</td>
</tr>
<tr>
<td>6</td>
<td>1.10</td>
<td>3.9</td>
<td>54.8</td>
</tr>
<tr>
<td>7</td>
<td>1.04</td>
<td>3.7</td>
<td>58.6</td>
</tr>
</tbody>
</table>
The scree plot (see figure 8.14) suggests a definite cut-off point at the second factor and a possible levelling off of the eigenvalues after the third or fourth factor.

Figure 8.14: Scree plot for factor analysis

![Scree plot for factor analysis](image)

A 3- and 4-factor model was run for comparison against the default 7-factor model. Details of the 7-, 4- and 3-factor model are set out in Table 8.15 with items loading at ≥3.

**Table 8.15: 7-, 4- and 3-factor models**

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>32</td>
<td>32</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>35</td>
<td>35</td>
<td>35</td>
<td>37</td>
<td>17</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>40</td>
<td>24</td>
<td>24</td>
<td>19</td>
<td>30</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>24</td>
<td>37</td>
<td>19</td>
<td>29</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>22</td>
<td>19</td>
<td>37</td>
<td>27</td>
<td>27</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>22</td>
<td>22</td>
<td>25</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>34</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Even at first glance a degree of similarity between these factor models can be detected. For example factor 1 in the 3-factor model is the same as factor 1 in the 4-factor model with the additional items 29 and 18, which make up factor 3 in the 4-factor model. Factor 1 in the 3-factor model (excluding item 18) is the same as factor 1 and 2 in the 7-factor model with the additional items 26 and 36 loading strongly. Similar relationships between the other factors can also be demonstrated.
It was decided to concentrate specifically on the 3-factor model structure on the grounds that the 4- and 7-factor models were really a broken down version of its items. Moreover the reliabilities of the two predominant factors within the 3-factor model were slightly higher than those of the 4- and 7-factor models. Table 8.16 details these reliabilities.

Table 8.16: Reliabilities of 3-, 4- and 7-factor models

<table>
<thead>
<tr>
<th>Model</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Factor</td>
<td>0.87</td>
<td>0.83</td>
<td>0.30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4-Factor</td>
<td>0.86</td>
<td>0.83</td>
<td>0.47</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7-Factor</td>
<td>0.82</td>
<td>0.78</td>
<td>0.77</td>
<td>0.56</td>
<td>0.66</td>
<td>0.37</td>
<td>-</td>
</tr>
</tbody>
</table>

8.4.3 Combination of Survey 1 and Survey 2

An attempt was made to determine the degree of agreement of the two cohorts of Year 1 teachers on the 28 attitude scale items that were addressed in the survey 1 and the survey 2 questionnaires. A t-test was conducted to examine differences between the groups. On seven of the attitude scale items a statistically significant difference in response was indicated. These items include:

- (Q17/15*) 4 to 5 year olds should have the opportunity to say no;
- (Q28/21/) A teacher-directed activity is always more challenging than a pupil chosen activity;
- (Q30/23) Acquisition of gross motor skills is fundamental to 4 to 5 year olds learning;
- (Q44/32) Formal instruction in Year 1 introduces children to failure in the school system too soon;
- (Q51/35) Formal teaching approaches often lead to poor motivation in learning;
- (Q59/39) Language must be the basis for all learning; and
- (Q60/40) 4 to 5 year olds are subjected to too much pressure in the context of learning to read.

*The first item number relates to survey 1 and the second to survey 2

A simple explanation for these differences might be that the first questionnaire was quite long and therefore the respondents may not have been fully thinking about each item in depth. This may have been the case particularly for items 59/39 and 60/40, which were the last two items in the questionnaire. Another explanation might be found in the wording of the item definitions themselves. It could be argued that the underlying meaning of some of the items might be quite vague e.g. item 17/15 might suggest to some
respondents that 4 to 5 year olds should have the opportunity to say no if they find themselves in an unfavourable situation. For others the idea of children saying no might suggest disrespect. Comparisons of the mean scores of each of the identified items are detailed in Table 8.17.

Table 8.17: Differences between the mean scores of the targeted items

<table>
<thead>
<tr>
<th>Item No.</th>
<th>First Sample Mean</th>
<th>Second Sample Mean</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/15</td>
<td>3.9</td>
<td>3.3</td>
<td>0.6</td>
</tr>
<tr>
<td>28/21</td>
<td>2.5</td>
<td>2.8</td>
<td>0.3</td>
</tr>
<tr>
<td>30/23</td>
<td>3.9</td>
<td>4.2</td>
<td>0.3</td>
</tr>
<tr>
<td>44/32</td>
<td>2.7</td>
<td>2.9</td>
<td>0.2</td>
</tr>
<tr>
<td>51/35</td>
<td>2.7</td>
<td>2.1</td>
<td>0.4</td>
</tr>
<tr>
<td>59/39</td>
<td>3.2</td>
<td>3.8</td>
<td>0.6</td>
</tr>
<tr>
<td>60/40</td>
<td>3.2</td>
<td>3.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Close examination of the two-sample cohorts’ item mean scores suggests that from a non-statistical perspective, the actual difference is small. The direction of response on all items remains unchanged e.g. if positively disposed to a statement in the first survey, the responses of the second survey are also in the positive direction. This argument is supported by Pedhazur and Schmelkin (1991) who emphasised the need to distinguish between the “statistical significance” and the “substantive meaningfulness” (p.202). They used the words of Huff (1954) to explain their position: “a difference is a difference only if it makes a difference” (p. 203) and in the case of this study a difference did not appear to be made.

Despite this argument, however, it was considered that the statistical differences might lead to other effects on further processing. It was therefore decided that these seven items should be excluded and that the analysis should concentrate on the 21 variables for which there was no significant difference (in the statistical sense) found.

8.4.4 Factor Interpretation and Meaning

Based on the combined sample of 286 respondents (91 in sample 1 and 195 in sample 2) the 3-factor model was re-run to compare the factor structure with that of the second sample. Listwise deletion of cases with missing values reduced the operational sample to 257 cases. The Barlett Test of Sphericity proved highly significant (p<0.0000) and the orthogonal (Varimax) model was once again used.
Like the second survey, two strong factors were found and a third factor containing four items was also recorded, all with eigenvalues > 1.0. The eigenvalues and the percentage of variance explained are presented in Table 8.18.

Table 8.18: Final Varimax Rotation Statistics (Eigenvalues and Variance)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.33</td>
<td>26.2</td>
<td>26.2</td>
</tr>
<tr>
<td>2</td>
<td>2.20</td>
<td>7.9</td>
<td>34.1</td>
</tr>
<tr>
<td>3</td>
<td>1.49</td>
<td>5.3</td>
<td>39.4</td>
</tr>
</tbody>
</table>

The third factor was, however, not considered for the following reasons:

- its reliability was less than 0.5;
- it consisted of only three items as item 18 had to be removed on the grounds that its factor loading was less than 0.3; and
- examination of the scree plot suggested a definite cut-off point at the second factor.

The two strong factors are presented in Table 8.19, along with the details of their constituent item statements; loadings mean scores, variances, eigenvalues and reliabilities.

Table 8.19: Factor items and their loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Item Definition</th>
<th>Loading</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Play is more important than reading, writing and arithmetic</td>
<td>0.64</td>
<td>2.55</td>
</tr>
<tr>
<td>19</td>
<td>Children learn more through play than formal instruction</td>
<td>0.51</td>
<td>3.16</td>
</tr>
<tr>
<td>37</td>
<td>A play-based programme is the best preparation for later life</td>
<td>0.50</td>
<td>3.31</td>
</tr>
<tr>
<td>22</td>
<td>There is too little time spent on play in Year 1</td>
<td>0.47</td>
<td>2.82</td>
</tr>
<tr>
<td>38</td>
<td>Children must have letter identification skills by the age of five</td>
<td>-0.44</td>
<td>2.72</td>
</tr>
<tr>
<td>26</td>
<td>Play during the school day should be kept to one hour in the morning</td>
<td>-0.42</td>
<td>2.66</td>
</tr>
<tr>
<td>13</td>
<td>Scribbling, painting, cutting and kneading are more important for the development of psycho-motor skills than letter formation</td>
<td>0.32</td>
<td>4.02</td>
</tr>
<tr>
<td>17</td>
<td>A play-based programme places too much emphasis on looking after children and not enough on learning</td>
<td>0.53</td>
<td>2.24</td>
</tr>
<tr>
<td>31</td>
<td>Learning through creativity is over-rated in the Year 1 curriculum</td>
<td>0.52</td>
<td>2.25</td>
</tr>
<tr>
<td>27</td>
<td>It is only in a formal teaching programme that children will realise the importance of learning</td>
<td>0.52</td>
<td>2.26</td>
</tr>
<tr>
<td>36</td>
<td>Formal teaching approaches ensure better success in later schooling</td>
<td>0.52</td>
<td>2.65</td>
</tr>
<tr>
<td>25</td>
<td>4 to 5 year olds concentrate better when the teacher directs their activities</td>
<td>0.50</td>
<td>3.10</td>
</tr>
<tr>
<td>30</td>
<td>Formal arithmetic lessons in Year 1 are more important than problem-solving approaches</td>
<td>0.49</td>
<td>2.21</td>
</tr>
<tr>
<td>33</td>
<td>Children have to be taught what is right and wrong through a set of rules</td>
<td>0.46</td>
<td>3.61</td>
</tr>
<tr>
<td>20</td>
<td>Pupils will not learn the right things if they choose what they do themselves</td>
<td>0.46</td>
<td>2.86</td>
</tr>
<tr>
<td>16</td>
<td>Pupils should have a say in their learning programme</td>
<td>-0.45</td>
<td>2.96</td>
</tr>
<tr>
<td>14</td>
<td>4 to 5 year olds have to realise that all learning cannot be enjoyable</td>
<td>0.37</td>
<td>2.20</td>
</tr>
</tbody>
</table>
Factor 1 had seven strongly loading items, one of which (19) showed singular complexing with factor 3 and one (37) complexed on both factor 2 (in the reversed direction) and factor 3 at a relatively high level i.e. >0.3. Items in the factor seemed to address content issues, in particular the relative importance of the extent to which the curriculum should incorporate play or basic skills (reading, writing, letter identification). The factor was therefore designated as a “curriculum design” factor which enabled the disposition of the Year 1 teachers either to a more play-based or formal design to be assessed.

With the exception of items 38 and 26, the variables in this sub-scale appear to be positively disposed to a more play-based design of the content of the learning activities. A mean score of approximately 3, after reversal of scores 38 and 26, indicates a degree of mixed feelings with the disposition expressed i.e. as a group, the Year 1 teachers seem to be unsure as to whether the content of the learning programme should focus more on play-based activities or the basic skills of reading and writing etc. In this way it would seem that this factor correlates with the findings from the descriptive analysis and the interview studies where it was suggested that a proportion of the Year 1 teachers do not perceive play to be more valuable than reading, writing and arithmetic.

Factor 2 had ten items loading strongly, five of which (17, 31, 27, 36 and 30) showed singular complexing with one other factor at a relatively high level i.e. >0.3, all in the reversed direction. Question 17 complexed with factor 3 and 31, 27, 36 and 30 all complexed on factor 1. The underlying concept within factor 2 appears to bring together the role of formal instruction versus more experiential methods such as creativity, self-involvement, problem-solving etc. in generating the pursuit of learning in young children. There seems to be some concern about the degree of autonomy and the amount of formal instruction children should receive in a Year 1 classroom. The substantive interpretation of the factor was therefore designated as “autonomy and learning” which enabled the disposition of the Year 1 teachers towards teacher-led or self-initiated learning in their classroom. The link to factor 1 is explained inasmuch as the content of the learning programme is affected by the way in which learning is initiated and generated.

With the exception of item 16, the variables in this sub-scale run counter to the belief that fostering the child’s autonomy is necessary at this stage. The overall mean score of <3 for the sub-scale indicates disagreement with the disposition expressed, suggesting that the Year 1 teachers, as a group, do see the need for allowing young children some degree of
control over their learning. However the individual high mean scores i.e. > 3 for items 25, and 33 and the reversed score for item 16 suggests that the Year 1 teachers perceive teacher direction as having some importance. These findings seem to replicate those of the descriptive analysis of the questionnaire survey, the interview studies, and the observation studies where a large proportion of Year 1 teachers appeared to be reluctant to give up their control in the classroom.

8.4.5 Factor Analysis of the Danish Sample

Although an initial attempt was made to factor analyse the Danish data using a number of different factor extractions (e.g. 3, 6, 7, 10 and 14), like the first Northern Ireland survey, the factors proved weak and unstable in spite of much consultation with a Danish expert about translation checks and factor interpretation. The main intention of the Danish survey had been for comparison purposes only and as Chapter 4 details, the response rate was approximately 62% i.e. 93 respondents. Listwise deletion of missing cases reduced the operational sample base to 63 cases and left the analysis prone to the instability which was ultimately found.

A 3-factor extraction model was re-run on the Danish data using only those items that were found in the combined Northern Ireland sample but no similarity in the factor structure was apparent. Some level of comparison was possible, however, by taking the items in the Northern Ireland factors and examining the mean scores of the Danish pædagogs’ responses. Table 8.20 details the Danish means scores for the individual items within each factor.

*Table 8.20: Mean scores of the Danish sample on the Northern Ireland factors*

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Mean Item Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACTOR 1</td>
<td></td>
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<tr>
<td>24</td>
<td>4.21</td>
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<tr>
<td>19</td>
<td>4.30</td>
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<tr>
<td>37</td>
<td>4.27</td>
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<tr>
<td>22</td>
<td>2.79</td>
</tr>
<tr>
<td>38R</td>
<td>2.46</td>
</tr>
<tr>
<td>26R</td>
<td>1.74</td>
</tr>
<tr>
<td>13</td>
<td>4.64</td>
</tr>
</tbody>
</table>
The overall higher mean score of the Danish respondents of >0.3 would suggest that they, as a group, are more positively disposed to play-based activities within the learning programme than their Northern Ireland counterparts. The low mean score on item 22 might result from the inappropriateness of this item for a Danish audience as their programme is soundly based on play.

Like their Northern Ireland counterparts, the overall mean score of <0.3 might indicate that substantively the Danish pedagogs are also negatively disposed to the disposition expressed in factor 2. In fact their lower mean scores than that of Northern Ireland sample, suggest an even stronger position than that of the Year 1 teachers, that children’s autonomy should be fostered by means of problem-solving, creativity etc.

### 8.4.6 Match of Factor Analysis with Biographical Detail

Statistical tests were carried out on the factor scores in accordance with various biographical categories such as age, place of training, experience etc. in an attempt to explore the respondents’ positions. Since the sub-scales yielded scores and mean scores, the test chosen was ANOVA, with individual t-tests for any analyses that produced significant differences.

Only one of the categories gave rise to any significant difference in the mean score for their classification against factor 1 (even this was quite weak-p<0.05) and none of the categories against factor 2. It would appear therefore, that regardless of the category any respondent fell into, the perception that Year 1 teachers as a group had mixed feelings towards the content and structure of the learning activities, was soundly accepted. This seemed also to be the case for the Year 1 teachers' perception that the children’s own positive disposition towards learning should be fostered to some degree.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Mean Item Score</th>
</tr>
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<tbody>
<tr>
<td>FACTOR 2</td>
<td></td>
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<tr>
<td>17</td>
<td>2.06</td>
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<tr>
<td>31</td>
<td>1.86</td>
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<tr>
<td>27</td>
<td>1.76</td>
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<td>36</td>
<td>2.30</td>
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<td>25</td>
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<td>30</td>
<td>1.56</td>
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<td>20</td>
<td>2.01</td>
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<tr>
<td>16R</td>
<td>3.95</td>
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<tr>
<td>14</td>
<td>2.46</td>
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</tbody>
</table>
The significant differences for factor 1 were shown to be between the mean score of group 2 i.e. Stranmillis and group 4 i.e. English, Scottish and Welsh Higher Education Colleges. Those who were trained in Stranmillis University College seemed to be less disposed to play-based activities in the learning programme (mean = 3.11) than those who were trained in Great Britain (mean = 3.42). This is not particularly surprising due to the more conservative mindset that is associated with Northern Ireland education and in particular the more school-based structure of the teacher training college.

8.5 Overall Summary of the Questionnaire Surveys

A summary of the survey findings would suggest that there were mixed feelings among the Year 1 teachers about the value of a high quality curriculum for the 4 to 5 year old child. Although the majority of the Year 1 teachers were of the opinion that play was a valuable learning experience, there appeared to be some ambiguity about whether play should assume priority over formal skills in a Year 1 classroom.

Another issue which emerged from the factor analysis was the issue of direct instruction versus the opportunity for more autonomous activity. The findings suggested that the Year 1 teachers valued creativity, exploration, problem-solving etc, but appeared to be less in agreement about the degree of autonomy that young children should receive in the learning process. This contrasted with the Danish response where the majority of pedagogues highly valued play and the need for children to act autonomously. The next chapter presents the findings from the parents' questionnaire in both contexts, which may provide a degree of evidence as to whether Northern Ireland parents prefer a more formal skilled-based programme for their young children and Danish parents a more play-based programme.
CHAPTER 9: FINDINGS FROM THE PARENT QUESTIONNAIRE

This chapter details the findings from the parents’ questionnaires. It begins with a short recap of the main purposes of this aspect of the study, provides a summary of the demographic features of the sample involved and proceeds to present the findings, structured according to the questions posed in the questionnaire.

9.1 INTRODUCTION

The purpose of the parent questionnaire survey was:

- to gain an insight into the parents’ perceptions of high quality practice for the 4 to 5 year old child; and
- to consider their satisfaction with the Year 1 learning experience.

9.1.1 Sample Size

As described in Chapter 4: Methods, ten questionnaires were distributed in each of the kindergartens and most of the Year 1 classes observed. A total of 650 parents was targeted (i.e. 350 in Northern Ireland and 300 in Denmark). Although a satisfactory number of the Northern Ireland parents responded (57%, 200 responses), there was only a response from 123 Danish parents (41%).

9.1.2 Demographic Features of the Sample in Both Contexts

Although slightly more fathers responded in Denmark than in Northern Ireland, the majority of responses in both contexts were from mothers. This perhaps reflects the more dominant role of the mother in the education of young children.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Northern Ireland n=200</th>
<th>Denmark n=123</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Mothers</td>
<td>164</td>
<td>82%</td>
</tr>
<tr>
<td>Fathers</td>
<td>36</td>
<td>18%</td>
</tr>
</tbody>
</table>

The majority of respondents in both the Northern Ireland and Danish sample were aged between 30 and 39 years and were married, with only 9% and 6% respectively of the Northern Ireland sample being single or divorced and 15% single and 7% divorced in the Danish sample.
9.2 SATISFACTION WITH THE PROVISION THE CHILDREN RECEIVE

9.2.1 Northern Ireland

Most of the Northern Ireland parents (70%, n=140) indicated that they were satisfied with the provision their child received in the Year 1 class and the progress they were making: “we can see great improvements in the way he has developed”, “my child has learned so much and has become more confident” and “my daughter has made good progress in reading”.

Approximately 30% (n=60) of the respondents were less satisfied, referring to the overemphasis on formal teaching methods:

“It's far too regimental too quickly. Individuality is not given adequate attention”

“I have my reservations about the very early formal start. It's so different to the relaxed atmosphere of the nursery that my child is used to”

“I feel they expect too much of a child that starts primary school at age four”

All respondents except two suggested several changes they wished to make to the existing provision. Their suggestions were categorised into seven areas:

- smaller classes and greater staff-child ratios (33%, n=65);
- more play-based activity (29%, n=57);
- more emphasis placed on academic achievement (11%, n=22);
- less homework (9%, n=18);
- more parent-teacher co-operation (9%, n=18);
- more comfortable surroundings (7%, n=14);
- more comfortable clothing (2%, n=4).

9.2.2 Denmark

In contrast to 28% (n=34) of the Danish parents who expressed a degree of dissatisfaction with the provision available, the majority of Danish parents (72%, n=89) were satisfied with the provision their young children received. They praised in particular the way in which their children’s social, emotional and physical well-being were catered for, as evidenced in the following comments:

“My son is very happy and content and that is naturally what means the most to me”

“Although there are different organised activities throughout the day, I've never had the feeling that my son feels stressed”
Despite this high level of satisfaction, all but six of the Danish respondents proposed some improvements that could be made to the kindergartens. These included:

- more organised activities and more staff interaction (28%, n=34)
- more staff and smaller institutions (22%, n=27);
- more creative activities (16%, n=20);
- more parent-pædagog discussions (10%, n=12);
- ecological food (8%, n=10);
- more space (6%, n=7);
- an equal number of male and female pædagogs (2%, n=2);
- more group games (2%, n=2);
- more boys games (1%, n=1).

9.3 DEFINITION OF A QUALITY PROGRAMME

9.3.1 Northern Ireland

Parents were asked to define a high quality learning experience for 4 to 5 year old children, one which favoured a play-based model of early years provision and the other a more formal approach, according to two statements. Half of the Northern Ireland parents (n=100) were sympathetic to the play-based model. A further 25% (n=50) emphasised the need for a combination of both statements: “I don’t think you can have one without the other” and “a mixture of both is more like it” with the remaining 25% of the respondents (n=50) defining a high quality programme in academic terms: “at the end of the day qualifications are what counts” and “reading, writing and arithmetic are essential. They are basic to everything”.

The findings would suggest that twice as many Northern Ireland parents perceived a high quality programme for the 4 to 5 year old child in terms of care and natural development than those who indicate that the earlier formal teaching begins the better. Comments to support this opinion include:

“It’s only a caring programme which will provide children with the confidence to tackle activities, especially when they find them difficult”

“a child who is learning willingly and is happy will learn a lot quicker and will progress with confidence”
9.3.2 Denmark

The majority (72%, n=89) of Danish parents perceived a high quality programme in terms of care, which allowed the children to develop at their own rate. The reasons given for this response included: allowing the children to be children for as long as possible, preventing children from experiencing pressure and providing the foundation upon which profitable learning would take place. These opinions are reflected in the following statements:

"I find it most important that children have the opportunity to develop at their own natural rhythm. When my son started kindergarten all he wanted to do was to play cowboys and Indians. As he was not pressurised to do other things he has now developed naturally and is more eager to participate in creative activities and has become much more self-confident in the process. Perhaps if he had been pushed too early this might not be the case."

Approximately 28% of the Danish sample (n=34) indicated that they favoured a programme which was play-based but which would ensure some degree of skill-acquisition in the process:

"No demands will slow down the children's development and too high demands will lead to failures which in turn will decrease their self-esteem. Demands have to be balanced naturally with the children's individual development."

None of the Danish sample described an appropriate programme for this age group purely in academic terms.

9.4 PERCEPTIONS OF THE EDUCATORS

9.4.1 Northern Ireland

Most parents (86%, n=172) responded positively, when asked if they considered the Year 1 teachers to be successful in their role, praising them principally for their commitment and dedication. Comments included: "the teachers do not receive enough praise for the job that they do" and "I think the teachers do a wonderful job, often thanklessly. They have so much more work to do than what is seen on the surface by parents. I couldn't praise them highly enough."

Approximately 14% of the sample (n=28) appeared to be less complementary: "some teachers don't make learning fun any more and have become stale", "they shouldn't rush the children as quickly into formal practice. There's no need for children to be so disciplined at this age" and "if there were less children in the class perhaps teachers could then give more attention to the children that need it".
9.4.2 Denmark
Like the Northern Ireland parents, the majority of the Danish respondents (72%, n=89) praised the efforts of the paedagogs:

"They are so loving and caring and possess a natural interest in each and every child"

"They seem to be able to handle 50 children at a time without turning the kindergarten into prison like conditions"

"I think they are very serious about the children’s developmental needs and their importance in the kindergarten"

There were some Danish parents (26%, n=32) who felt that the educators were not fulfilling their expectations: “often the paedagogs are too invisible in the kindergarten”, “they need more professional knowledge about how to challenge children appropriately” and “I think they took the job because it was easy and you don’t need to work so hard. The children, to my knowledge, generally take care of themselves”. One parent went as far as to say that:

"No matter what time of the day you come to the day care setting, the employees are sitting drinking coffee and talking to each other. They forget they are actually employed to be with the children”.

9.5 PARENTAL NEEDS

9.5.1 Northern Ireland
The majority of the Northern Ireland parents appeared not only to be satisfied with the provision their children were receiving and the input of the educators but also the way in which their needs as a parent were taken into consideration. Approximately 74% of the sample (n=148) described their relationship with the staff in positive terms as evidenced in the following comments:

"we are always invited to meetings and are actively involved in different aspects of the school life”

"we are kept up to date at the school meetings and we get school reports sent home twice a year. You can inquire about the child's progress at any time the teacher is free”

Approximately 26% of the sample however, felt that their needs as parents could be better considered:

"The teacher doesn't really bother unless you do. She doesn't have much time”

"I want school to be a positive and happy experience for my child and believe that the encouragement of a closer relationship between class teachers and parents would achieve this result”
"I would like the opportunity to chat with the teacher more frequently, but she is always so busy, I don't like interrupting her".

In fact 15% (n=30) argued that working parents’ needs could be better catered for. Suggestions were made that earlier opening hours would be beneficial to allow parents to leave their children to school instead of child minders and less homework during the week was also referred to as both children and parents were often tired in the evenings.

9. 5.2 Denmark

Like the Northern Ireland parents, the majority of the Danish sample (86%, n=106) also indicated that their needs as parents were being appropriately considered with the comment “there’s always time for a cup of coffee and a welcoming chat if required” reflecting the mood of most of the respondents. Several of the Danish parents commented that if the setting catered successfully for their children’s needs, it also did so for their’s. This opinion is reflected in statements such as:

“The most important thing is that my son’s needs are cared for and that both the staff and I can work together to ensure that”

“I think they cover all my daughter’s needs and as long as she is happy and satisfied then so am I”

Approximately 14% of the sample (n=17) seemed to be of the opinion that their needs as parents were not being fully taken into consideration and would benefit from more communication with the staff: “I would like more initiatives from the staff as to how my child’s day has gone” and “I have a need to know how my child behaves in kindergarten and a need to know how their day has been”.

9.6 SUMMARY

Although the majority of the Northern Ireland and Danish parents appeared satisfied with the provision their children received, a substantial minority in both contexts expressed a degree of discontent. Just over a quarter of the Danish respondents (29%) emphasised the need for more organised activities and interaction on the part of the staff; while 30% of the Northern Ireland sample indicated that more practical activity was necessary.

It was particularly interesting, that in spite of the formal programme their children attended, 50% of the Northern Ireland parents (like the majority of the Danish sample) defined a high quality programme for the 4 to 5 year old child in terms of care and natural development.
Having presented the findings from all aspects of the study, it is necessary to turn one’s attention to the results of the focus group discussions that commented on the results in their entirety.
CHAPTER 10: FINDINGS FROM THE FOCUS GROUP DISCUSSIONS

The final phase of the research design focused on the perceptions of a group of experts who have the power to influence policy, training and practice in the field of early childhood. As a group, they were well-placed to address the validity of the findings, to discuss the observed differences between the formal and play-based settings, and suggest what action, if any, is needed to improve provision in Year 1 classes in Northern Ireland. A series of by-invitation seminars were conducted to elicit their views on all of these matters and this chapter addresses their recommendations in some detail.

10.1 INTRODUCTION

Three by-invitation focus group discussions with early years experts (including members of the Inspectorate, advisory services, higher education tutors and Key Stage 1 coordinators) were conducted in an effort to:

- test the preliminary findings;
- consult an expert audience; and
- refine the findings.

The structure of this chapter is based on the questions posed during the discussion and feedback sessions. The findings from the four groups are presented under the following headings:

- validity of the findings;
- discussion of differences between formal and play-based settings;
- action required; and
- research suggestions.

10.2 FINDINGS FROM THE FOCUS GROUP DISCUSSIONS

10.2.1 Validity of the Research Findings

For the purpose of the focus group discussions, the findings from the overall research project were summarised as follows:

- children’s emotional and physical well-being (i.e their happiness and comfort, and their confidence) is better catered for in the Danish settings than in the Northern Ireland settings;
- children were offered more opportunity to act autonomously in the Danish kindergartens;
• the greater freedom of activity and movement in the Danish settings appeared to allow for more opportunities for social intercourse and the children appeared less aggressive;
• the more formal curriculum in the Northern Ireland Year 1 settings appeared to do little to promote children’s motivation;
• challenge was limited in both the Year 1 classes and Danish kindergartens, where there were few opportunities for children to develop their higher order thinking skills;
• some Year 1 teachers appeared to have a conservative attitude towards the value of play.

The overall acceptance of the findings was evident from the responses of each of the focus groups. There was a general consensus among the panels that the Northern Ireland Year 1 programme was not meeting the needs of all four and five year old children and that a more appropriate start for these young children was required.

The inspectors and advisory service members particularly voiced concern about the lack of challenge and play-based activities on offer in the Northern Ireland Year 1 classes. They agreed that too much emphasis is being placed on written and colouring-in activities and as one inspector stated, “as a result young children are not receiving adequate opportunities to ensure the grey matter is actually working”. Similarly they endorsed the finding that play (both in and outdoors) was not being adequately used as a means of stimulation and challenge. Instead they suggested children were being encouraged to learn in a way that was completely unnatural to them. There appeared to be a consensus among them that Year 1 teachers tend to adopt a mechanical approach to play, envisaging the complexity of a task in terms of the amount written down, or believing that if a worksheet has not been completed then the activity has not been worthwhile.

The higher education tutors referred in particular to a ‘culture of dependence’ that is being promoted in Northern Ireland classrooms. Evidence was provided to suggest that the lack of autonomy is not only apparent in Year 1 classes but throughout the education system as a whole. In fact there was a general consensus that even among the higher education institutions, less opportunity to act autonomously was offered in comparison to European institutions. Particular concern was voiced that if children are to be educated within this ‘spoon-fed’ environment how will they compete at a later date with their more independent and superior decision-making European counterparts.

In certain cases some Key Stage 1 co-ordinators indicated that they considered the findings rather harsh e.g. in relation to the degree of boredom displayed and the amount
of play offered to young children. A degree of scepticism was also voiced by some co-ordinators about the amount of freedom the children were receiving in Denmark, and concerns were expressed that if this was the case in Northern Ireland complete chaos would erupt. However after discussion with the group, they all agreed that by the end of Year 1 most children are less eager and enthusiastic than at the beginning of term and that on the whole some changes would need to be made. One co-ordinator stressed that “we are just going to have to admit to it. We are not providing the environment that these young children require”. Another co-ordinator, who taught in a school where the teaching of formal reading had been abandoned, emphasised the improvement that had been made particularly the children’s academic skills.

Concerns that children’s behaviour was deteriorating in schools were raised, and that the gap between the weaker and the brighter child was widening. Suggestions were also made that activities provided could perhaps be more challenging and allow for more autonomy if additional help was available. They all agreed that when involved with a reading group it is imperative that the rest of the children are offered a simple activity which they can complete without help and that this is often a colouring-in activity. The Key Stage 1 co-ordinators reinforced the fact that Year 1 teachers were under pressure to fulfil the demands of the Northern Ireland curriculum. They agreed unanimously that at a more relaxed atmosphere was achieved on days when reading was not being taught. Reference was also made to the amount of record keeping and assessment that was expected.

The situation, which worried all of the panels, was that both children and teachers were being put under too much pressure. A member of the advisory services referred to the number of five to six year olds in Reading Recovery programmes as “scandalous”, when children in other European countries have not even begun to read. In support of this statement, others, (e.g. both members of the advisory services and higher education tutors) commented on the process of ‘Baseline Assessment’ which, in their opinion, may have a similar effect on young children, if teachers and parents fail to understand its intended purpose. The higher education tutors accused the ‘hot-housing’ programme as the principal reason why so many children, in particular boys, are failing the system. A member of the Inspectorate commented that many children appear to be much more secure when observed in the nursery programme than in the Year 1 context. Evidence was provided to suggest that the child who is considered as bright, independent and
possessing a 'bit of spark' in the nursery is often the one in later years who is being complained about in the staff room as suffering from behavioural problems.

10.2.2 Discussion of Differences in the Formal and Play-based Settings

Many explanations were offered by each of the focus groups as to why the differences between Danish and Northern Ireland practice were so pronounced. It is useful to collate this evidence and present it under three main headings - namely cultural philosophy, teacher training and the Northern Ireland Curriculum.

Cultural Philosophy

All of the focus groups drew attention to the different philosophy of education in both contexts. It was stressed that in Denmark, the early years of education are perceived as a preparation period to ensure that children develop holistically and are embedded in the principle that children should be allowed to be children for as long as possible. However all groups argued that this was not the case in Northern Ireland, where Year 1 is recognised by both parents and teachers, as the initial stage of the child's formal education, expecting children to display some academic skill development from the outset.

The Key Stage 1 co-ordinators referred to the 'competitive philosophy' that permeates Northern Ireland society in general. They stressed that parents are prone to compare the performance of their children with those of others and indicated that the Government is advocating such competition even among schools, by publicising the performance of schools in the form of 'league tables'. The 'selection process' was blamed for this competitiveness that has governed the Northern Ireland system for a long period of time and has according to one co-ordinator "imposed a kind of elitist structure on the whole process of education in our country".

Some of the Key Stage 1 co-ordinators accused the government of neglecting the early years of education, stating that Year 1 teachers have had to cope with poor facilities and little help for a long time. They did, however, express gratitude for the extra funds available through the 'Primary One Initiative Project'. A member of the advisory services was more sceptical, indicating that no matter how much money is granted to Year 1 classes, changes will not be apparent until the mindset of early years teachers is transformed. The members of the Inspectorate mitigated the role of government policy, stressing that child-staff ratios were reasonable in Northern Ireland as compared to the
UK. They suggested, like Denmark, the school day should be made longer. In this way teachers and children alike might have more opportunity to relax. Such a suggestion was immediately rejected by a member of the advisory services stating that "teachers would probably end up using this time to colour in rather than go for walks etc.".

The lack of outdoor play in the Northern Ireland Year 1 classes was attributed by the Key Stage 1 co-ordinators to the threat of litigation, stating that as a result activities such as climbing trees etc. had to be avoided.

**Training**
The higher education tutors highlighted the difference in the training of educators in both the Danish and Northern Ireland contexts and suggested that this situation might have resulted in different educational philosophies. They stressed that unlike Northern Ireland Key Stage 1 teachers who are trained to teach all areas of primary education, paedagog specialise in the development of young children. In their opinion paedagogs, as a result, do not possess a 'thinking about teaching' but rather see their role as facilitators who aid the development of young children. They argue that Year 1 teachers, however, perceive their duty mainly in terms of imparting knowledge and ensuring that young children are 'learning'. In this way, they argue, it is of no surprise that the Year 1 programme is more school-like in orientation whereas the kindergarten is presented as a more ‘child-minding’ institution.

**The Northern Ireland Curriculum**
The Key Stage 1 co-ordinators blamed the Northern Ireland Curriculum and parental expectations for the more formal programme that was observed in the Northern Ireland settings. When they learned that neither a curriculum nor form of accreditation exists in Danish kindergartens, one co-ordinator stated “it is of small wonder that the paedagogs can provide a more playful and relaxing programme. They don’t have to worry about attaining targets”.

Members of the Inspectorate, on the other hand, blamed the teachers themselves who, for many years even before the Northern Ireland Curriculum, were “obsessed with reading, writing and arithmetic”. In the inspectors’ opinion, the Northern Ireland Curriculum actually advocates more practical activities in the early years of schooling. The advisory services and the higher education tutors emphasised however, that it was not the content of the Northern Ireland Curriculum that caused difficulty, but rather the assessment-led programme it represented. They stressed that as a result of the Key Stage 1 and 2
assessments, a top-down pressure was being imposed from other colleagues to ensure that most children had reached a certain level before entering the next class.

10.2.3 Action Required
All of the focus groups suggested ways to improve the situation in Year 1 classes. These recommendations are summarised in the following areas:

- A review of the training programme for Key Stage 1 teachers;
- An evaluation of the Northern Ireland Curriculum;
- A change in the mindset of parents, teachers and society as a whole; and
- A better shared understanding of terms.

A Review of the Training Programme for KS1 Teachers
Higher education tutors suggested that an alternative training programme might be more suitable for early years teachers. They were of the opinion that Year 1 children required teachers who possessed a thorough knowledge of class development, rather than a subject specialist. They also stressed the need to enable prospective teachers to become critical thinkers, capable of making their own decisions and determining what they believe to be best practice for young children based on their own experiences. In this way, according to a member of the advisory service, young teachers might be capable of going into schools and adopting their own teaching techniques, instead of following the ‘traditional’ practice of those around them.

The Inspectorate were concerned that this change in teacher training programmes might result in a ‘deprofessionalism’ of Key Stage 1 teachers. One inspector stated that “Northern Ireland early years teachers should pride themselves on the equal status and income they receive with teachers in general unlike their European counterparts who do not”. She proposed instead, rather than a change in teachers’ training, to adopt a key-worker system within the Year 1 classroom. In this way, there would still be a teacher figure but assisted by someone who perhaps underwent a more intensive early childhood education-training programme.

An Evaluation of the Northern Ireland Curriculum
Members of the advisory services and the higher education tutors recommended a different form of curriculum as is proposed in the CCEA Review of the Northern Ireland Curriculum (CCEA, 2000). They emphasised the need to release the pressure on written,
numeracy and literacy tasks and instead to encourage children to become involved in more creative activities e.g. music, role-play art etc. They also suggested that a more formative rather than summative assessment programme would be advantageous where time would be available for teachers to observe individuals' all-round development, rather than concentrating on specific targets.

A Change in the Mindset of Parents, Teachers and Society

All the focus groups agreed that there should be a change in the mindset of parents, teachers and society towards the value of play for young children's development. Although they agreed that the findings of this study were a step in the right direction, one member of the advisory service indicated the need for further research particularly in the form of statistical evidence. She stated that "if we are to try to transform the thinking of parents and teachers of older children, evidence which shows that children's performance in school is improved as a result of following a play-based programme is required".

Furthermore some of the Key Stage 1 co-ordinators suggested that a compulsory parent education programme might be helpful, introducing the role of play in the all-round development of young children. One of the co-ordinators argued that "the greatest test would be trying to change the mindset of some Year 1 teachers who have become so set in their ways that they do not want to listen to new ideas and prefer to keep themselves cocooned in the confines of their own classroom". Suggestions were made that perhaps providing teachers with the opportunity to visit other early years models, such as 'High/Scope', Reggio Emilia or the Danish model might be helpful.

A Better Shared Understanding of Terms

A member of the Inspectorate stressed the need for all early years workers to adopt a common language and fully comprehend the different terminology used. She indicated that there are many differing opinions surrounding e.g. the word 'learning'. In her opinion some educators might perceive learning to be taking place when children are being well cared for, while others may envisage learning as something more formal and academic. Instead she believes that all early years workers should realise that activities need to be developmentally appropriate and a programme which concentrates on care and education is required. She also emphasised the need for all educators to be aware that challenge does not refer to the length of an activity or the amount of writing it involves. Challenge, in her opinion, is about ensuring that the brain is actually being encouraged to work, advocating the relevance of hands-on experience.
10.2.4 Research Suggestions

Several research suggestions were made that could follow on from the present study. A member of the advisory services reinforced the need to engage in a more quantitative study to access the quality of formal and play-based settings from an outcome perspective, now that some insight into the process quality of Year 1 classes had been gained.

A higher education teacher educator suggested a gender-related study in an attempt to see the way in which girls and boys reacted in the two early years models i.e. in the formal and play-based settings.

A suggestion was made that it might be interesting to consider whether the troubles of the past 30 years have affected young children’s development in Northern Ireland.

10.3 SUMMARY

Clearly, the majority of experts in each focus group agreed with the findings from the study, reinforcing the inappropriateness of an early start to formal schooling for 4 to 5 year old children. They agreed that there were inadequate practical experiences on offer in Year 1 classes, and a lack of autonomy and adequate challenge. They suggested that the culture, the training institutions for teachers and paedagogs, and the Northern Ireland Curriculum could explain the main reasons for the differences in Northern Ireland and Danish practice. Several members proposed that in an effort to improve Northern Ireland practice, the Year 1 programme and teacher training must be reviewed and a change in the mindset of parents and teachers is necessary.

The results to emerge from the focus groups underpin the overall findings of the study, which will be discussed in the following chapter.
This chapter draws together the findings of the six results chapters in a discussion relating to the quality and appropriateness of Northern Ireland Year 1 provision for the 4 to 5 year old child. Eight principal findings have been identified namely pressure, positive dispositions to learning, challenge etc. each of which will be discussed individually. These findings also form the structure of this chapter.

11.1 INTRODUCTION

The overall purpose of this study was to explore the play versus formal debate in early years education in an attempt to consider the extent to which Year 1 practice in Northern Ireland offers a high quality programme for 4 to 5 year old children. In order to achieve this aim the research examined the quality of the learning experiences on offer in a selection of Year 1 classes in Northern Ireland, using a selection of kindergartens observations to provide an example of play-based models in Denmark.

An assessment instrument, known for the purposes of this study as the QLI, was devised, calibrated by ten Year 1 experts and used in 50 settings to allow the processes of the learning environments to be explored and evaluated. A series of in-depth interviews were conducted with Northern Ireland Year 1 teachers and Danish pedagogues to clarify issues raised in the observations, to collect background information on both the staff and the settings and to gain an insight into their perceptions of a high quality programme for the 4 to 5 year old child.

Based on the preliminary findings of the interviews and some of the observation data, a survey was carried out on a sample of Year 1 teachers, and to a lesser extent Danish pedagogues (for comparison purposes only) to obtain background information on their gender, age, training etc., and their perceptions towards a play-based versus formal programme by means of an attitude-scale. A survey of parents’ views was also conducted in an attempt to identify their perceptions of a high quality programme for the 4 to 5 year old child. The culmination of the analyses led then to a series of focus group interviews with experts in the field of early childhood, all of whom were considered to be in a position to influence Year 1 education and practice in Northern Ireland. These focus group discussions underpin the findings that are discussed in this chapter.

This chapter brings together the findings of all aspects of the study. While there are many small and enlightening issues arising from the work, the most important issues centre on the following eight areas:
pressure on children and teachers;
positive dispositions to learning;
autonomy and flexibility;
relationships and values;
challenge;
value of play-based activity;
contextual features; and
the instrument.
These are now dealt with in turn.

11.2 PRESSURE

11.2.1 Pressure on Children
The findings from the study suggested that children in the Year 1 classes in Northern Ireland were under greater physical and academic pressure than their Danish counterparts in the play-based kindergartens. In all of the Year 1 classes, there appeared to be a pressure on children to conform to a more school-like environment and a more formal style of classroom management. They were expected to remain seated for most of the day, to engage in written exercises and, in approximately one third of the classes, to remain indoors for the entire day without getting the opportunity to release their energy, even at break or lunchtime.

The more competitive atmosphere that permeated the Year 1 classes also appeared to pressurise the young children who were expected to complete tasks in a given time and to reach specific targets. This was evidenced by the degree of hesitancy shown by several children in approximately three-quarters of the Year 1 classes in the manner in which they approached their activities and frequently sought the reassurance of their teacher.

The observations revealed that this practice contrasted with the relaxed and pressure-free programme of the play-based kindergartens in Denmark. The main emphasis in all of the kindergartens was placed on offering a caring approach; the children's comfort and physical well being were prioritised. These findings were reinforced by the interview data - 61% of the Danish paedagogs defined high quality practice purely in terms of happiness, enjoyment and care and none of the respondents identified academic learning as a priority at this stage.
All of the expert panels agreed that children were being put under too much pressure in the Northern Ireland Year 1 classes, evidenced by the number of children engaged in reading recovery programmes (i.e. 1358 in the year 1998/99, Prance, 2000) when other European children have not even started to read. What was particularly worrying however, was the fact that members of the advisory services and higher education tutors indicated that a similar experience of failure could emerge from Baseline assessment if the intended purpose was misconstrued.

It would appear that pressure of assessment is not only associated with Year 1 children in Northern Ireland, but according to research conducted by Harland, Kinder, Ashworth, Montgomery, Moor and Wilkin (1999), pupils in their final years of primary schooling also feel stressed by the Transfer Test. Unhealthy stress symptoms are also experienced by children (some as young as five) in English primary schools according to a study undertaken at the London Institute of Education (Ghouri, 1998) due to the emphasis placed on examination success both by teachers and parents. Such pressure may in some instances prove quite serious. Fisher (2000) refers to recent statistics from the Child and Mental Health Services (CAMHS) which reported that one in every five children in Britain suffers from mental health problems. She explains that according to the Audit Commission (1999) in 1998-1999 alone, approximately 500 children under four, 900 children around the age of five and over 1500 children aged seven, were seen by specialists from CAMHS. In her opinion such pressure is partly the result of the current emphasis on attaining targets, which has led to young children's education being more a question about height rather than breadth and depth and where children's well being is not being appropriately catered for.

Data from the interview studies suggested that the physical and emotional well being of children was not adequately catered for in Year 1 classes. Although most Year 1 teachers (as evidenced by the interview data and descriptive analysis of the attitude-scale survey) recommended a balanced approach for young children, which addressed both their affective and academic needs, approximately half of them indicated in the interviews that this did not take place in practice. In their opinion, adequate emphasis was not being given to developing the whole child, especially the children's physical and emotional needs, as a result of the pressures to fulfil the demands of the Northern Ireland Curriculum, to attain targets and meet the academic requirements of parents.
These findings support the work of Goleman (1996) who argued that while much emphasis in primary schools is placed on raising academic standards, the issue of emotional illiteracy is not being adequately addressed. Drawing on 126 different studies of more than 36,000 subjects, he indicated that this is particularly detrimental as the more anxious a person is, the poorer their academic performance will be. He also maintained that if children experience depression and anxiety in the early years of life, these tend to be much more difficult to rectify and overcome in later years.

The lack of physical activity in the Year 1 classes referred to in this study is in line with the recent Sport England survey by Rowe and Champion (2000) which indicated that British children are not receiving the physical exercise they require, compared with their European counterparts. This is particularly of concern in the light of an array of research compiled by Tan (1998). Tan argues that children who engage in physical activity are not only healthier and happier but are also more likely to be better learners than their sedentary peers. In fact a recent study conducted by McPhillips, Hepper and Mulhem (2000) provides evidence of a link between reading difficulty and control of movement in children. It would appear almost ironical therefore that by reducing the emphasis placed on emotional and physical well being in an effort to raise academic standards, in actual fact the contrary might be taking place.

11.2.2 Pressure on Teachers

The findings from this study indicated that pressure was not only being placed on the children but also on the Year 1 teachers themselves. Despite 67% of the Year 1 teachers expressing satisfaction with their job, 89% of them also indicated that they often felt stressed by it. Yet it was not the children that appeared to be causing them to feel stressed but rather the administrative duties they were obliged to undertake. This over-emphasis on bureaucracy has been reinforced by a recent survey conducted by the Ulster Teacher’s Union (1998) with teachers in Northern Ireland schools. The classroom teachers indicated that much of the pressure they experienced came from excessive paperwork, including report writing, lack of time for administrative duties and too many meetings. They also felt that there was inadequate time in school to complete marking and preparation which resulted in too much time being spent taking school work home. This finding was reinforced by the results of the interview studies. Approximately 99% of the Year 1 teachers indicated that they often stayed late in school and a further 72% of the respondents emphasised in addition that they brought work home on a regular basis. The
observation data revealed that in some cases, signs of teachers becoming more irritable towards the end of the day were noted, using a stricter form of classroom control, especially if they had not been successful in listening to all the children read.

On the other hand, the data did not suggest that the play-based programme was pressure-free. The majority of pædagogs (73%) claimed that they felt stressed with their job, but it is necessary to note that most of the Danish pædagogs were leaders and therefore had to balance pædagogs' and leadership duties. This might explain some of the stress they were feeling. The observation studies suggested that the pædagogs rarely showed signs of irritation and according to the interview data only 7% of the Danish respondents stated that they brought work home regularly. None of the pædagogs indicated that they remained in the kindergarten outside work hours on a regular basis.

11.3 DISPOSITIONS TO LEARNING

The pressure to achieve academic targets also seemed to suppress the Northern Ireland children's level of interest and enthusiasm in the learning programme. The observation data revealed that the level of motivation was said to be high in only 21% of the Year 1 classes, compared to 50% of the Danish kindergartens and low in 39% of the Year 1 classes and in only one (5%) of the Danish kindergartens. The freedom of choice and the play-based activities seemed to allow for a higher degree of motivation, especially when the activities were stimulating and varied, with a degree of adult interest being shown. Although the overall level of concentration in the Year 1 classes appeared to be slightly higher than that of motivation, the observations revealed that it was teacher control and discipline that ensured a certain level of precision was shown. In the Danish kindergartens however, despite the overall level of concentration being lower than that of motivation, when the children were highly engrossed in an activity, it was out of an innate desire to do so, rather than any form of extrinsic control.

These findings were endorsed in the work of Harland et al (1999) with Year 6/7 pupils. Their research indicated that when children were engaged in more passive learning activities such as listening, writing or filling in worksheets the pupils were much more prone to refer to such tasks as boring and onerous. The Key Stage 1 co-ordinators also remarked that by the end of Year 1 most children tend to be less enthusiastic to learn than at the beginning of term.
In line with these findings is the recent work of Claxton (2000). He argues that enforced teaching within a traditional model damages children's 'learnacy' i.e. their desire to want to learn and their ability to know how to keep on doing so. He argues that instead of schools focusing solely on teaching children the basic skills of reading, writing and arithmetic, they should aim towards developing children's 'learnacy' which has nothing to do with cleverness or academic achievement but rather a "learning toolkit" (Claxton, 2000, unpaginated) which can be developed throughout life i.e. learning by immersion, imagination, intuition and intellect. According to Claxton when children's 'learnacy' has been damaged they will "mess about", "bunk off" or "go invisible". Data from the observations studies supported Claxton's thinking. There were more signs of bad behaviour in the more formal Year 1 classes, compared to the play-based settings in Denmark, where few signs of aggression were observed. The Key Stage 1 co-ordinators in the focused group discussions also voiced concern at the deteriorating behaviour of children in schools.

The observation studies revealed that in practice extrinsic incentives such as rewards or in some cases threats were commonly used to maintain the children's attention. Kohn (1993) detailed the controversial effects that can emerge from extrinsic motivation such as praise. He indicated that instead of "boosting achievement" it can actually "drag it down" (pp. 98), often precluding children's intrinsic drive to learn in the process.

The need to develop children's natural disposition to learn has also been identified by the new curriculum consultation document entitled Proposals for Changes to the Northern Ireland Curriculum Framework (CCEA, 2000). These proposals have recognised the need for children to acquire skills but also to enjoy and be interested in the learning process, stating that "enjoyment of their early learning experience and progress at a developmentally appropriate pace" (CCEA, 2000, p. 25:4) are crucial for successful learning.

11.4 AUTONOMY AND FLEXIBILITY

Offering children some degree of control within the learning process has also been identified by theorists such as Ames (1992) as being requisite to the quality of the learning experiences. Drawing on the work of Nolen and Haladyna (1990), Ames indicated that when teachers are seen as emphasising independent thinking and content mastery, pupils are more likely to see the potential in using effective learning strategies.
Unsurprisingly the observation studies revealed that the level of autonomous behaviour was restricted by the structured programme of the Year 1 classes. In nearly all of the Northern Ireland classrooms the children had little opportunity to make their own decisions and use their own initiative as evidenced by the low level of independence observed in 57% of the Year 1 classes. This contrasted with the high level of flexibility that was observed in all but two of the play-based settings, where children were free to act autonomously for most of the day.

The lack of freedom and choice found to be offered in the Year 1 classes corresponded with the findings of an OFSTED Report (1993) which emphasised that "the over-directed nature of many infant classes removes the opportunity for children to develop their own initiative, independence and sense of responsibility, all of which are essential pre-requisites for ultimate achievement" (p. 10:26). This was reinforced by the observation data, which indicated that in those Year 1 classes where a short play session took place, it tended to be the teacher who decided what and how the children should play.

The higher education tutors in the focus group discussions also expressed concern about the lack of emphasis placed on independent thinking in Year 1 classes. In their opinion, independence was lacking in the entire school system and they believe that this results in children not being able to cope with the challenges of society. A similar apprehension has been voiced by Claxton (2000) who discusses the need for adaptable, creative and flexible minds to be able to manage life in the 21st Century.

Research conducted by Hendy and Whitebread (1999) on independent learning in the early years highlights the dependency culture, which they argue, is promoted in primary education programmes. Having studied children in nursery, reception and Year 1 and 2 classes, Hendy and Whitebread found that there was little significant difference between the children's independence level within the three age groups. This led them to conclude that the experience of schooling seems to encourage children to become more, instead of less, dependent on their teacher. They argued also that few primary teachers seemed to value children's independence, a finding that emerged from the survey data in the present study. Despite 91% of the Year 1 teachers disagreeing with the view that teachers should always direct what children do, there was a degree of uncertainty about the level of independence children should have in their learning programme, in contrast to the more positive view held by their Danish counterparts. Furthermore some of the Key Stage 1 co-ordinators expressed concern that if they were to allow the children too much freedom
this might undermine their control as teachers in the classroom. The factor analysis of the Year 1 teachers’ perceptions of high quality learning also helps to clarify this position. Although as a group the Year 1 teachers appeared opposed to formal instruction where children have little say in the learning process, the descriptive analysis of the mean item scores suggested however that Year 1 teachers still saw the need for teacher control in the classroom and appeared reluctant to let it go.

Hendy and Whitebread also indicate that teachers’ views are constrained by external forces. They emphasise that helping a large group of children meet a series of predetermined targets is not conducive to developing independent thought. The recent report (D/EE, 1999c) also addressed the need for pressure from the prescribed curriculum to be eased, allowing teachers more flexibility in devising their own programmes. The report refers to four benefits that could emerge from such a change:

- it would raise the morale of teachers by affirming confidence in their professional competence;
- it would allow more time and opportunity for schools to develop imaginative forms of teaching and learning;
- it would allow schools greater flexibility in developing programmes which meet the needs of their own pupils and which take account of the local and regional circumstances in which they work; and
- it would allow all schools to develop their own particular strengths and profiles within any given area of the statutory curriculum: sciences, arts, humanities, physical education or technology.

11.5 RELATIONSHIPS AND VALUES

Another purpose of the observation studies was to examine the degree of social interaction evidenced in both the formal and play-based models. As might have been expected, the freedom of activity and movement in the Danish kindergartens appeared to allow more opportunities for positive social intercourse than observed in Northern Ireland. Despite sitting together in-groups, most of the activities on offer in the Year 1 classes encouraged individual completion rather than group co-operation.

Within the flexible play-based kindergartens the children were free to converse how and with whom they pleased, no restrictions were placed upon them as to where they should sit or which activity they should complete. This was not the case in the more structured
Northern Ireland settings where it was the teacher who spoke for the most part of the day. Although in several cases the children engaged in low-level conversations as they completed their individual tasks, in approximately 20% of the classes complete silence was expected. Devries, Haney and Zan (1991) support these findings. They indicated that in direct instruction classrooms little opportunity for shared experiences or negotiation strategies were found, as it was the teacher who assumed control. More recent work by Hughes and Westgate (1998) also found that in teacher-provided contexts, children were given access to relatively few communicative roles other than that of respondent.

The competitive ethos observed in the formal programme as a result of the priority given to achieving goals, resulted in some children displaying a desire to outdo their fellow peers, rather than collaborating and working together. This was evidenced by the greater level of tale-telling and aggression that was observed in the Year 1 classes and in a few cases the disrespectful comments about their peers. This seems to be in line with Katz's argument (1995), which indicated that narcissism can develop in a competitive atmosphere in which some children begin to perceive their own success in terms of another child's incompetence. Halsted and Taylor (2000) extends this thinking, arguing that in an entrepreneurial society which prioritises individual success, often at the expense of co-operation, the individual intellectual and spiritual development, and the individual social and moral development of communities are neglected. This is reinforced by Bandura, Pastorelli, Barbaranelli and Caprara (1999) who indicate that in a pro-social environment of helpfulness, sharing and co-operation, a more favourable climate for academic achievement is achieved.

The observations revealed that control and discipline were the main teaching strategies used to ensure positive social relationships, where teachers seemed constrained by time to encourage children to sort out their problems independently, as was observed in the Danish kindergartens. The majority of Danish respondents (96%) actually disapproved of discipline, encouraging self-control on the part of the child. Broström (1998b) agrees with this position, indicating that an educational practice, which encourages children's initiatives and interactions, contributed better to the development of social competence. Extrinsic control, according to Halsted and Taylor, is not favourable to developing pro-social behaviour. They agreed that a genuine concern for others is more likely to develop where children are encouraged to see the need for behaving pro-socially rather than being told to behave in a certain manner. This was borne out in the observation findings where
the overall level of respect was high in 91% of the Danish kindergartens, compared with 25% in the Year 1 classes. In the kindergartens it appeared that the main emphasis was placed on valuing the children rather than prioritising the subject content.

An interesting finding emerged that the children, in all of the play-based kindergartens observed in Denmark, had the opportunity to develop a rapport with male as well as female adults. This was not the case in the more formal-based programme of Northern Ireland.

11.6 CHALLENGE

In the light of recent policy initiatives such as Early Learning Goals, the National Literacy and Numeracy strategy, Baseline assessment etc., there appears to be an underlying assumption that the Government equates raising standards with formal teaching and learning. Surprisingly, the findings from this study revealed that it was only in 21% of the Year 1 classes that the children could be said to be fully challenged as evidenced by a high level of motivation, concentration and higher order thinking skills observed. In the majority of the Year 1 classes, the children spent the most part of the day completing low-level written activities and colouring-in exercises. In a few instances however, signs of weaker children being over-challenged were observed. These children were expected to read and write when they appeared not to be ready.

Data from the focused interviews (in particular the Inspectorate and advisory service members) reinforced the lack of appropriate challenge that is offered to young children in Year 1 classes and the over-emphasis that is placed on written and colouring-in tasks, reinforcing the earlier work of Bennett and Kell (1989). Bruce (1999) is most out-spoken in this area. She emphasises that keeping children busy in teacher-led activities for the most part of the school day does not allow the time for children's brains to become "coordinated and reflective" (p. 39) and that preventing children from learning through play will result in "educational failure" (p. 40).

This is not to suggest, according to Katz and Chard (1988), that all play-based activities are highly challenging for young children, a finding that was also borne out in the observation studies. Although marginally higher than the Year 1 classes, it was only in 27% of the play-based kindergartens that a high level of motivation, concentration and higher order thinking skills were observed. Instead in most settings, the emphasis seemed to be on keeping children busy, entertained and well cared for. It arose from the
observations that appropriate challenge was associated with good educators who knew when and how to interact with the children to extend their learning rather than interfering with it, while at the same time providing open-ended tasks which allowed for exploration and problem-solving. These results are not new but instead reinforce the thinking of an array of both anecdotal and empirical evidence such as Sylva (1984), Meadow and Cashdan (1988), Filippini (1990), Atkin (1994), Bennett, Wood and Rodgers (1997) and more recently Laevers (1999) all of whom emphasise the role of the teacher in developing children’s learning. However the observations revealed that in both the kindergartens and the Year 1 classes, it was rare to see the educators interact with the children in what Edwards (1998) describes as “a kind of intellectual dialogue...and join in their excitement and curiosity” (p. 181).

The interview studies also revealed some interesting findings in relation to challenge. They indicated that the Danish and Northern Ireland educators did not attribute the same importance to challenge. Only two of the Danish paedagoggs considered challenge to be requisite, prioritising rather the child’s need for relaxation and enjoyment. This may help to explain the lack of extension on the part of the adults in these settings. This did not appear to be the case for the Northern Ireland Year 1 teachers, 99% of whom reinforced the importance of challenging young children. It was of particular concern, despite the low level of challenge observed in these settings, that 60% of the Year 1 teachers were of the opinion that their programme was offering an appropriate level of challenge for the children concerned, envisaging among other things, additional written work, homework and neat presentation as methods of challenge. The Inspectorate and the advisory services expressed the view that Year 1 teachers tend to envisage the complexity of a task in terms of the amount written down, rather than actually making the young children think. The need for more open-ended and problem-solving tasks and more interaction on the part of the staff was highlighted by the remaining 40% of the Year 1 teachers who recognised that their programme was not sufficiently challenging.

The findings from this study support the work of Costello (2000) who also argues that ample opportunity to extend children’s thinking skills is not available in educational establishments. Instead he maintains that the emphasis is placed on written activities, which in the teachers’ opinion, will provide the necessary evidence for parents that something worthwhile is happening in the classroom.
It is only in recent years that thinking skills have assumed some importance in educational documentation, as evidenced particularly in the work of McGuinness (1999). She has undertaken a project known as Activating Children’s Thinking Skills (ACTS) to develop and trial a methodology for enhancing thinking skills in Key Stage 2 classes in Northern Ireland.

According to McGuinness ACTS:

- recognises that pupils must be given the time and opportunity to talk about thinking processes, to make their own thinking more explicit, to reflect on their strategies in order to gain self-confidence and more self-control;
- builds on the idea that good thinking may have as much to do with creating a disposition to be a good thinker as it has to do with acquiring specific skills and strategies; and
- promotes the development of a “thinking curriculum” in a “thinking classroom”.

The findings from the present study would suggest that if a similar strategy were to be carried out in Year 1 classrooms in Northern Ireland, the overall level of challenge on offer might be increased. The chance of this happening is increased in the light of the recent curricular proposals where thinking skills have assumed a prevalent role. These have been categorised as “those intellectual skills that are necessary for the realisation of human potential” (CCEA, 2000, p.15) and include critical thinking, creative thinking, caring thinking and problem solving.

The observation data also revealed that the narrow curriculum (i.e. primarily reading, writing and arithmetic), which was provided in the majority of the Year 1 settings, seemed to do little to stimulate other skill areas such as science, music, art etc. This was also drawn out in the interview data, where the Year 1 teachers in general explained that their planning tended to concentrate on subject content in the Northern Ireland Curriculum, with little reference being given to the individual needs of children.

In the light of Gardner’s theory of multiple intelligences (1993, 1999) this is particularly of concern as adequate emphasis is not being given to the differing capabilities the children might possess and adequate opportunity to develop this potential is not being offered. In a recent report (DfEE, 1999c), reference is made to the need to provide more creative and cultural experiences in the early years of education. Drawing on brain
research the issue of exposure has been identified, on the grounds that if children are not exposed to, for example, musical experiences in the early years of life that development in this area might be stilted. The report provides evidence that literacy and numeracy are in fact “best promoted through a broad and balanced curriculum, which includes, rather than excludes, the arts and the humanities” (p. 77:140). It draws attention to the need for imaginative play and discovery learning to develop intellectual, social and emotional skills.

The descriptive analysis of the survey data revealed that the majority of Year 1 teachers saw the potential of creativity and exploration. The fact that this was not borne out in practice might suggest that the emphasis on accountability and learning outcomes prevents the teachers from giving these areas the importance they require, as evidenced by 53% of the Year 1 teachers in the interview studies.

11.7 THE VALUE OF PLAY-BASED ACTIVITY

Drawing on the observation data, it was apparent that Year 1 classes placed little value on play activities. Although a play session was observed in most Year 1 classes (70% in the pilot sample and 75% in the main observations’ sample), it tended to last less than 45 minutes, 10 minutes of which was involved in tidying up. In all but three of these classes the teacher used the available time to listen to children read, perhaps implying that this time of the day was less important than work-related tasks.

The findings from the factor analysis of the attitude survey suggested that there is a degree of scepticism among the Year 1 teachers about whether play-based activities should form the structure and content of the Year 1 programme. This is evidenced by the overall item mean score of approximately three i.e. ‘undecided’. The descriptive analysis of the initial survey revealed that only 17% of Year 1 teachers envisaged play to be more important than the 3Rs i.e. reading, writing and arithmetic.

The Danish paedagogs on the other hand, appeared more disposed as a group to the value of play in the learning programme. This might suggest that there is a degree of conservatism within the mindset of some Year 1 teachers, a finding that was borne out in the focus group discussions, where reference was made to the way in which some Year 1 teachers have become so set in their ways that they do not want to change. This was reinforced by 35% of the Northern Ireland Year 1 teachers who requested that more emphasis should be placed on teaching the basics i.e. reading, writing and arithmetic in
the Year 1 programme, despite another 43% advocating a less formal approach for 4 to 5 year old children.

The work of Francis and Grindle (1998) also draws attention to the conservative attitudes held by some British teachers. They indicate that well over half the teachers surveyed expressed their support for traditional teaching styles such as following a timetable and giving rewards for good work. On the same theme, Anning (1998) refers to education as a deeply conservative profession where teachers have not in her opinion, “embraced new technologies into their pedagogic practices” (pp. 309).

The work of Anning (1998) and that of Francis and Grindle (1998) draw attention to the increase in ‘formal’ education since the implementation of the National Curriculum, a finding that was reinforced by the Key Stage 1 co-ordinators, members of the advisory services and the higher education tutors in the focus discussions. The role played by the Northern Ireland curriculum in formalising practice was mitigated by the Inspectorate who argued that on the contrary the Northern Ireland Curriculum advocated the place of play-based activity in the early years of schooling. They emphasised rather that Year 1 teachers have always prioritised the basics.

Findings from the survey would suggest that Year 1 teachers who were trained in Northern Ireland higher education institutions, in particular Stranmillis University College Belfast, are slightly less disposed to play-based approaches than those who are trained in Great Britain. Reference was made to the more conservative training programme in Northern Ireland teacher training colleges in the focus interviews, particularly by the higher education tutors who referred to the emphasis placed on subject content rather than child development. Perhaps the recent introduction of the BA in Early Childhood Studies in Northern Ireland followed by a PGCE in early years education may result in a greater emphasis being placed on play in Year 1 classes.

The focus group discussions also indicated that the mindset of parents in Northern Ireland is quite traditional, a finding which is reinforced by the interview studies where approximately one third of the Year 1 teachers accused parents of putting pressure on them to concentrate on the basics. Yet the findings from the parent questionnaire study run counter to the widespread consensus, that Northern Ireland parents conceive education purely in academic terms. Clearly the parent questionnaire could be criticised on its methodology, the parents being expected to make their choice from only two contrasting definitions of quality practice. However tentative the findings might be, they
revealed that twice as many parents perceived high quality practice for their 4 to 5 year old children in terms of care, natural development and practical activities, rather than academic skill acquisition. These results are corroborated by Anning (1998) who indicates that despite an underlying assumption that parents judge schools by academic results, that research studies such as those of Hughes, Wikely and Nash (1994) etc. show that parents’ main concern is for their children’s happiness.

11.8 CONTEXTUAL FEATURES

Despite the mindset of teachers and parents in Northern Ireland towards play, the findings from this study suggest that contextual features such as child-staff ratio and space may prevent a play-based programme from being implemented even if desired. The observations revealed that compared to the play-based kindergartens where the child-staff ratio was approximately 7:1, the child-staff ratio in the formal Year 1 classes in Northern Ireland was approximately 12:1, with class sizes ranging from 17-30 (mean =24). The Department of Education in Northern Ireland has recognised the importance of smaller class sizes and from September 1999 it was made statutory that all Year 1 and 2 classes have a maximum of 30 pupils.

Some Year 1 teachers (26%) and parents (36%) emphasised the need for smaller classes and better child-staff ratios to improve the overall provision available. This was also stressed by both the Key Stage 1 co-ordinators and the higher education tutors in the focus group discussions. The need for smaller classes is of particular concern in the light of Bullivant and Charlton’s research (2000). They found that large class sizes restricted activities that required one-to-one interaction and 'hands' on involvement on the part of the children. They concluded that improving academic attainment for all children is a common goal, but unless children have access to appropriate curricular experiences their educational progress will be limited.

It is interesting to note that in spite of the more reasonable class-size ratios in Denmark, 40% of the paedagogs and 22% of the parents commented on the need for more staff. This dissatisfaction might stem from the previous staff reduction referred to by Jensen (1995) in an aim to ensure more pre-school places, reducing to a degree the overall space available.

It appeared from the observation data that the Danish kindergartens were much more spacious than the Northern Ireland Year 1 classes, the Year 1 children confined mainly to
one average-sized classroom for the most part of the day. As desks and chairs took up most of the room, space for play and storage seemed quite limited. It was in the area of outdoor play that the difference was most pronounced. The observations revealed that in 91% of the Danish settings some form of outside play area was available where the children were free to play for most of the day despite the weather. This compared with only two settings in Northern Ireland which had adjacent outdoor play areas and even in these cases they were only used at break time and lunch time, weather permitting. This is not to suggest that there was no available space outdoors where an outdoor plot could have been created. Moreover expensive outdoor equipment was not required as evidenced by the Danish kindergartens, where muck areas, cane huts, vegetable patches, tree huts etc. appeared to be the norm. Time and safety may have been the reason for the lack of outdoor play in the Year 1 classes. Due to the emphasis placed on the 3Rs and attaining targets, time for outdoor play seemed limited. Moreover teachers in Northern Ireland are also accountable for children’s safety, where litigation has become a major issue (see DENI, 1999b) which, according to several paedagogs, is not the case in Denmark.

11.9 THE INSTRUMENT

Although not original in the sense that it was derived from other sources, the Quality Learning Instrument (QLI) possesses a degree of originality in the way in which it crossed two cultures and was calibrated by a number of early years specialists. It could be argued that this instrument has the potential to be used as an assessment schedule in any early years setting, taking into consideration the cultural diversities that exist.

The content of the instrument, based on nine indicators of quality learning e.g. motivation, concentration, confidence etc. bear some resemblance to the four outcome areas that Pascal and Bertram (1999) have identified for their AcE Project (Accounting Early for Life Long Learning). In this way it could be argued that the indicators used in the QLI not only act as process indicators but could also be used as outcome measures as Pascal and Bertram (1999) argue that it is time to stop thinking of outcomes simply in terms of “facts, subjects and disciplines of knowledge” (p. 101/102). Laevers (2000) also argues this to be the case, challenging the view that “narrowly defined tests of academic achievement are the only means of measuring educational outcomes” (p. 20). Perhaps the QLI could supplement the work of Pascal, Bertram and Laevers in this field as well as frameworks such as the “Quality in Diversity” (Early Childhood Education Forum, 1998 or Carr’s “dispositional framework” (1998) all of which emphasised the importance of
positive dispositions as measures of learning outcomes. In fact it could be argued that the QLI provides not only an easy to use and comprehensive assessment schedule for research purposes but also a means for early years teachers to assess the quality of their own practice and inform and develop their understanding of children’s learning. Clearly then there are a number of ways in which the QLI could be further used.
CHAPTER 12: CONCLUDING REMARKS

The main findings from the observation, interview and questionnaire surveys indicate that the Northern Ireland Year 1 model is not an appropriate learning experience for many 4 to 5 year old children. This inappropriateness can be explained in the excess pressure imposed on children and adults, the lack of meaningful challenge and practical activities on offer, an inadequate child-staff ratio and cramped facilities. The implications to emerge from these findings are discussed in this chapter and a way forward are suggested.

12.1 IMPLICATIONS OF THE STUDY

12.1.1 The Appropriateness of the Year 1 Model of Early Childhood Education

The findings from the observation studies suggested that the current approach of formally teaching reading, writing and arithmetic is inappropriate to the needs of many 4 to 5 year old children. For example the demands to meet specific targets seemed to exert excess pressure both on children and teachers, resulting in a learning experience that was neither challenging nor enjoyable. It would appear that even at this early stage in their education, several children's intrinsic motivation had been stifled and their self-esteem damaged, and this at an age when many of their European counterparts have not even started school proper. These findings would therefore appear to support the philosophical and psychological argument of the play-based advocates that an early start to formal schooling is inappropriate for young children on the grounds that it deprives them of their childhood and it forces children to participate in activities that are unnatural to them. The words of Zorba the Greek help to illustrate this position more clearly:

"I remember one morning when I discovered a cocoon in the back of a tree just as a butterfly was making a hole in its case and preparing to come out. I waited awhile, but it was too long in appearing and I was impatient. I bent over it and breathed on it to warm it. I warmed it as quickly as I could and the miracle began to happen before my eyes, faster than life. The case opened, the butterfly started slowing crawling out, and I shall never forget my horror when I saw how its wings were folded back and crumpled: the wretched butterfly tried with its whole trembling body to unfold them. Bending over it, I tried to help it with my breath, in vain.

It needed to be hatched out patiently and the unfolding of the wings should be a gradual process in the sun. Now it was too late. My breath had forced the butterfly to appear all crumpled, before its time." (cited in Little, 1995, p. 36).

Drawing on the findings of the present study, it would appear then that a review of the Year 1 curriculum is required to ensure that a more suitable programme is provided for 4 to 5 year old children. The Northern Ireland Council for the Curriculum, Examinations and Assessment (CCEA) has recognised this need and in its recent curricular proposals (CCEA, 2000) has suggested that the formal teaching of reading, writing and arithmetic should not begin until children are aged six.
12.1.2 The Value of Play

Although the CCEA’s action might be a step in the right direction, the findings from the present study would suggest a degree of caution in the light of the conservative mindset of approximately half of the Year 1 teachers. Despite the majority of Year 1 teachers emphasising the value of play in a Year 1 classroom, several were reluctant to attribute more significance to play than to the teaching of the 3Rs. Similarly as a group the Year 1 teachers were unwilling to release their control in the classroom and offer children a more independent role in the learning process.

To impose on teachers, therefore, a requirement to offer more practical activities may do little to improve the quality of the learning experience on offer. As suggested by the Inspectors in the focus group discussions, in spite of the recognised change in the Northern Ireland Curriculum to offer more practical activities, many Year 1 teachers continue to focus their attention principally on the teaching of the 3Rs. They do this by providing a play session at some point in the day, during which the majority of them listen to children read. In the light of this research it would appear that any change towards more play-based practice has to be gradual to allow Year 1 teachers the time to recognise the advantages.

The study would also suggest that if the current educational policies continue to formalise practice, in an effort to raise standards, the selection process remains in Northern Ireland, then even if teachers wish to become less formal the pressure on them to meet specific targets might not allow them to do so. This was highlighted by just over half of the Year 1 teachers.

The findings from the study, however, did not uphold the assumption that Northern Ireland parents’ views of education are highly traditional. The majority of Northern Ireland parents, like their Danish counterparts, did not define a high quality learning experience in terms of an academic and skill-based programme. In fact some Northern Ireland parents expressed the need for more practical activities to be offered in Year 1 classes and less pressure to be exerted. Their desire for less formal activities contradicted approximately a third of Year 1 teachers who claimed that they were forced to maintain the formal teaching of reading, writing and arithmetic in an effort to please parents.
12.1.3 The Danish Model – Is it Transferable?

Although the findings from the study suggest that an early start to formal schooling is inappropriate for many 4 to 5 year old children, it does not indicate that the answer to improving the quality of early childhood education in Northern Ireland lies in adopting the Danish model. In fact there are many indications that to adopt the Danish model would be as inappropriate as the formal Year 1 model that is already practised there. The study would suggest that the play-based programme in Denmark is accompanied by a high staff-child ratio and spacious surroundings, which is not the case in Northern Ireland, and there is no indication from the Government that they would be willing to cover these costs.

Similarly in the Danish play-based model the paedagogs are not trained to degree level and many of their helpers possess no qualifications in the field of early childhood. The idea of returning to a programme in which early years teachers were less qualified than teachers of older children was considered inappropriate by the early years experts in the focus group discussions. One Inspector stated that having fought for many years to ensure early years teachers received the same status as their colleagues, she did not wish for this to be undone to allow for a higher staff-child ratio. What did emerge as significant from the findings was that the training programme that many early years teachers follow in Northern Ireland could perhaps become less subject-based and concentrate more fully on child development. As suggested earlier the new Early Childhood Studies degree and the PGCE in Early Years, which concentrates principally on the development of the young child and the role of play, might provide the means of doing this.

The lack of emphasis placed on 'learning' in the Danish play-based model may also make it culturally inappropriate for Northern Ireland society. As suggested in the focus group discussions, Year 1 is recognised as the initial phase of a child’s compulsory education and to offer children little more than a caring and supportive environment might not be acceptable. The findings from the observation studies suggested that meaningful challenge is lacking in many of the Danish play-based kindergartens, a finding which supported the earlier comparative work of Broström (1995, 1998) in Danish and US kindergartens. Reference was made by a small number of Danish leaders in the interviews and parents that paedagogs could do more to challenge 4 to 5 year old children.
12.1.4 A High Quality Learning Experience for 4 to 5 Year Old Children

What did emerge from the study was that a high quality learning experience was associated with a high quality early years educator i.e. one who was encouraging and supportive, and who participates fully in the learning, allowing children also the opportunity to do so. Drawing on the definitions of Athey (1990), Bruce (1987, 1997) etc., it would appear that a high quality learning experience can be equated with Athey’s constructivism and Bruce’s interactionism i.e. a programme embraced in practical activity but also much teacher-child interaction and vice versa.

12.2 LIMITATIONS OF THE RESEARCH

All research is inherently flawed and it was the role of the researcher in this study to be aware of the limitations of the study and attempt to address them in the most appropriate way possible in an effort to further knowledge. The researcher used a multi-method research design, conducted a calibration study and collaborated closely with Danish early years experts. In spite of these efforts the research remains imperfect and as McGrath (1982) argued conducting research should not be envisaged as “a set of problems to be solved but as a set of dilemmas to be lived with” (p. 80). In this context, it is clear that much more research is needed to address the many complex issues raised here.

12.3 FUTURE RESEARCH

The research reported in this study indicates the need for further research to be conducted on the play versus formal debate in a Northern Ireland context. Although this study addressed the process quality of a sample of Year 1 classes, similar studies need to be conducted before any conclusive evidence can emerge. Furthermore this study indicates the need for a global examination of children’s performances in both the formal Year 1 model and an interventionist play-based programme. An experimental research project is therefore required which will consider the impact of different kinds of teaching approaches, different kinds of environments and different kinds of learning experiences on young children. Much work remains to be done as “the question of quality in early childhood is a crucial one and one which we cannot afford to get wrong” (Bertram and Pascal, 1995, p. 71).
REFERENCES


Andersen, J. (1993) Quality in Early Childhood Education. The Danish Federation of Early Childhood and Youth Education. Copenhagen: BUPL.


CCEA (1999c) *Baseline Assessment in Northern Ireland.* Belfast: CCEA.


Curriculum Assessment Authority for Wales (ACAC) (1996) *Desirable Outcomes for Children's Learning Before Compulsory School Age.* Cardiff: ACAC.


Great Britain (1944) *Education Act 1944.* London: HMSO.


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Northern Ireland (1947) *Education Act (Northern Ireland) 1947.* Belfast: HMSO.


Scotland (1946) *Education Act (Scotland) 1946*. Edinburgh: HMSO.


APPENDICES

Appendix 3.0 Examples of Level One Attainment Targets in NI Curriculum
Appendix 3.1 Sample of Early Learning Goals
Appendix 4.0 Invitations to Experts for Focus Group Discussions
Appendix 4.1 The Format of the Focus Group Discussions
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Appendix 4.4 Letter Accompanying Attitude-Scale Survey
Appendix 4.5 Initial NI Year 1 Questionnaire
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Appendix 4.9 Content of Video Excerpt for Calibration Study and Examples of the Materials Distributed to the Raters (the letter, the instructions and the exemplar of the rating sheet).
Appendix 3.0 Examples of Level One Attainment Targets in the Northern Ireland Curriculum
<table>
<thead>
<tr>
<th>Subject</th>
<th>Programme of Study</th>
<th>Level one descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>Talking and Listening</td>
<td>Pupils have something to say about matters of immediate and personal interest. In their talk use a basic vocabulary and attempt to sequence words and ideas, conveying simple meaning. Listen to what is told and said to them and usually respond adequately.</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>Pupils listen and respond to text with enjoyment and some understanding. Show awareness that print and pictures carry meaning. Recognise letters, words and phrases, which have significance for them in a familiar text. Recognise and name some of the letters of the alphabet. In all of these activities they will require support.</td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td>Under the guidance of the teacher, the pupils' written conveys meaning through the use of pictures, symbols, words and phrases and some simple sentences. Pupils show some control over the size, shape and orientation of letters.</td>
</tr>
<tr>
<td><strong>Maths</strong></td>
<td>Process</td>
<td>Pupils use materials provided under direction. Use maths as an integral part of the classroom activities. Talk about their work in response to question. Represent their work with objects or pictures. Begin to make simple predictions.</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Count, read, write and order numbers up to at least 10. Understand the conservation of number. Begin to make simple estimates of a small number of objects. Add and subtract up to 10 using real objects and use these skills to solve problems. Copy, continue and devise repeating patterns using objects and pictures.</td>
</tr>
<tr>
<td></td>
<td>Measures</td>
<td>Measure and order numbers using direct comparison and use appropriate language associated with length, weight, capacity and area. Sequence events and recognise times on the clock.</td>
</tr>
<tr>
<td></td>
<td>Shape and space</td>
<td>Sort and make constructions with 2-D and 3-D shapes, using every language to describe their work. Use positional prepositions.</td>
</tr>
<tr>
<td></td>
<td>Handling data</td>
<td>Sort and classify objects and talk about the criterion they have used. Record work using real objects or drawings.</td>
</tr>
</tbody>
</table>

*Examples of Level One Attainment Targets in the Northern Ireland Curriculum (DENI, 1996)*
Appendix 3.1 Sample of Early Learning Goals
Examples of the Early Learning Goals (DfEE and QCA, 1999, p. 18) which most children in England and Wales are expected to achieve by the end of the foundation stage of education:

**Personal, Social and Emotional Development**
- maintain attention, concentrate and sit quietly when appropriate;
- understand what is right, what is wrong and why;
- select and use resources independently.

**Language and Literacy**
- hear and say initial and final sounds in words and short vowels sounds within words;
- read a range of familiar and common words and simple sentences independently;
- attempt writing for various purposes, using features of different forms e.g. lists, stories and instructions.

**Mathematical Development**
- count reliably up to 10 everyday objects;
- find one more or one less than a number from 1-10;
- use everyday words to describe position;
- look closely at similarities, differences, patterns and change;

**Knowledge and Understanding of the World**
- begin to know about their own culture and beliefs and those of other people;

**Physical Development**
- move with control and co-ordination;
- recognise changes that happen to their bodies when they are active.

**Creative Development**
- explore colour texture, shape form and space in two and three dimensions.
Appendix 4.0 Invitation to Experts for Focus Group Discussions
I am organizing a series of by-invitation early years education seminars early in the new year and I'd like to invite you to take part. The purpose of the seminars is two-fold: to disseminate aspects of the work I have been carrying out over the last four years and to get feedback from experts who work in the field. I will be presenting the seminars along with Professor John Gardner of the Graduate School of Education at Queen's. Each seminar is designed for specific groups of experts (e.g. teachers, advisers etc.) and they are restricted to a maximum of eight participants. Nearer the time I will be able to send you the names of the others who have accepted the invitations.

The work we will be reporting and seeking views on has focused on two issues. Firstly, what are the features of a quality provision of early year's education? My research here has centred on observation of a variety of early years' settings and the development of an instrument that enables the quality features to be identified. Secondly I have explored the view that Northern Ireland's early years' provision is overly formal in comparison, say, to Scandinavian countries such as Denmark. As part of my approach, I have therefore visited Denmark several times to observe their play-based kindergartens and interview their teachers (pædagogs).

At the seminar our intention is to outline briefly the findings to date and to seek your views on their various aspects. If you agree to participate, I will send you a short digest of the seminar, to complement the presentation John Gardner and I will make. The venue for the seminar will be at Stranmillis University College in Committee Room 1 and the time and date is 4.30-6.00pm on Thursday, 27th January, 2000. It is scheduled to last no more than 1.5 hours and refreshments will be available. If you are able to accept my invitation, please send back to me the tear-off slip below or confirm your intention by telephone (384432) or by email (g.walsh@stran-ni.ac.uk). I hope you will be able to attend and look forward to your reply.

Yours sincerely,

Glenda Walsh
Appendix 4.1 The Format of the Focus Group Discussions
EARLY YEARS SEMINAR

Thursday 27th January at 4.30 p.m.

Venue: Committee Room 1

PROGRAMME

1. Welcome and introduction to seminar
2. Background to the study
3. Purpose of seminar
4. Findings from the study *
5. Discussion of findings
6. Summary and close

**********

Please note Tea/Coffee and biscuits will be served on arrival

**********

* Findings include issues such as:

- Children’s emotional and physical well-being appeared to be better catered for in the Danish kindergartens rather than the Northern Ireland Year 1 classes;
- Children are offered more opportunity to act autonomously in the Danish kindergartens;
- The greater freedom of activity and movement in the Danish settings allows for more opportunities for social intercourse and the children appeared less aggressive;
- Challenge is limited in both contexts and is dependent on the teacher’s role;
- Some Year 1 teachers appear to have a conservative attitude towards the value of play.
Appendix 4.2 The Quality Learning Instrument
QUALITY LEARNING INSTRUMENT
<table>
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<tr>
<th>INDICATOR</th>
<th>CHILDREN'S ACTIONS</th>
<th>TEACHING STRATEGIES</th>
<th>THE ROLE OF THE ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTIVATION</td>
<td>Examples</td>
<td>Examples</td>
<td>Examples</td>
</tr>
</tbody>
</table>
| High:              | - eager to participate in activities;  
|                    | - a degree of curiosity and inquisitiveness displayed;  
|                    | - signs of excitement, energy and vitality;  
|                    | - enthusiastic gestures e.g. clapping hands, jumping up and down, hopping on one foot;  
|                    | - displays a degree of creativity and imagination.  
| Low:               | - apathetic and unenthusiastic;  
|                    | - seldom asks constructive questions;  
|                    | - appears bored;  
|                    | - completing activity out of obligation rather than interest.  
| High:              | - a variety of stimulating and age-appropriate activities on offer (e.g. practical tasks, games etc., activities planned around the children’s needs);  
|                    | - activities changed regularly;  
|                    | - adults show interest in children’s learning  
|                    | - participates and extends learning process when appropriate;  
|                    | - adults are cheerful and enthusiastic.  
| Low:               | - uninteresting activities on offer;  
|                    | - activities are rarely changed;  
|                    | - adults rarely participate in children’s learning;  
|                    | - adults display little overall interest.  
| High:              | - décor is colourful, bright and aesthetically pleasing;  
|                    | - variety of exciting areas available allowing for privacy and curiosity;  
|                    | - resources are in plentiful supply and are exciting and interesting to use;  
|                    | - stimulating outdoor equipment available;  
|                    | - facilities spacious, airy and attractive for the learner;  
|                    | - examples of children’s work displayed  
| Low:               | - small, dull and lacking in character;  
|                    | - resources available but tend to be routine and uninspiring;  
|                    | - no outdoor facilities;  
<p>|                    | - unattractive environment for the young learner.  |</p>
<table>
<thead>
<tr>
<th>CONCENTRATION</th>
<th>Examples</th>
<th>Examples</th>
<th>Examples</th>
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</thead>
</table>
| **High:**     | - very attentive/lost in what they are doing;  
                - signs of deliberation and mental engagement e.g. intent gaze, protruding tongue, pursed lips;  
                - precision and care evident;  
                - perseverance in the face of difficulty;  
                - remain at activity until a satisfactory conclusion. | **High:**     | - adult allows appropriate time for completion of activities;  
                - ensures activities are pitched appropriately for the age-level and ability of the children and allow for a degree of challenge and diversity of response;  
                - adult available for intervention if and when required;  
                - adult encourages children to remain at the activity until a satisfactory conclusion is made. | **High:**     | - adequate space to allow for lack of distraction and disturbance. |
| **Low:**      | - children are inactive;  
                - move quickly from one activity to another;  
                - easily interrupted and distracted;  
                - completes activity carelessly. | **Low:**      | - adult ignores or interrupts the learning process;  
                - attention elsewhere when it is required by the children;  
                - inappropriate thought given to stretch and challenge;  
                - inaccurate timing of activities. | **Low:**      | - little space and many signs of distraction around the room. |
<table>
<thead>
<tr>
<th>Higher Order Thinking Skills</th>
<th>Examples</th>
<th>Examples</th>
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<tbody>
<tr>
<td>High:</td>
<td></td>
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<tr>
<td>- evidence of children setting their own goals and showing systematic planning and problem-solving to reach those goals; children occasionally reflect on the completed activity and offer suggestions for improvement.</td>
<td></td>
<td>- adults emphasise the learning potential within the activities;</td>
<td>- samples of children's work displayed on walls;</td>
</tr>
<tr>
<td>Low:</td>
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<tr>
<td>- complete activities in an unelaborated and simple fashion; - evidence of repetition; - few signs of challenge seeking and development of ideas noted.</td>
<td></td>
<td>- encourage the children to reflect on past experiences and develop on them;</td>
<td>- well-organised and learning-oriented environment e.g. room for children to explore, investigate and problem-solve;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- high level of logical reasoning and problem-solving encouraged;</td>
<td>- displays that arouse reflection and development of ideas;</td>
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<tr>
<td></td>
<td></td>
<td>- adults avoid offering childish activities that undermine the children's powers of intellect e.g. over use of colouring-in exercises, sticking tissue paper on templates etc.</td>
<td>- materials accessible and choice available;</td>
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<td></td>
<td></td>
<td>- emphasis is on keeping children amused without stressing the learning potential within activities;</td>
<td>- children allowed to use environment to explore and investigate.</td>
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<td>- few opportunities are provided where children can reflect on their experiences and build upon them.</td>
<td>- little evidence of children's work on display</td>
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<td></td>
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<td>- activities tend to be one off with few signs of progression apparent.</td>
<td>- childish illustrations around the room but void of learning potential</td>
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<td></td>
<td></td>
<td></td>
<td>- little room for exploration and investigation.</td>
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<tr>
<td>Multiple Skill Acquisition</td>
<td>Examples</td>
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<td>Examples</td>
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<tr>
<td><strong>High:</strong></td>
<td>- children engage in a number of mathematical, scientific, linguistic, physical and creative activities; - they show some understanding of basic mathematical concepts; - show interest in the written word and make attempts at deciphering - reveal some fine and gross motor control - show interest in the world around them and in expressing themselves creatively through visual, dramatic and musical stimuli - attempt to solve their own problems</td>
<td><strong>High:</strong> - a broad and balanced curriculum on offer encouraging development of linguistic, scientific, mathematical, creative and physical development - thorough planning for individual differences and progression apparent - observation and assessment integral to the curriculum - adults available to extend children’s learning potential and cognitive skill acquisition</td>
<td><strong>High:</strong> - array of materials allowing for the development of mathematical, linguistic, scientific, physical and creative activity.</td>
</tr>
<tr>
<td><strong>Low:</strong></td>
<td>- little involvement in cognitive, creative and physical activities observed.</td>
<td><strong>Low:</strong> - narrow curriculum on offer which fails to account for all children’s learning needs; - planning limited and observation and assessment rarely take place - adult presence not used to extend skill acquisition.</td>
<td><strong>Low:</strong> - few materials that allow for the development of cognitive, physical and creative skills.</td>
</tr>
<tr>
<td>CONFIDENCE</td>
<td>Examples</td>
<td>Examples</td>
<td>Examples</td>
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</table>
| **High:**  | - tackle activities without hesitation;  
|            | - can express emotions freely;  
|            | - take a sense of pride and self-satisfaction in end product;  
|            | - not afraid of failure; and  
|            | - volunteer easily and express own opinions.  
| **Low:**   | - require constant adult reassurance;  
|            | - reluctant to tackle new activities;  
|            | - rely on adult’s direction;  
|            | - shy and reserved.  
| **High:**  | - warm, secure relationship established;  
|            | - adults respond to children in a non-judgemental and sensitive manner;  
|            | - appropriate praise given;  
|            | - encourages children to value work as well as others;  
|            | - value the contributions offered by the children;  
|            | - allows opportunities for children to express own opinion in front of others  
| **Low:**   | - little praise and encouragement is given;  
|            | - a sense of inferiority and failure is instilled in children;  
|            | - children are not given the central position they deserve.  
| **High:**  | - the environment is arranged appropriately for the children’s needs;  
|            | - resources remain in a similar position;  
|            | - a friendly and welcoming décor and surroundings are developed.  
| **Low:**   | - no consistency and little organisation of materials is evident;  
|            | - environment is not appropriate to the needs of children.  
<p>|</p>
<table>
<thead>
<tr>
<th>WELL-BEING</th>
<th>Examples</th>
<th>Examples</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **High:** | - laughter is frequently in evidence;  
- hum of activity can be heard  
- children are comfortable and eat healthily;  
- they often smile and seldom cry. | **High:** | - adults develops a strong rapport with the  
- demonstrate affection by caring gestures e.g. smiling, hugging gently, setting child on lap if child desires and getting down to child’s level;  
- display warmth, patience and kindness;  
- ensure that children are comfortable, eat healthy food and have access to physical exercise;  
- take appropriate precautions for children’s safety. | **High:** | - environment reflects a cozy, warm and calm atmosphere;  
- space is available for children’s comfort and relaxation;  
- surroundings are safe. |
| **Low:**  | - children are quiet, subdued, tearful and unhappy. | **Low:** | - adults possess little rapport with the children;  
- impatient, unfair and always put adults’ needs first;  
- little consideration for children’s physical needs and safety are noted. | **Low:** | - environment is dull and uncomfortable;  
- signs of danger are also apparent. |
<table>
<thead>
<tr>
<th>INDEPENDENCE</th>
<th>Examples</th>
<th>Examples</th>
<th>Examples</th>
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</thead>
</table>
| **High:**    |  - can use own initiative and undertake simple activities for themselves e.g. can put on own coat and shoes, can go to the toilet unsupervised  
   Can make an attempt at making decisions for themselves  
   Use adult for support and advice rather than direction  
   Can make attempts at solving their own problems  
| **Low:**     |  - Little initiative shown  
   Depend on adult for almost everything  
| **High:**    |  - adults encourage children to do things for themselves as often as possible;  
   - arrange setting to facilitate choice;  
   - allow children a degree of freedom and help to develop their powers of decision-making;  
   - children encouraged to show some initiative and have a degree of control over their learning.  
| **Low:**     |  - teaching strategies tend to be dictatorial and authoritarian or children allowed complete freedom where no constructive planning for development of independence is apparent.  
| **High:**    |  - shelves are low-level;  
   - materials within easy access for children;  
   - coding facility available for easy finding;  
   - children are encouraged to make independent choices;  
   - toilets within easy access;  
   - ample space for children’s own personal items.  
| **Low:**     |  - shelving is high;  
   - space is limited;  
   - toilets are not accessible.  

<table>
<thead>
<tr>
<th>SOCIAL INTERACTION</th>
<th>Examples</th>
<th>Examples</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **High:**          | - interacts confidently and freely with adults and peers;  
                      - can share and take turns;  
                      - can participate well in parallel and group activity;  
                      - few signs of aggression and mis-behaviour noted. | **High:** | - adults all approachable and have available time to interact appropriately with the children;  
                      - provide opportunities for working in groups and in pairs;  
                      - allow ample time for group discussion and participation;  
                      - self-control encouraged and empathy and consideration for others fostered. |
| **Low:**           | - rarely interact with others;  
                      - tend to play solitarily;  
                      - few discussions take place;  
                      - much aggression noted. | **Low:** | - adult controls the conversation or does not intervene at all;  
                      - available activities do not allow for group participation;  
                      - adults interact appropriately with one another by providing a good example for the children. |
|                    |          |          | **High:** | - resources available which stimulate group and linguistic activity;  
                      - lay-out of setting allows for group participation  
                      - private places available for children's own interactions. |
<p>|                    |          |          | <strong>Low:</strong>  | - setting is too small and/or regimental to allow for positive social interaction among children and adults. |</p>
<table>
<thead>
<tr>
<th>RESPECT</th>
<th>Examples</th>
<th>Examples</th>
<th>Examples</th>
</tr>
</thead>
</table>
| High:  | - children display good manners;  
         - show respect for materials, equipment and one another. | High:  | - excellent relationship displayed with all children;  
         - caters for all children’s needs and interests;  
         - pastoral care policy practised where all children are considered equally;  
         - respect all children’s work and display according to effort rather than content. | High:  | - ample materials available for all children’s needs i.e. according to gender and culture;  
         - space for all children within the setting;  
         - room for children to ‘let off-steam’. |
| Low:   | - children are rude and unmanly;  
         - disrespectful of adults, equipment and one another. | Low:   | - poor regard for children’s work observed;  
         - competitive and hierarchical. | Low:   | - poor selection of materials where little consideration for gender and multi-cultural needs have been taken  
         - cramped facilities. |

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Appendix 4.3 The Interview Schedule
INTERVIEW WITH THE LEADER OF THE SETTINGS

Name of setting: _____________________________________________________________

Date: ______________________________________________________________________

INTRODUCTION

First of all thank you for taking the time to speak to me.

At the moment there is much debate concerning an appropriate high quality programme for the early years child.

Many argue in favour of a play-based approach, while others see the need to begin the basic skills of reading, writing and arithmetic at an early age. The following questions concern this debate and also seek some personal information about your training, job satisfaction, workload etc.

The interview will probably last about 45 minutes.

I’d like to stress that everything you tell me will remain truly confidential and in any report your name will not be cited. If you have any difficulty understanding a question, please feel free to ask for further clarification.
TRAINING

1) Where did you train to become an early years teacher?  
   (e.g. university, teacher training college/seminarium or other)

2) For how long did you train?

3) What qualifications did you receive?  
   (e.g. degree, diploma)

4) Do you feel that your training has prepared you for the jobs you are confronted with daily?
5) What areas do you think could be improved?
   (e.g. more theory or more practice)

6) What age range did you specialise in?
   (e.g. Nursery, KS1, KS2, Secondary)
JOB SATISFACTION

1) Are you happy with your job?

2) What satisfaction do you get from it?

3) Do you ever feel stressed/overworked due to your job?
COMMITMENT AND DEDICATION

1) Do you stay after hours to complete planning and organisation for the next day?

2) On occasions do you bring work home with you to complete? (e.g. planning, resource making, administration, marking)

3) Do you become involved in in-service courses. If so how important do you think they are?

4) Would you consider improving your knowledge relating to early childhood education?
PLANNING

1) What type of planning do you undertake?

2) What does your planning involve?
   (is subject content at the core of your plans or the individual needs of the children)

3) Do you plan as a group or individually?

4) What value do you place on observation, planning and assessment?
1) How would you define a high quality curriculum for the 4 to 5 year old child?

- Do you see it in terms of subject content and learning outcomes?
- Do you see it in terms of security, enjoyment and care?

2) Do you feel the programme you employ fulfils the needs of all four to five year olds? If so why?
3) What changes would you make, if any?
RELATIONSHIPS WITH THE CHILDREN

1) What type of relationship do you strive to achieve with the children?
   - Is it an informal relationship?
   - Do you see the need for discipline and control?

2) Why do you practice this relationship?

3) Do you consider it appropriate for four to five year old children?
CHALLENGE

1) What are your expectations for the four to five year old child?

2) Do you consider challenge to be of major importance in the Year 1 class/kindergarten?

3) How do you challenge your children?
OTHER INFORMATION

Children
1) What is the social background of the children?

2) How many children are on role?

Staff
1) What age bracket do you fall into?
   (20-30), (31-40), (41-50), (51+)

2) How long have you been teaching here?

3) What is the staff/child ratio here?

4) How many men have you on staff?
Appendix 4.4 Letter Accompanying Attitude-Scale Survey
Teachers' Perceptions of Education for 4 to 5 Year Olds

Dear Colleague,

I am conducting a study into Year 1 teachers' perceptions of the education we offer 4 to 5 year olds. One aim of my study is to explore the difference between early years teaching here in Northern Ireland and that provided in Denmark, a country that follows the Scandinavian tradition of informal education in children's early years. In the questionnaire attached there are a number of matters on which I would very much appreciate your opinion. I will also be sending a Danish version of the questionnaire to colleagues in Denmark for completion. Once completed, I hope my study will:

- contribute to our knowledge of early years teaching here and in countries like Denmark;
- inform the preparation and continuing professional development of early years teachers in Northern Ireland;
- contribute to early years curriculum design in Northern Ireland.

I hope you will be able to assist me and I would be very grateful if you would take approximately 20 minutes to fill in this questionnaire. To enable you to respond as frankly as possible the questionnaire is designed to be anonymous. If, however, you wish to discuss any matters further with me please give your name on the last page. Any named responses will be treated in the utmost confidence.

The contributions of practising early years teachers are vital to the success of this study and your co-operation will be greatly appreciated.

Many thanks,

Glenda Walsh
Appendix 4.5 Initial Northern Ireland Year 1 Teacher Questionnaire
**Teachers’ Perceptions of Education for 4 to 5 Year Olds**

This questionnaire assumes you are a practising Year 1 teacher - if you are not, please pass it to a Year 1 colleague for completion.

It will take you approximately 20 minutes to complete the questions. Please indicate your answers as appropriate and feel free to add comments on any of the items presented.

---

### Biographical Profile

1. Please indicate your gender:  
   - Male [ ]  
   - Female [ ]

2. What age bracket are you in (please circle)?  
   - 20-29 [ ]  
   - 30-39 [ ]  
   - 40-49 [ ]  
   - 50-59 [ ]  
   - 60+ [ ]

3. Please tick and complete your qualification(s):  
   a) PGCE [ ]  
      Specialism?: __________  
   b) BEd [ ]  
      Hons Class?: __________ (e.g. 1st, II.1 etc.)  
   c) BSc [ ]  
      Hons Class?: __________ (e.g. 1st, II.1 etc.)  
   d) BA [ ]  
      Hons Class?: __________ (e.g. 1st, II.1 etc.)  
   e) Cert Ed [ ]
   f) Adv Cert Ed [ ]
   g) DASE [ ]  
      (Named specialism?) __________  
   h) MEd [ ]  
      (Named specialism?) __________  
   i) MPhil [ ]  
      (Thesis title?) __________  
   j) PhD [ ]  
      (Thesis title?) __________  
   k) Other (please specify) __________

4. Please indicate the specialism of your teaching:  
   - Nursery [ ]  
   - KS1 [ ]  
   - KS2 [ ]  
   - Secondary [ ]

5. Where did you complete your teacher training (name of institution)? __________________________

6. What year did you complete your training? 19____

---

### Teaching Experience

7. How many years have you taught Year 1 classes (please circle)?  
   - 0-5 [ ]  
   - 6-10 [ ]  
   - 11-20 [ ]  
   - 21-30 [ ]  
   - 30+ [ ]

8. Have you ever taught classes other than Year 1?  
   - Yes [ ]  
   - No [ ]

If yes, please give brief details of the classes and the number of years you spent teaching them:

---

### Your Class and School

9. Please state how many pupils are in your class: _________

10. Please state approximately how many pupils are in your school: _________
11. Please indicate the type of area which best describes the area in which your school is situated:

- Deprived city area
- Affluent city area
- Rural area
- Based in a town

Other (please specify): __________________________

12. Please indicate the board area in which your school is situated:

BELB □ NEELB □ SEELB □ SELB □ WELB □

**PERCEPTIONS OF EDUCATION FOR 4 TO 5 YEAR OLDS**

*For the purposes of this survey:*

- A formal or structured programme is one where the teacher imparts knowledge to the children and the academic activities and goals are emphasized. While
- A play-based or informal programme is one where children are involved in practical and/or play activities for the majority of the day.

Please indicate the extent to which you agree with the following statements. Please select the box which best describes the extent to which you agree with the statements.

**SD = STRONGLY DISAGREE, D = DISAGREE, U = UNDECIDED, A = AGREE and SA = STRONGLY AGREE**

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Scribbling, painting, cutting and kneading are more important for the development of psycho-motor skills than letter formation</td>
<td></td>
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<tr>
<td>14. Failing is part of life so the earlier the pupil experiences it the better able they will be to cope with it as they grow up</td>
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<tr>
<td>15. 4 to 5 year olds have to realize that all learning cannot be enjoyable</td>
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<tr>
<td>16. Problem solving activities play a crucial role in the development of mathematical skills</td>
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<tr>
<td>17. 4 to 5 year olds should have the opportunity to say 'no'</td>
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<tr>
<td>18. Play is an important tool for assessing children's cognitive progress</td>
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<tr>
<td>19. Pupils should have a say in their learning programme</td>
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<tr>
<td>20. A play-based programme places too much emphasis on looking after children and not enough on learning</td>
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<tr>
<td>21. Play is a good activity for keeping children occupied until they are ready to learn</td>
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<tr>
<td>22. 4 to 5 year olds concentrate better when they are carrying out tasks they choose themselves</td>
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</tbody>
</table>
23. Children learn more through play than formal instruction
24. Teachers should ensure that pupils are encouraged to develop their curiosity
25. Pupils will not learn the right things if they choose what they do themselves
26. Play in the early years lays the foundation for later learning
27. Exploratory methods may be fun but they have little impact on 4 to 5 year old’s intellectual learning
28. A teacher-directed activity is always more challenging than a pupil chosen activity
29. There is too little time spent on play in Year 1
30. Acquisition of gross motor skills is fundamental to 4 to 5 year olds’ learning
31. Play is more important than reading, writing and arithmetic
32. Play allows a record of children’s development to be kept
33. 4 to 5 year olds concentrate better when the teacher directs their activities
34. 4 to 5 year olds need to learn how to read and write in school, they can develop oral and social skills sufficiently at home
35. Creativity and the use of the imagination are powerful vehicles for learning
36. Play during the school day should be kept to one hour in the morning
37. Tests are the only means of assessment for the 4 to 5 year old
38. A happy child is a good learner
39. It is only in a formal teaching programme that children will realise the importance of learning
40. To ensure maximum learning the teacher always needs to be interact with the children when they are playing
41. 4 to 5 year olds show higher self-esteem when interacting in a play programme
42. Formal arithmetic lessons in Year 1 are more important than problem solving approaches
43. Learning through creativity is over-rated in the Year 1 curriculum
44. Formal instruction in Year 1 introduces children to failure in the school system too soon
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 45. | Play is good for developing social skills but has little impact on developing intellectual skills | SD | D | U | A | SA | For Office Use Only |
| 46. | Children have to be taught what is right and wrong through a set of rules | SD | D | U | A | SA | For Office Use Only |
| 47. | Children are only motivated to learn when they are given sweets or stickers | SD | D | U | A | SA | For Office Use Only |
| 48. | There is no time in Year 1 for anything other than reading, writing and arithmetic | SD | D | U | A | SA | For Office Use Only |
| 49. | Children's attitudes to learning are more positive within a play-based programme | SD | D | U | A | SA | For Office Use Only |
| 50. | Young children's confidence can only develop in a competitive atmosphere | SD | D | U | A | SA | For Office Use Only |
| 51. | Formal teaching approaches often lead to poor motivation in learning | SD | D | U | A | SA | For Office Use Only |
| 52. | Play is a waste of valuable teaching and learning time | SD | D | U | A | SA | For Office Use Only |
| 53. | Formal teaching approaches in the early years ensure better success in later schooling | SD | D | U | A | SA | For Office Use Only |
| 54. | Play times provide the teacher with an opportunity to listen to children read | SD | D | U | A | SA | For Office Use Only |
| 55. | A play-based programme is the best preparation for later life | SD | D | U | A | SA | For Office Use Only |
| 56. | Teachers must always direct what the children are doing | SD | D | U | A | SA | For Office Use Only |
| 57. | Physical education activities make 4 to 5 year olds too lively for effective learning | SD | D | U | A | SA | For Office Use Only |
| 58. | Children must have letter identification skills by the age of 5 | SD | D | U | A | SA | For Office Use Only |
| 59. | Language must be the basis of all learning in Year 1 | SD | D | U | A | SA | For Office Use Only |
| 60. | 4 to 5 year old children are subjected to too much pressure in the context of learning to read | SD | D | U | A | SA | For Office Use Only |

**THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN IT IN THE ENVELOPE PROVIDED OR, IF YOU HAVE MISLAIRED THE ENVELOPE, PLEASE RETURN IT TO: Glenda Walsh 1/4, Graduate School of Education FREEPOST BE 2012 69 University Street The Queen's University of Belfast Belfast BT7 1HL**

*If you wish to discuss any issues further please give your contact details here:*

| Name: |  | Telephone: |  | Facsimile: |  | e-mail: |  |
Appendix 4.6 Danish Pædagog Questionnaire
Kære kollega,

Jeg er i gang med en undersøgelse af pædagogers opfattelse af/syn på undervisning af 4-5 årige. Et af formålene med min undersøgelse er at udforske forskelle mellem småbørnsundervisning her i Nordirland og i Danmark. Den Skandinaviske tradition for uformel/tvangfri undervisning af børn i de tidlige år har stor interesse for lærere i UK, og i det vedlagte spørgeskema er der en række forhold, som jeg vil sætte pris på at høre din mening om. Nogle af spørgsmålene angår metoder som nok vil være ubekendte for dig som dansk pædagog, men vi vil alligevel bede dig om dit syn på forholdene.

Når undersøgelsen engang er færdig, håber jeg at den vil:

- biddrage til vores viden om omsorgen for småbørn i Danmark;
- præge uddannelsen og den fortsatte professionelle udvikling af småbørnslærere i Nordirland;
- biddrage til formgivningen af undervisningsplaner for småbørn i Nordirland.

Jeg håber at du kan hjælpe mig, og jeg vil være meget glad, hvis du vil bruge omkring 20 minutter på at udfylde spørgeskemaet. For at du kan svare så ærligt som muligt, er spørgeskemaet udformet så du kan være anonym.

Biddragene fra praktiserende pædagoger er helt afgørende for at undersøgelsen kan lykkes, og din medvirken vil blive værdsat højt.

På forhånd mange tak,

Glenda Walsh

Glenda Walsh (>> Stig Brostøm)
PÆDAGOGERS OPFATTELSE AF/SYN PÅ UNDERVISNING AF 4-5 ÅRIGE

Dette spørgeskema forudsetter at du er praktiserende pædagog – i modsætning her bedes du venligst give det til en kollega.

Det vil tage dig omkring 20 minutter at udfylde skemaet.

Udfyld venligst skemaet i de korrekte felter. Du er velkommen til at kommentere de givne punkter.

DIN BAGGRUND

1 Vær venlig at angive dit køn: Mand □ Kvinde □

2 Hvilken aldersgruppe tilhører du (sæt ring om)? 20-29 30-39 40-49 50-59 60+

3 Hvor mange års uddannelse har du fået for at blive pædagog? _____ år

ERFARING SOM PÆDAGOG

4 Hvor mange år har du været pædagog? _____ år

DIN BORNEHAVE

5 Angiv venligst hvor mange barn der ca. er i din bornehave: ______

6 Angiv venligst den type område, der bedst beskriver det område som din bornehave ligger i:

Underpriviligeret storbyområde □ Velstående storbyområde □ Landområde □

By Andet (specificer venligst) _____________________________________________
To vigtige definitioner i denne undersøgelse:

Et formalprogram er en struktureret tilgang til undervisning og indlæring, hvor læreren meddeler viden til barnene, og hvor der lægges vægt på de boglige aktiviteter og mål

Mens

Et lege-baseret eller uformalt program er et hvor barnene er beskæftiget praktiske aktiviteter og/eller lege størstedelen af dagen.

Vær venlig at angive i hvilket omfang du er enig i følgende udsagn.

HU = HELT UENIG, U = UENIG, V = VED IKKE, E = ENIG, HE = HELT ENIG

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<tbody>
<tr>
<td>7</td>
<td>Leg med papir og blyant, maling, klippe klistre og bagning er vigtigere for udviklingen af fin-motoriske færdigheder end bogstavdannelse.</td>
<td>HU</td>
<td>U</td>
<td>V</td>
<td>E</td>
</tr>
<tr>
<td>8</td>
<td>Det er menneskeligt at fejle, så jo før barn erfærer dette, des bedre rustet vil de være til at klare nederlag under opvæksten.</td>
<td></td>
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<tr>
<td>9</td>
<td>4-5 åriges vil ikke udvikle sig til noget andet end at tage ud af som en del af naturen.</td>
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<tr>
<td>10</td>
<td>Problemløsningsaktiviteter spiller en afgørende rolle i udviklingen af matematiske færdigheder.</td>
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<td>11</td>
<td>4-5 åriges vil have muligheden for at sige &quot;nej&quot;.</td>
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<tr>
<td>12</td>
<td>Leg er et vigtigt redskab når man skal bedømme barns cognitive fremskridt.</td>
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<tr>
<td>13</td>
<td>4-5 åriges vil have indflydelse på tilrettelæggelsen af deres undervisning.</td>
<td></td>
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<tr>
<td>14</td>
<td>Lege-baserede programmer lægger for meget vægt på pasningen af barnene og ikke nok på indlæring.</td>
<td></td>
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<tr>
<td>15</td>
<td>Leg er en god aktivitet for at holde barnene beskæftigede indtil de er undervisningsmodne.</td>
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<tr>
<td>16</td>
<td>4-5 åriges koncentrerer sig bedre når de udfører selvvalgte opgaver.</td>
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<tr>
<td>17</td>
<td>Børn lærer mere gennem leg end gennem lærerstyreundervisning.</td>
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<tr>
<td>18</td>
<td>Pædagoger bør sikre at barn opmunter til at udvikle deres nysgerrighed.</td>
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<tr>
<td>Nummer</td>
<td>Størrelse</td>
<td>Beskrivelse</td>
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<tr>
<td>19</td>
<td>Born lærer ikke de rigtige ting, hvis de selv får lov til at vælge det de laver.</td>
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<tr>
<td>20</td>
<td>Leg i de tidlige barneår danner grundlaget for al senere indlæring.</td>
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<tr>
<td>21</td>
<td>Udforскende metoder kan være sjove, men de har kun lille indvirkning på 4-5 åriges intellektuelle indlæring.</td>
<td></td>
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<tr>
<td>22</td>
<td>En pædagogstyret aktivitet er altid mere udfordrende end et barns foretrukne aktivitet.</td>
<td></td>
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<tr>
<td>23</td>
<td>Der bruges for lidt tid på leg i de tidlige år.</td>
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<tr>
<td>24</td>
<td>Erhvervelse af basale motoriske færdigheder er fundamentalt for 4-5 åriges indlæring.</td>
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<tr>
<td>25</td>
<td>Leg er vigtigere end læsning, skrivning og matematik.</td>
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<tr>
<td>26</td>
<td>Overvejtagt leg muliggør en optegnelse af barnets udvikling.</td>
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<tr>
<td>27</td>
<td>4-5 årige koncentrerer sig bedre når en pædagog leder deres aktiviteter.</td>
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<tr>
<td>28</td>
<td>4-5 årige har brug for at lære at læse og skrive i børnehaven, de kan udvikle deres sproglige og sociale færdigheder tilstrækkeligt derhjemme.</td>
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<tr>
<td>29</td>
<td>Kreativitet og brug af fantasi er virkningsfulde midler til indlæring.</td>
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<tr>
<td>30</td>
<td>På en almindelig dag i børnehaven bør leg kun fylde en time om morgenen.</td>
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<tr>
<td>31</td>
<td>Prover er den eneste måde at vurdere 4-5 årige.</td>
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<tr>
<td>32</td>
<td>Et glad barn er en dygtig elev.</td>
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<tr>
<td>33</td>
<td>Det er kun gennem et regelret læreprogram at børn forstår betydningen af at modtage undervisning.</td>
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<tr>
<td>34</td>
<td>For at opnå optimal indlæring bør pædagogen altid tage aktiv del i børnenes leg.</td>
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<td>35</td>
<td>4-5 årige udviser større selvstændighed, når de deltager aktivt i et legeprogram.</td>
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<tr>
<td>36</td>
<td>Ordinære matematiktimer er vigtigere end forsøgsvis tilnærmlinger af problemløsning i de tidlige år.</td>
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<tr>
<td>37</td>
<td>Indlæring gennem brug af kreativitet er overvurderet i de tidlige års læsepensum.</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
38 Regelret instruktion i de tidlige år udsætter alt for tidligt børnene for nederlag i skolesystemet.  
39 Leg er nyttigt i udviklingen af sociale færdigheder, men har kun en lille indvirken på udviklingen af intellektuelle færdigheder.  
40 Børn er nødt til at lære hvad der rigtigt og hvad der er forkert gennem et sæt regler.  
41 Børn er kun motiveret for undervisning, når de får slik eller andre former for opmuntringer.  
42 Der er ikke plads til noget som helst andet end læsning, skrivning og matematik i de tidlige år.  
43 Børns indstilling overfor at modtage undervisning er mere positiv indenfor et legebaseret undervisningsprogram.  
44 Børns selvstød kan kun udvikles i et konkurrencepræget miljø.  
45 En tilnærmelsesvis regelret undervisningsform fører ofte til en dårlig indlæringsmotivation.  
46 Leg er spild af værdifuld undervisningstid.  
47 En tilnærmelsesvis regelret undervisningsform i de tidlige år sikrer et bedre standpunkt i den senere skolegang.  
48 Et legebaseret undervisningsprogram er den bedste forberedelse til det senere liv.  
49 Pædagoger bør altid instruere børnene.  
50 Fysiske undervisningsaktiviteter gør 4-5 årige for livlige til effektiv indlæring.  
51 Børn i 4-5 årsalderen bør have færdigheder indenfor identifikation af bogstaver.  
52 At arbejde med sproget bør være grundlæggende for al undervisning i de tidlige år.

Tak for din deltagelse i udfyldningen af dette spørgeskema.

Returnér venligst skemaet i den medfølgende konvolut eller hvis konvolutten skulle have forlagt sig-send den til-

Glenda Walsh / Stig Broström  
Institut for småbørnspædagogik  
Danmarks Lærerhøjskole  
Emdrupvej 101  
2400 København NV
Appendix 4.7 Revised Version of the Northern Ireland Year 1 Teacher Questionnaire
TEACHERS’ PERCEPTIONS OF EDUCATION FOR 4 TO 5 YEAR OLDS

This questionnaire assumes you are a practising Year 1 teacher - if you are not, please pass it to a Year 1 colleague for completion.

It will take you approximately 15 minutes to complete the questions. Please indicate your answers as appropriate and feel free to add comments on any of the items presented.

**Biographical Profile**

1. Please indicate your gender: Male □ Female □

2. What age bracket are you in (please circle)? 20-29 30-39 40-49 50-59 60+ □

3. Please tick and complete your qualification(s):
   a) PGCE □ Specialism?:
   b) BEd □ Hons Class?: ___ (e.g. 1st, II.1 etc.)
   c) BSc □ Hons Class?: ___ (e.g. 1st, II.1 etc.)
   d) BA □ Hons Class?: ___ (e.g. 1st, II.1 etc.)
   e) Cert Ed □
   f) Adv Cert Ed □
   g) DASE □ (Named specialism?)
   h) MEd □ (Named specialism?)
   i) MPhil □ (Thesis title?)
   j) PhD □ (Thesis title?)
   k) Other (please specify) □

4. Please indicate the specialism of your training:
   Nursery □ KS1 □ KS2 □ Secondary □

5. Where did you complete your teacher training (name of institution)? ______________________

6. What year did you complete your training? 19___

**Teaching Experience**

7. How many years have you taught Year 1 classes (please circle)? 0-5 6-10 11-20 21-30 30+ □

8. Have you ever taught classes other than Year 1? Yes □ No □

If yes, please give brief details of the classes and the number of years you spent teaching them:

____________________________________

**Your Class and School**

9. Please state how many pupils are in your class: __________

10. Please state approximately how many pupils are in your school: __________
11. Please indicate the type of area which best describes the area in which your school is situated:

Deprived city area □ Affluent city area □ Rural area □ Based in a town □
Other (please specify): ____________________

12. Please indicate the board area in which your school is situated:

BELB □ NEELB □ SEELB □ SELB □ WELB □

<table>
<thead>
<tr>
<th>Perceptions of Education for 4 to 5 Year Olds</th>
</tr>
</thead>
</table>

For the purposes of this survey:

- A formal or structured programme is one where the teacher imparts knowledge to the children and the academic activities and goals are emphasized.
- A play-based or informal programme is one where children are involved in practical and/or play activities for the majority of the day.

Please indicate the extent to which you agree with the following statements. Please select the box which best describes the extent to which you agree with the statements.

SD = STRONGLY DISAGREE, D = DISAGREE, U = UNDECIDED, A = AGREE and SA = STRONGLY AGREE

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Scribbling, painting, cutting and kneading are more important for the development of psycho-motor skills than letter formation</td>
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<td>14. 4 to 5 year olds have to realize that all learning cannot be enjoyable</td>
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<tr>
<td>15. 4 to 5 year olds should have the opportunity to say ‘no’</td>
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<td>16. Pupils should have a say in their learning programme</td>
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<tr>
<td>17. A play-based programme places too much emphasis on looking after children and not enough on learning</td>
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<tr>
<td>18. 4 to 5 year olds concentrate better when they are carrying out tasks they choose themselves</td>
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<tr>
<td>19. Children learn more through play than formal instruction</td>
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<tr>
<td>20. Pupils will not learn the right things if they choose what they do themselves</td>
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<tr>
<td>21. A teacher-directed activity is always more challenging than a pupil chosen activity</td>
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<tr>
<td>22. There is too little time spent on play in Year 1</td>
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</tr>
<tr>
<td>23. Acquisition of gross motor skills is fundamental to 4 to 5 year olds learning</td>
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</tr>
</tbody>
</table>
24. Play is more important than reading, writing and arithmetic

25. 4 to 5 year olds concentrate better when the teacher directs their activities

26. Play during the school day should be kept to one hour in the morning

27. It is only in a formal teaching programme that children will realize the importance of learning

28. To ensure maximum learning the teacher always needs to interact with the children when they are playing

29. 4 to 5 year olds show higher self-esteem when interacting in a play programme

30. Formal arithmetic lessons in Year 1 are more important than problem solving approaches

31. Learning through creativity is over-rated in the Year 1 curriculum

32. Formal instruction in Year 1 introduces children to failure in the school system too soon

33. Children have to be taught what is right and wrong through a set of rules

34. Children's attitudes to learning are more positive within a play-based programme

35. Formal teaching approaches often lead to poor motivation in learning

36. Formal teaching approaches ensure better success in later schooling

37. A play-based programme is the best preparation for later life

38. Children must have letter identification skills by the age of 5

39. Language must be the basis of all learning in Year 1

40. 4 to 5 year old children are subjected to too much pressure in the context of learning to read

THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THIS QUESTIONNAIRE.

PLEASE RETURN IT IN THE ENVELOPE PROVIDED OR, IF YOU HAVE MISLAIRED THE ENVELOPE, PLEASE RETURN IT TO:

Glenda Walsh
7th Graduate School of Education
FREEPOST BE 2012
69 University Street
The Queen’s University of Belfast
Belfast BT7 1HL
Appendix 4.8 Parent Questionnaire (English and Danish Version)
Dear Parent,

I am a lecturer at Stranmillis University College who is undertaking a PhD in early childhood education. I am trying to ascertain the quality of the early years programme for the 4/5 year old child in primary one in comparison to that of a more kindergarten approach in Denmark. In order to undertake such research I am greatly in need of the views of parents who have children of this age. For this reason I would be most appreciative if you could take a little time to complete the questionnaire. Please note that all information will remain confidential and will not be traced to the particular school that your child attends. Your comments will be of great benefit to my study.

Please complete return it in a sealed envelope to your child’s teacher, or forward it to me using the address below. If you have any queries please call me on the following number 01232 384 432.

Thanking you in anticipation for the precious time and effort you will spend on the questionnaire.

Yours sincerely,

Glenda Walsh
PARENTS' PERCEPTIONS OF EDUCATION FOR 4 TO 5 YEAR OLD CHILDREN

This questionnaire assumes you are a parent of a child aged 4 to 5 years. It will take you approximately 10 minutes to complete. All information will remain confidential.

BIOGRAPHICAL PROFILE

Gender: Man/Woman

Marital Status: Single/Married/Divorced/Co-habitating

Age: 20-29, 30-39, 40-49, 50+

Occupation:

PERCEPTIONS OF THE QUALITY OF EDUCATION FOR 4 TO 5 YEAR OLD CHILDREN

1) How satisfied are you with the provision your child/ren receive?

2) If you were to make any changes what would they be?
3) How would you define a high quality programme for the 4 to 5 Year Old Child?

A) an academic programme where the teaching of basic skills (e.g. reading, writing and arithmetic) is at its core.

B) A caring programme where children are allowed to develop at their own rate through the medium of play.

4) Do you feel the teachers are successful in the job that they do?

5) How well do you feel your own needs are considered as a parent?

Please add any further comments if necessary.

Thank you for your assistance in completing the questionnaire.

Glenda Walsh
Graduate School of Education
69 University Street
The Queen's University of Belfast
Belfast BT7 1HL
Spørgeskema

Bedes udfyldt af forældre til børn i alderen 4-5 år.

Alle oplysninger behandles fortroligt.

Hvis det er muligt at svare på engelsk, vil det lette mit arbejde. Tak.

Køn: mand / kvinde

Ægteskabelig stilling: enlig / gift / fraskilt

Bopæl:

Alder: 20-30/ 30-40/ 40-50

Besvar venligst nedenstående spørgsmål.

1. Hvor tilfreds er du med den dagligdag, dit barn/dine børn har i børnehaven?

2. Hvis du skulle foreslå nogle ændringer, hvilke kunne det være?
3. Hvorledes ville du bestrive det optimale program i en børnehave for 4-5 årige?
   a. et der stiller store krav til barnets intellekt, og som kræver at barnet yder sit yderste?
   b. et der tillader barnet at udvikle sig i sit eget naturlige tempo?

4. Mener du, at pædagogerne klarer deres job godt?

5. I hvilket omfang føler du, man tager hensyn til dine behov?

Mange tak for hjælpen.
Appendix 4.9 Content of Video Excerpt for Calibration Study and Details
Distributed to Raters
Content of the Video Excerpt for the Calibration Study

The video extract was 20 minutes in length, displaying Danish children at play in their everyday environment. The video begins with children arriving in the kindergarten and concentrates on three children (i.e. two girls and one boy) drawing pictures, singing and chatting as they work. These children are situated in the welcome room and soon other children come in also – two playing with blocks on the floor and another little boy who greets the pædagog with a hug. A snapshot of the outside area is also presented, where two girls are playing in the puddles, collecting water in buckets.

The video then concentrates on the art room where three different activities are being undertaken. One activity involves children making pictures from coloured beads, another painting pictures on T-shirts and the final one making a boat at the woodwork bench. One pædagog is present at each activity (two of whom are male) and approximately eight children are painting T-shirts, six making bead pictures and three constructing the boat. At the latter activity the pædagog is using a drill and the two boys are using sandpaper. Much discussion about how the boats should be made takes place. The pædagog at the T-shirt activity also offers some advice to one three year old boy about holding his paint brush and she encourages a five year old girl to add a little more to her painting. The friends of this little girl also offer advice as to what she could do to enhance the painting. The pædagog at the bead activity chats to the children about what they are doing.

The environment as illustrated in the video includes a welcome room which contains one large table at which the children eat their breakfast, lunch and afternoon snack and one small round table which is situated in the corner. A large cupboard is also housed here, containing an individual drawer for each child in which he or she can place their personal belongings. Paper, pens and cellotape are also available here, as well as a number of table-top toys. A cosy settee is situated in the corner beside the window and some mats are placed on the floor. A number of plants are placed at random in this room and some framed illustrations of the children’s work are hung on the wall like pictures. The art room consists of two large tables and a woodwork bench. A number of luminous paint containers are placed at the T-shirt table and a selection of small beads, paper and glue is on the other table. This room is smaller in size than the welcome room and is
situated in the attic. Plants are placed at random and some samples of the children’s finished work are mounted on the notice board.

The entire outside area is not clear from the video extract. It displays a large sandpit, a ‘dolly’ house, a storage shed, some picnic tables, and a garden area. Due to the stormy weather form the previous night everything is extremely wet and dull in appearance.
INSTRUCTIONS

1) Read the Quality Learning Instrument carefully. Note the examples for the children’s actions, the teaching strategies and the role of the environment. The QLI is not to be used as a checklist, only as a lens through which you view the snapshot of practice.

2) Watch the video.

3) Study the QLI again.

4) Note down on the grid provided your judgements on each of the identified features.

5) Using a best fit approach score each of the features i.e. motivation, concentration etc. in accordance with the children’s actions, teaching strategies and the environment. Study the exemplary recording grid.

6) Watch the video again and add further comments or changes if required.

Thank you.
Dear Colleague

Thank you so much for your kind offer of co-operation. It is much appreciated. As regards the video viewing, I hope it will not take up too much of your time. I have included a set of instructions, a video, a rating sheet and a copy of the Quality Learning Instrument. If you require further assistance please do not hesitate to ring. You can contact me at 01868 723646 after 4pm.

Happy viewing!

Yours sincerely

GLENDAS WALSH
Graduate School of Education
FREEPOST BE2012
69 University Street
The Queen's University of Belfast
BELFAST
BT7 1HL
<table>
<thead>
<tr>
<th>SITUATION</th>
<th>TOPICS</th>
<th>ACTION</th>
<th>TEACHER</th>
<th>ACTION</th>
<th>ENVIRONMENT</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most of the children display an eagerness to participate in the activities activated through freedom and choice. They show good imagination e.g. leaves become food, cardboard boxes become lorries. Good precision shown.</td>
<td>HIGH</td>
<td>HIGH</td>
<td>HIGH</td>
<td>As above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The children are all busy and stay at activity for quite a length of time e.g. little bay building tractor. Few signs of wandering</td>
<td>HIGH</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td></td>
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<tr>
<td>The children are hesitant to tackle activities without presence of teacher e.g. colouring in sheet constantly asking what colour to use</td>
<td>LOW</td>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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</tr>
<tr>
<td>Children are able to get own materials and go to toilet without help. When finished require assistance from teacher to become engaged in another activity.</td>
<td>LOW</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td></td>
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</tr>
<tr>
<td>In general activities on offer are challenging and stimulating e.g. playing with marionette puppet. Adult always particularly in child's learning. Extending learning taking place. Very cheerful.</td>
<td>HIGH</td>
<td>HIGH</td>
<td>HIGH</td>
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<tr>
<td>Pressure of time apparent. Rushed to complete activities. Interesting activities on offer and adult usually available.</td>
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<tr>
<td>Little praise given. Activities encourage child to experience failure.</td>
<td>LOW</td>
<td>LOW</td>
<td>HIGH</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Although some freedom and choice encouraged, teacher dominates the programme, intervening constantly in what child doing.</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Materials accessible and shelving is low. Toilets close by.</td>
<td>HIGH</td>
<td>HIGH</td>
<td>HIGH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Skills</strong></td>
<td><strong>Communication</strong></td>
<td><strong>Happy &amp; Secure</strong></td>
<td><strong>Positive Attitude to Learning</strong></td>
<td><strong>Respect</strong></td>
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<td></td>
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</tbody>
</table>
| Good 3R acquisition  
Can read some words  
"count 1-10"  
"write most letters"  
Physical and scientific skills limited | limited - T. does most of the talking  
Chn respond with one word answers | All happy  
Chn. skipping, singing  
Laughing  
Smiling dominates | Well-behaved  
Few arguments  
Yet do not see work do their "own"-for T. | Some good manners  
Most chn. shown respect for materials  
Yet nb. Johnny throwing books |
| **Medium** | **Low** | **High** | **Medium** | **Medium** |
| **Broad Curriculum**  
All activities encourage academic acquisition  
Some observation & assessment apparent | Adult approachable but dominates  
Rapport with most chn  
Few caring gestures  
Patience doubtful | Facilities very school-like  
Yet bright and airy | Encourages all chn to do best  
Learning encouraged through fun-like activities  
Good organisation  
Positive discipline | Some favouritism shown in some cases |
| **Medium** | **Low** | **Medium** | **High** | **Medium** |
| **Materials considered on 3R's.** | Role play area  
Book corner, telephones, puppet  
Private conversation areas few | Beautiful display of chn's work  
Number line with cartoon characters plenty of chn's pride | Few multicultural materials eg chinese tea set  
Good space for all chn | **Medium** |