What is smart?

An in-depth study of children's concepts of intelligence

Anna Fiona Keogh
Jean Whyte

Trinity College Dublin
children's research centre
research for children & young people

January 2008

WHAT IS SMART?

An in-depth study of children's concepts of intelligence

Anna Fiona Keogh and Jean Whyte

Children's Research Centre

Trinity College Dublin

Telephone: 353-1-8962901

Email: crcentre@tcd.ie

www.tcd.ie/childrensresearchcentre/

ISBN: 1-902230-33-7

978-1-902230-33-7

This research was part-funded by the Irish Research Council for the Humanities and Social Sciences. The views expressed in this report are the responsibility of the authors and do not necessarily represent those of the Irish Research Council for the Humanities and Social Sciences.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

We wish to express our sincere thanks to all those who assisted us with the present study. First and foremost, we are especially grateful to the school Principal, class teacher and school staff for their openness to the study, their valuable input and their facilitation of the study. Special thanks go to the class teacher who accommodated the researcher and generously allocated class time to the different stages of data collection. We would also like to thank the children for their welcoming, enthusiastic and friendly response to the researcher and their willingness to participate in the study.

We gratefully acknowledge to the Irish Research Council of Humanities and Social Sciences for contributing to the study. Thanks also to Dr. Ruth Emond, University of Stirling and Dr. Paul Conway, University College Cork who assisted in various ways with the planning and conduct of the study, provided valuable feedback at various intervals during the course of the study and for comments on drafts of the study.

Finally, we are grateful to our colleagues at the Children's Research Centre in Trinity College, Dublin for their ongoing support. Special thanks to Aoife Fitzpatrick who assisted with data collection, Clíona Murphy and Elizabeth Nixon for their ongoing support and comments, Dr. Paula Mayock for her valuable feedback during analysis and on earlier drafts, Professor Robbie Gilligan for his support during the initial stages of the project, and Professor Sheila Greene for her comments on earlier drafts.

OVERVIEW

Research has shown that by the time children are 11 or 12 years old, their beliefs about the nature of intelligence play a pivotal role in their achievement motivation—in their decisions about accepting challenges, in their behaviour during difficult tasks, and in their interpretation of success and failure (Cain and Dweck, 1989). As children's concepts of intelligence are linked to their achievement motivation, it is important to probe what these concepts are: 'What do children think "smart" is?' and 'How do they think they can succeed?' For some, success may be achieved through formal schooling, for others it may mean getting out into the real world as quickly as possible and starting to earn money.

This report presents the findings of a study carried out by the Children's Research Centre, which aimed to explore, using ethnographic methods, the concepts of intelligence of 5th class children in a designated disadvantaged Dublin school. This research project had the general aim of increasing the understanding of issues influencing the educational and general development of children in disadvantaged settings.

The research was conducted with one 5th class. There were 19 children in the class, 12 boys and 7 girls. The children were on average 11 years of age. The main research methods were participant observation over a four month period and a series of focused activities, including classroom drawings, a photographic project, focus group discussions and individual interviews.

The specific aims were:

- To explore children's concepts of 'smartness' in different contexts, i.e. academic (in class) and social (with friends), and to determine what influences the development of these concepts.
- To explore the relationship between children's concepts of 'smartness', their aspirations and the options they see open to them.
- To explore whether there is a connection between the children's concepts of intelligence, and the activities on which they decide to spend their energy during the day.
- To inform policy and practice in the area of primary educational disadvantage by obtaining a better understanding of what motivates children to learn and achieve and of the kinds of activities and materials that help them to learn.

An understanding of children's concepts of intelligence, of the development of these concepts and of how they relate to children's academic achievement motivation will give educators a better awareness of what motivates children to achieve and of the media through which children can be encouraged to learn. It is hoped that this will inform teacher training and practice, classroom management, curriculum development and support services for both children and teachers.

Why use the word 'smart'?

It is important to clarify why the word 'smart' was used in this study. Firstly, this study aimed to achieve an understanding of intelligence from the ground up. We wanted to find out what words the children use to describe 'intelligence' and what they believe are the characteristics of an 'intelligent' person. Secondly, the word intelligence is often considered in an evaluative capacity. It carries with it a lot of weight and, arguably, negative connotations. From children's classroom experience, people who visit the class and sit at the back of the classroom observing are normally there in an evaluative capacity, for example, a school inspector. Although such observers are not necessarily there to evaluate the children, this is often not clear to the children themselves. As far as children are concerned, they have to be on their best behaviour and must try their hardest in front of this visitor. More importantly, they perceive that there may be negative repercussions if they do not represent themselves properly.

For the purposes of this study therefore, we used the word 'smart' instead of 'intelligence' in our interactions with the children, as this is a word that reflects a broader understanding of intelligence, both in academic and social contexts.

Report outline

The first three chapters of this report set the theoretical context for the study by reviewing relevant literature and outlining the methodology used in the study. Chapter 1 aims to provide a brief overview of changing concepts of childhood, paying particular attention to childhood in Ireland and children's experiences of education in Ireland. In Chapter 2, we will discuss the relationship between concepts of intelligence and educational disadvantage in an Irish context. Chapter 3 reviews some of the most relevant research on children's concepts of intelligence.

In Chapter 4, we discuss why we chose ethnography as a methodology and the ethical considerations in research with children. We provide an overview of the fieldwork undertaken for this study, the various methods employed, and how data were collected and analysed.

Chapters 5 and 6 set the scene for the study by providing a description of the class, the classroom and the school and the locality in which the school was based; by offering an overview of the daily routine in school; and by introducing some of the terms, identifying characteristics and concepts the children used when discussing intelligence and 'what is smart'.

The next three chapters develop an analysis of the children's concepts of intelligence in three domains – schoolwork, presentation of self and peer-group dynamics. Chapter 7 focuses on how the children's concepts influence their relationship to schoolwork, their aspirations and their motivation to achieve academically. Chapter 8 reviews some of the ways in which the children tried to show that they were smart in school by successfully negotiating the school environment, and Chapter 9 shows how concepts of intelligence are constructed and reinforced by group dynamics within the classroom.

The findings from both the literature review and the study are summarised and concluded in the final chapter. The implications of the research findings for policy, practice and further research are also discussed.

1. THE CHILD IN AN IRISH CONTEXT

This study is concerned with developing a better understanding of the relationship between children's concepts of intelligence, their achievement motivation and their experience of school. This chapter aims to provide a brief overview of changing concepts of childhood, paying particular attention to childhood in Ireland and children's experiences of education in Ireland.

Changing concepts of childhood

Over the last 15 years, the way in which the child is viewed within Western society has changed dramatically. Childhood has become problematised and increasingly analysed by a number of different professions and in a number of social fora, and this has challenged traditional concepts of childhood. Studies of how children are socialised have firmly located the child in the wider social context, and have done the groundwork for the new ways of thinking about childhood (James *et al.*, 1997). The view of children has changed, from seeing them as being irrational, passive, dependent and incompetent to seeing them as rational, actively involved in constructing their lives, autonomous and having a voice. As there has been more and more contact with a global world, the whole notion that there is an essential, 'universal' child has been challenged.

There is not just one type of childhood, but many childhoods. Children's lives differ depending on many factors, including gender, social class, ethnicity and religious background, as well as on individual differences like personality. It is also recognised that childhood is part of the broader social structure. There will always be children, and they make up a determining component of all social structures. Children are not pathological or incomplete; they form a group, a body of social actors, and as citizens they have needs and rights. This changing view of children has been formalised through such instruments as the UN Convention on the Rights of the Child (1989) and within Ireland in the National Children's Strategy (2000), which views childhood from what it calls the 'whole child' perspective. There have also been many developments in educational policy and thinking over the years, which have been influenced by, for example, the feminist movement. This change in thinking has led to key changes of approach to the reality of the classroom.

The view of the child in Ireland

To understand how children are viewed in Ireland today, it is useful to outline how children were viewed in the recent past. The historical development of perceptions of children and childhood in Ireland has been traced by Devine (1999). Childhood pre-1960s was characterised by parents exerting extensive control over their children, who were primarily regarded in terms of their functional capacity. This control was evident in the organisation of children's space and time, but also in the expectation that children would have an absolute respect for authority. Education too was influenced by such expectations of children and, in most cases, the aim was to educate children to conform to a nationalistic and Catholic ideology (Devine, 1999).

It can be argued that traditional perceptions of children, stemming from seventeenth- and eighteenth-century philosophers, were common at this time. In their review of various ways in which children have been perceived historically, James *et al.* (1998) showed how children were viewed in contrasting ways. One view, which they attribute to Thomas Hobbes, sees the child as having little resolve and being easily corrupted and diverted. This perpetuated the belief that if children are not monitored and controlled, disciplined and punished, they will veer off the straight and narrow. In stark contrast, children have also been viewed as innocent and essentially pure in heart. Within this view, attributed to Jacques Rousseau, parents and educators were contracted to ensure that children grew up in a protective environment, thus ensuring that they would maintain their innocence (James *et al.*, 1998). Within education, the role of teachers was not only to facilitate children to move along a sequence of cognitive stages, but also to facilitate their socialisation and the process of becoming civilised adults.

In terms of social performance also, 'all children who seemed to falter in this socialization process were potentially included in the new set of categories of "child" including special needs, deviants and neglected children' (James and Prout, 1997: 14).

Devine (1999) proposes that between 1960 and 1990 there was still a focus on the normalisation of children in terms of adult goals; however, there was a greater concern with the fulfilment of children's needs. There was a focus on the concepts of socialisation and turning children into rational, competent and self-disciplined adults. The New Primary School Curriculum in 1971 advocated change in the way adults (teachers) related to children, from the teacher-centred, authoritarian approaches common up to that point to more sensitive and interactive approaches. In practice, this meant that teachers were encouraged to be less

dominant in the classroom and to allow children to take control over their learning. However, although the new curriculum advocated change, it did not really succeed in challenging the underlying way of thinking and talking about children. A number of reasons have been put forward to explain this. The economic recession of the 1970s meant that the comprehensive network of supports for teachers that was envisaged did not materialise (Fallon, 2005). Another argument states that teachers were reluctant to relinquish control over the learning process and move away from the traditional didactic approach to teaching (O'Sullivan, 1980). Also, it can be argued that practice did not change because the approach of the new curriculum adopted a particular interpretation of Piaget's theory, which focused on the developmental stages of his model and led to a strong age (and developmental stage) led curriculum, whereby children were compared with peers and evaluated against a gold standard of the 'normal' child (Devine, 1999). The new curriculum also supported traditional approaches to teaching and learning, and it endorsed essentialist (fixed, innate, unchangeable) concepts of the individual (Devine, 1999), and thus essentialist concepts of a child's intelligence.

The 1990s brought many changes in the educational system. There was increased focus on equality issues and on the right to access and to participate in the education system regardless of gender, social class, ability, etc. (Devine *et al.*, 2004). The Primary School Curriculum 1999 adopted a constructivist approach to learning. Theoretical principles underlying this approach include the self-directed and developmental nature of learning (Gash and Murphy-Lejeune, 2004). The 1999 curriculum acknowledges the dynamic and interactive relationship between education and society (Devine *et al.*, 2004). Although there was a growing awareness of the discourses related to the inclusion of children's voices in matters that affect them, influenced by the UN Convention on the Rights of the Child (1989) for example, children were not included as one of the education partners in the process of consultation to the Curriculum or the Education Act 1998. They were, however, included in the development of the National Children's Strategy (Devine *et al.*, 2004).

In 2000, the National Children's Strategy advocated a new way of thinking about children in Ireland. It aims to implement the UN Convention on children's rights, which was signed by Ireland in 1990 and ratified without reservation in 1992. It has at its core a 'whole child' perspective. The 'whole child' perspective recognises the extent of children's own capacities, the multiple interlinked dimensions of children's development and the complex mix of informal

and formal supports on which children rely. It recognises that children's educational success is dependent not just on schooling, but on many factors—social, cultural, intellectual, environmental—and that home, school and community are interlinked. The strategy asserts that 'children are active participants in a world which continues to experience increasing change' (National Children's Strategy, 2000: 16). It also recognises the capacity of children to interact with and shape the world around them as they grow up. Among the views the strategy holds include the belief that children have an innate dignity as human beings, which deserves respect; that children are especially vulnerable and need adult protection; that children should be supported to explore, enjoy and develop their varied talents and that they need to learn responsibility as they grow towards adulthood.

Children's experiences of education in Ireland

Children spend a considerable amount of their time in school. Education is recognised as being a very important factor in providing children with the resources to fully participate in civic life. School is important not only because it is the main system of formal learning, but also because it provides a variety of experiences that influence the development of concepts, relationships and perspectives.

In line with the changing understanding of childhood, some recent educational research has focused on children's experience in school. Keogh and Whyte (2005) reviewed the development and operation of student councils in second-level schools. Lynch and Lodge (1999) have researched second-level students' experience of equality; and Bisset (2000) conducted an ethnography of the educational process in a working class second-level school. Devine (2001; 2003) and Zappone (2002) focused on primary-level students' experience of power and equality, respectively. Other studies conducted in primary schools researched gender identity (Lodge, 2001); racism (Devine *et al.*, 2004), children's perceptions of language variation (MacRuairc, 2004) and other cultures (Gash and Murphy-Lejeune, 2004).

Four of these studies, Devine (2001; 2003), Lynch and Lodge (1999), Keogh and Whyte (2005) and Zappone (2002), have influenced the development of the current study because they provide an insight into children's perceptions of schooling.

Devine's (2001; 2003) study explored children's daily experience in school—curriculum, teaching practices, assessments and social relations. It was conducted in three co-educational primary schools with different levels of socio-economic intake. Devine spent one year observing classroom practice in these schools, and she conducted interviews and questionnaires with children in 2nd and 5th class. Her study shows that when children are given the opportunity, they are clearly able to document and reflect on all aspects of their schooling. Her data also show that as children's experience of the education system grows, so too does their level of alienation and disenchantment. Devine concluded that 'children are interpreting much of their experience in terms of subservience and conformity—concepts alien to democracy and equality'. (2001: 172). Furthermore, despite the increasing recognition of children's rights, on a day-to-day basis adults still set the boundaries of these rights, applauding if children assert themselves in some situations but failing to recognise their rights in other situations. She argues:

> *To be a child in school is to have one's behaviour, thoughts and gestures controlled and defined in terms of adult norms and expectations…School is a space where children are compulsorily confined and where they are subjected to a range of normalising practices, which both signify and legitimise their subordinate status relative to adults.* (2001: 165)

However, Devine also argued that children need to be recognised as central actors within the school system. Children adapt to the norms surrounding them and the expectations of them defined by adults, and thus interpret and react to their experiences. They also mediate adult domination and control through their friendships, something that is particularly evident in the school yard.

Zappone's (2002) study also focused on primary education, with the aim of developing a conceptual framework of educational equality that could provide foundations for a cohesive and systematic approach to educational practice, strategies and policies to end disadvantage at primary level. The views of children and the experience of practitioners, parents, teachers and other professionals supporting children's learning were gathered. Parents argued for a flexible education system so that each child's unique needs and capacities could be supported. Such an education system would be characterised by a teaching and learning process that affirms every child and has high expectations for each one. Parents also argued that relationships of equal respect between teachers, parents and children must be nurtured

and practiced in order for equality in education to be achieved. Professionals, on the other hand, identified the home environment and parental involvement as the most significant conditions to ensure every child has an equal chance to learn and to achieve. However, they also recognised that there are wider economic and social injustices that impact on parents' capacity to support their children. While acknowledging that what happens in school is very important, they argued that the social and economic systems need to be restructured so that the basic needs of children are met and that resources are distributed more fairly.

The children in Zappone's study, as in Devine's study (2003), struggled with their subordinate status within the education system, sometimes accepting it and sometimes challenging it. The findings of Zappone's research indicate that children desire to communicate with caring adults, whether teachers or parents. Helping children see the value of education and the importance of teaching methods that activate the child's capacity to learn and to support the learning of her or his peers is critical for the learning process (Zappone, 2002).

Lynch and Lodge's study (1999) provides an important insight into young people's experience of equality (or inequality) in second-level schools. It involved 1,202 students in 12 schools nationwide, who were asked to write essays on their experiences of school. Similarly to those in Devine's study (2003), students in this study also interpreted much of their school experience in terms of subservience. The principal equality concerns of the students related to unfair treatment by teachers. Solutions they presented to tackle such inequalities included calls for increased democratic input by students in their school and calls for greater equality of respect and improved democracy. However, even in schools where there is a forum for democratic input, for example an active student council, students can still feel that teachers are not willing to listen to their opinions or take their views into account (Keogh and Whyte, 2005). Keogh and Whyte's study of 10 second-level schools nationwide found that school management and staff tended to value students' views more as they get older, rather than viewing a student council as a forum for students to voice their opinions and contribute meaningfully to the school, regardless of whether they are in 1st year or final year.

Studies on children's experiences in schools have indicated that children and young people are conscious and reflective of their experiences of school. They are not passive learners but critically engage with the education system. Children also feel that they are subordinate within the education system, and their experiences of unfair treatment within the school system can

lead to disengagement with the learning process.

Summary

The view of children has changed considerably over the last few decades. Theories of socialisation prevalent up to the 1960s assumed that children needed to be changed from being incompetent, dependent, asocial and acultural into competent, autonomous, social and cultural adults. Within education, one of the roles of teachers was to facilitate children to move along a sequence of cognitive stages, from irrational children to rational adults. Teachers were also expected to facilitate children's socialisation into civilised adults. Children who did not succeed in this socialisation process were in danger of being viewed as somehow deviant.

Although the understanding of children has changed somewhat, the traditional understandings of children are still prevalent in popular thought (James *et al.*, 1998). There is still evidence that classic socialisation theory continues to be implicit in recent educational policies (Deegan, 2004). The notion of children as 'irrational but becoming rational' is very important when considering concepts of intelligence. These views of children are particularly pertinent with regard to how intelligence and ability are conceptualised, particularly in contexts where children are considered to be educationally disadvantaged. The following chapter aims to tease out this relationship between concepts of intelligence, ability and educational disadvantage.

2. INTELLIGENCE IN CONTEXT

In this chapter we will review some of the discussions in Irish educational discourse of the relationship between concepts of intelligence and educational disadvantage, particularly the call for a new framework for understanding intelligence and learning in disadvantaged contexts.

Educational Disadvantage in Irish educational discourse

Before we can understand concepts of intelligence in an Irish educational context, we must locate the discussion in broader educational discourse. This study is particularly concerned with how intelligence is conceptualised in discourse around educational disadvantage. Below, we will briefly discuss some of the wider ideological standpoints that influence the understanding of intelligence and its relationship to educational disadvantage in Ireland.

Discourses in Irish education

As a way of locating concepts of intelligence in an Irish educational context, it is useful to use the framework for understanding some of the most prominent ideological standpoints in Irish educational discourse as proposed by Drudy and Lynch (1993). The first standpoint involves a particular conception of society itself (consensualism), the second a particular conception of the individual (essentialism) and the third, a particular conception of the relationship of the individual to society. These ideologies provide one possible explanation of how 'intelligence' and 'ability' are perceived in an Irish context, but also how 'educational disadvantage' is understood.

Consensualism represents society as an undifferentiated whole—social differences such as class, gender and ethnicity are defined as attributes of the individual, as opposed to wider social issues. This has led to a lack of understanding of the bigger picture of how structural factors perpetuate inequality, for example how schools contribute to the reproduction of inequality, so that if an individual is not doing well in school, it is assumed that this is due to personal deficiencies. The structurally detached term 'disadvantage', which is used to refer to social class inequalities in education, is an example of consensualism in Ireland (Drudy and Lynch, 1993).

Drudy and Lynch argue that by defining society in consensual terms, 'educationalists had to look to the individual to explain social variability. Consensualism has predisposed the individual as having a given fixed nature, which in turn predetermined his or her educational needs' (1993: 55). This in turn leads to the second ideological discourse, essentialism. This is a particular concept of the individual. Essentialism defines the person in terms of fixed or given talents, abilities or intelligence, which are measurable. This implies that there is a limit to educational development.

The third discourse is a particular understanding of how the individual relates to society. Meritocratic individualism proposes that those individuals who have talent and who make the effort deserve to be rewarded in society; in other words, that IQ + effort = merit. This discourse helps perpetuate the hierarchical social order and 'may merely provide a smokescreen behind which privilege is perpetuated—albeit through cultural rather than economic practices' (1993: 60).

These ideologies have had an impact not only on how 'educational disadvantage' is understood in an Irish context, but also on how 'intelligence' and 'ability' are perceived. Consensualism has contributed to the detaching of 'disadvantage' from the wider social structure. Essentialism and meritocratic individualism, 'by representing the individual in abstract terms, rather than as a structurally located relational being, encourage us to look for educational solutions through changing individuals rather than by changing social structures.' (1993: 63) The focus then, according to Drudy and Lynch, has been on making individuals responsible for being disadvantaged and on changing the individual as opposed to changing the social structure.

Educational disadvantage in Ireland

The Education Act 1998 defines educational disadvantage as 'the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools'. Over the past decade, many programmes and interventions have been developed to combat educational disadvantage in Ireland. Those aiming to tackle educational disadvantage at primary level include Early Start, Giving Children an Even Break, the Disadvantaged Areas Scheme, the Home School Community Liaison Scheme, and the School Completion Programme (Primary and Post Primary). There have also been curricular changes at both junior and senior cycle. The establishment by the

Department of Education and Science of the Educational Disadvantage Committee in 2002 and the National Forum on Primary Education: Ending Disadvantage (2002) show that educational disadvantage is still high up on the education agenda.

Most research on educational disadvantage in Ireland has been concerned with 'identifying the extent of educational disadvantage, identifying factors which relate strongly to it, and proposing measures to address the perceived problem' (Boldt and Devine, 1998: 8). Most research has focused on the socio-economic factors contributing to educational disadvantage. Several authors have suggested that educational disadvantage results from various socio-economic, home and school factors (CMRS, 1992; Hannan, 1987; Kellaghan *et al.*, 1995). The link between poverty and educational disadvantage has been highlighted (CPA, 2002; Drudy and Lynch, 1993; INTO, 1994; NESF, 1997) and there has also been a focus on early school leaving and how it relates to reduced chances of employment (CORI, 2002; Crooks and Stokes, 1987; Hannan and McCoy, 1995; NESF, 1997).

A number of approaches have impacted on how educational disadvantage has been understood in Ireland and, consequently, on the attempts to tackle it. One approach focuses on factors related to the child and home as the source of educational disadvantage. The child may not be able to achieve in school because he or she does not have the knowledge, attitude and skills to do so, due to social or cultural factors in the child's family (Kellaghan *et al.*, 1995). An extension of this approach argues that it is not simply the family background that influences a child's ability to achieve in education, it is the wider community in which the child lives that provides a disadvantaged environment. Most policy interventions and plans in Ireland are heavily influenced by this 'ghetto culture' model (Tormey and Prenderville, 2000). This model suggests fixed and essentialist concepts of disadvantaged children and makes assumptions about the limited potential impact of education.

The rejection of these theories, because they place the blame for educational failure on the child, and home and community environments, led to a focus on the social and cultural factors, including the education system and school organisation, that result in children not achieving their full potential in school (see for example Boldt, 1994; CMRS, 1992; Lynch and Lodge, 2002; NESF, 2002; Power and Tormey, 2000; Smyth and Hannan, 2000). Although much research has highlighted how there is a discontinuity between home and school, the important point was that this discontinuity must not be interpreted as deficiency. The second approach that has influenced efforts to tackle educational advantage has focused instead on

cultural and social capital, the kind of knowledge that is valued within the education system and the labour market and how inequality is reproduced through schooling. It has been suggested that educational disadvantage refers to the 'discontinuity between the school and non-school experiences of children who are poor resulting in the socio-economically disadvantaged child being unable to participate fully in the school experience' (CMRS, 1992: xvii). There has been recognition of the fact that educational disadvantage results not only from the child's inability to cope with the school, but also on the school's inability to cope with the needs of the disadvantaged child. This has been the main approach in tackling educational disadvantage over the last decade and it has led to a focus on targeted responses and interventions.

However, despite the focus on the discontinuity between home and school, an understanding of educational disadvantage from the 'ghetto culture' model is still evident in educational discourses (Tormey, 2004). The targeted responses to educational disadvantage adopted by the Department of Education and Science have had limited impact, because the interventions have focused on changing the individuals and communities experiencing disadvantage, as opposed to thoroughly interrogating and restructuring the education system itself (NCCA, 2002). A review of the *White Paper on Early Childhood Education 1999* led Deegan (2004) to conclude that models of social pathology are evident in the conceptualisation of children who are disadvantaged, and that the arguments presented support essentialist and reductionist notions of what happens in highly developed instances of social and economic disadvantage. There is a disproportionate emphasis on IQ and an over representation of data on educational achievement as opposed to social processes in children's schooling and lives. Even the National Children's Strategy, which advocates a child-centred approach, still focuses on the individual child, neglecting a focus on small group interaction and social categories (Deegan, 2004).

Intelligence and educational disadvantage

As already noted, there is research that argues that educational disadvantage will only be tackled if the underlying structures, concepts and processes within the education system itself are interrogated (see for example NCCA, 2002; Lynch and Lodge, 2002; Power and Tormey, 2000). Crucial to this interrogation is a thorough examination of the curriculum and assessment, and, getting to the heart of the matter, an exploration of what knowledge is valued, what skills are appreciated and how these are assessed. It has been pointed out that

the knowledge that is valued is not necessarily the knowledge that is required (Lynch and Lodge, 2002). Lynch argues that 'there is much which passes as education therefore which is of marginal relevance for life outside school, especially when viewed in terms of the wide range of skills and predispositions which are necessary in contemporary society' (2002:275).

Located firmly in the debate about 'valued knowledge' is the understanding of intelligence and ability. Intelligence, or what is considered 'smart', should concern educationalists because, as Drudy and Lynch (1993: 228) have argued, what is defined as intelligence or ability has a profound effect on what is defined as legitimate knowledge in schools. Schooling only recognises and accredits a narrow range of talents and abilities, which automatically alienates from the educational system those students whose talents and abilities are not assessed in school.

Although the way knowledge is legitimated in our society may be at the basis of educational disadvantage—it shapes our view of who is smart, who is valuable and who is 'disadvantaged'—the fact still remains that some groups of students have difficulty manipulating forms of knowledge that have established their legitimacy, such as logical-mathematical knowledge (Lyons, 2002). Regardless of how accurate such assessments are, teachers will respond to IQ and ability assessments accordingly, and schools select on the basis of such instruments (Nash, 2001). As students considered disadvantaged tend to score lower than do non-disadvantaged students on most standardised IQ tests (Lyons, 2002), there is a danger that their failure in school will be attributed to their lack of so-called intelligence or ability. What's more, there is a danger that their failure will be seen as inevitable and/or justified (Drudy and Lynch, 1993).

A feature of the organisation of schooling in the Irish educational system at second level is the prevalence of the practice of grouping students according to academic performance (Smyth, 1999; Lynch and Lodge, 2002; O'Brien, 2001). Ability grouping encourages the notion of a fixed concept of intelligence, which in turn provides a justification for practices such as ability grouping (Lynch, 1999). In fact, a concept of fixed intelligence can make ability grouping seem natural, inevitable and desirable. Research has shown that that ability grouping itself perpetuates educational inequality (Darling-Hammond, 1997; Gamoran and Hallinan, 1995; Hallinan, 1994; Oakes *et al.*, 1992); thus it can be argued that concepts of intelligence and ability play a role in perpetuating educational inequality (Lynch and Lodge, 2002). However,

changing the focus to 'mixed ability' will not guarantee equality of treatment unless teachers learn to appreciate differences in abilities and stop making assessments on intelligence and ability and thus stratifying students accordingly, and unless schools give formal recognition to students' diverse talents (Lynch, 1999).

The notion that intelligence is fixed puts a limit on the pace or rate of learning and has led to education in educationally disadvantaged settings in Ireland being heavily influenced by the behavioural principles of learning—breaking down tasks into small and manageable pieces, teaching the basics first and incrementally reinforcing or rewarding observable progress (Conway 2002). This approach to teaching is associated with two difficulties in terms of the learning experience. Firstly, the assumption of 'vertical transfer'—learners need to have achieved a certain competence in all the basics before they can engage with higher-order learning activities (in the case of reading, perception of print, that is, single letters or words must be mastered prior to the more complex elements like reading sentences are introduced). Vertical transfer is linked with the second problem, which is the decomposition of activities such as reading, writing and problem solving, resulting in a lack of task wholeness and authenticity (comprehending a text as part of a bigger, more complex task or project).

Assumptions about the nature of intelligence as an individual trait and a fixed commodity also impacts on teaching practice in disadvantaged contexts (Conway, 2002). International research highlights the diminished classroom pedagogical and organisational experiences of students in low-income, high-poverty and/or minority communities. Educationally disadvantaged students typically experience diluted curricular experiences, involving task decomposition and infrequent opportunities to engage in higher order thinking (Anyon, 1981; Oakes, 1986; Oakes and Lipton, 1999). For example, teachers may rely on drill and practice of basic skills in efforts to compensate for the perceived deficits that students bring to school (Conway, 2002: 65). This view of classroom practice was also supported by the OECD (1991) review of Irish education, which 'raised serious concern about the dominance and widespread prevalence of a transmission model of teaching, low level cognitive demands in classroom teaching, and low levels of pupil involvement in the learning process in Irish schools' (Conway, 2002: 64).

Broadening our understanding of intelligence

The interrogation of our concept of intelligence in an Irish context has been advocated by many in recent years, particularly in relation to tackling educational disadvantage (Conway, 2002; Drudy and Lynch, 1993; Flynn 1998; Hanafin, 1997; Hyland, 1998; 2000; Lynch and Lodge, 2002; Lyons, 2002; NESF, 2002). One theory of intelligence that has been advocated in discourse around educational disadvantage has been Gardner's Theory of Multiple Intelligences. Gardner (1983, 1993) proposed that general ability consists of several factors and argues that there are eight intelligences. These are presented below, with examples of occupations that would embody the relevant intelligence in action:

- Linguistic Intelligence allows individuals to communicate and make sense of the world through language (poets, journalists, writers, orators);
- Logical-mathematical Intelligence enables individuals to use and appreciate abstract relations (scientists, mathematicians, philosophers);
- Spatial Intelligence makes it possible for people to perceive visual or spatial information, to transform this information, and to recreate visual images from memory (architects, engineers, sculptors);
- Bodily Kinaesthetic Intelligence allows individuals to use all or part of the body to create products or solve problems (craftspeople, dancers, surgeons, athletes, choreographers);
- Musical Intelligence allows people to create, communicate, and understand meanings made out of sound (singers, musicians, composers);
- Interpersonal Intelligence enables individuals to recognise and make distinctions about others' feelings and intentions (parents, teachers, politicians, psychologists, sales people);
- Intrapersonel Intelligence helps individuals to distinguish their own feelings, to build accurate mental models of themselves, and to draw on these models to make decisions about their lives (difficult to observe in specific occupations, but relevant to most);
- Naturalist Intelligence allows people to distinguish among, classify, be sensitive to, and use features of the environment (farmers, gardeners, botanists, florists, geologists, archaeologists).

(As presented in NESF, 2002)

A research project called 'Multiple Intelligences, Curriculum and Assessment' carried out by the Department of Education in University College Cork between 1995 and 2000 (Hanafin, 1997; Hyland, 2000) was established to examine the application of the theory of MI (Multiple Intelligences) to curriculum and assessment. The project provided training courses for teachers on the features of the MI approach, the design of materials/resource packs for teachers and information seminars. 'Intelligence-fair' approaches were developed, which take account of individual intelligences in areas such as music, visual/spatial and inter-personal understanding (Hyland, 1998). The significance of the MI approach is that it allows students to develop and demonstrate their abilities in a variety of ways. Assessment is broadened beyond tests of logical/mathematical and linguistic ability. The success of the approach lies in the fact that it provided support and allowed for affirmation of success on the part of the individual on the basis of his/her own skills—learning became more accessible. The MI approach also led teachers to challenge their assumptions in relation to learning (Hyland, 2000).

Although the Multiple Intelligences approach has not been formally adopted within the Irish education system, there is increasing evidence that the concept of intelligence is beginning to change in educational policy. Also, there has been a continuing argument for the need for a more radical approach to assessment and certification. There is a need for formal recognition of non-academic skills that the individual student can acquire, but which 'are not equated with intelligence' (NESF, 2002: 56). The Junior Certificate School Programme, for example, allows for a greater degree of choice on the part of the individual student on his/her learning path and for the recognition of non-academic achievements (including attendance, punctuality, interpersonal skills).

The Educational Disadvantage Committee (2005: 17) argues that intelligence should be understood as 'multidimensional, plastic and learnable'. In the report *Delivering Equality of Opportunity in Schools: An Action Plan for Educational Inclusion* (Department of Education and Science, 2005) it is stated that while literacy and numeracy skills are vital tools for life, for learning and for social and economic participation, they are 'only aspects of the integrated curricula in primary and second-level schools that are designed to provide a broadly based education to nurture and develop a range of intelligences and skills.' The report argues:

> *It is important, therefore, that all intelligences and skills are promoted in schools and that pupils have exposure to a wide variety of opportunities to develop their potential and that will support a growth in self-esteem, engagement, and motivation which are necessary for successful learning* (Department of Education and Science, 2005: 44).

New framework for understanding intelligence and learning

Conway (2002) and Lyons (2002) both argue that a new framework for understanding intelligence and knowledge needs to be introduced in an Irish context.

As we have seen, the focus in Irish educational discourse over the last thirty years has been on cognitive theories, particularly Piaget's theory, and more recently Gardner's Multiple Intelligences theory. Both of these theories see the learner as an individual cognizer and learning as an individual activity (Conway 2002). What is neglected, as Conway (2002: 76) argues, is 'how the learner is situated amidst levels of guidance by more knowledgeable others, nurtured via social support, influenced by peer norms, and shapes and is shaped through engaging in communication with other humans and various media within evolving cultural and historical circumstances'. In contrast to traditional cognitive and behaviour approaches, socio-cultural theories assume that learning itself is a social act and culturally rooted in, as Brown (1994) called it, 'communities of learners'. How children learn is influenced by social and cultural roots and environments, as is the value they ascribe to learning or ability or intelligence. The contexts in which one is perceived as 'smart' are influenced by the social and cultural environment.

The socio-cultural approach emphasises the social context of intellectual development. According to this approach, knowledge begins with the interactions and activities among individuals (Seifurt and Hoffnung, 1994). Cultural influences are seen as the source or foundation of thinking rather than as a secondary factor that modifies individuals' cognitive performances. One of the implications of socio-cultural theories of learning, as outlined by Conway (2002:79), is that they 'provide a perspective on cognition and learning that could address a cascade of new and crucial questions in understanding issues of teaching and learning in disadvantaged contexts.' Importantly, socio-cultural theory introduces a new way of understanding intelligence. Whereas the cognitive perspective may ask 'how smart are you?' or 'in what ways are you smart?', the socio-cultural perspective asks 'in what contexts

are you smart?' Contexts in which you are smart are viewed on a moment-to-moment, student-to-student, teacher-to-student, event-to-event, activity-to-activity basis. A crucial question is 'why learners may appear "smart" in one context and not another?'

Another important factor to note is that socio-cultural theories place the responsibility for disadvantage on society rather than on educationally disadvantaged communities, families or students and therefore offer the possibility of a more socially just perspective on learning and teaching than either behavioural or cognitive learning theories (Oakes and Lipton, 1999). Socio-cultural theories focus on the discontinuities between home and school rather than deficits in families and students as a way of characterising educational disadvantage (Conway, 2002).

Lyons (2002) suggests a two-pronged approach to this problem. Firstly, we need to broaden our understanding of what knowledge is important, what behaviour is intelligent and how both are assessed. We also need to embed traditional knowledge and skills in a meaningful context in order to make them more accessible. Lyons argues that the challenge is to find workable, valid and alternative concepts. One way of embracing this challenge is to turn to children themselves to explore what they think is intelligent and what knowledge they think is important. The present study takes this route.

Summary

We have shown that within Irish educational discourse, there has been a belief that for educational disadvantage to be alleviated, the focus should be on changing the individual and the communities experiencing disadvantage rather than the social and educational structure. There is a danger that an essentialist understanding of children at risk of educational disadvantage predominates, leading to a presumed limit to the educational participation and achievement of such children. It has also been argued that for educational disadvantage to be tackled, there must be a thorough examination of the curriculum, assessment and fundamental concepts such as what knowledge is valued, what skills are appreciated and how these are assessed. There is a need to actively research 'intelligence', how it is defined and how the associated concepts are used to perpetuate inequality in the Irish educational system.

Considering the lack of debate based on socio-cultural theories in the Irish context, trying to achieve a better understanding of disadvantaged children's concepts of intelligence, what and who they think is smart and in what contexts they think they are smart through a socio-cultural perspective, provides a very useful insight into their motivation for achieving. In the next chapter, we will review previous research on children's concepts of intelligence.

3. CHILDREN'S CONCEPTS OF INTELLIGENCE

Research has shown that by the time children are 11 or 12 years old, their beliefs about the nature of intelligence play a pivotal role in their achievement motivation—in their decisions about accepting challenges, in their behaviour during difficult tasks and in their interpretation of success and failure (Cain and Dweck, 1989). In recent years there has been an attempt to build theories about the influence of children's concepts of intelligence on their learning orientation and achievement motivation (Thorkildsen and Nicholls, 1998). Some of the other findings from research relevant to this study are presented below.

Developmental changes in children's concepts of intelligence

Firstly, let us review some of the developmental changes in children's concepts of intelligence that have been identified. Younger children have a broader definition of intelligence, linking it to academic skill but also to noncognitive characteristics such as social skills, work habits and athletic prowess (Yussen and Kane, 1985; Bempechat *et al.*, 1991; Kurtz-Costes *et al.*, 2005). Older children (aged 11 or 12 years) have systematic views of intelligence and, like adults, hold that at least three components are important to intelligence—knowledge and/or experience; reasoning ability or capacity; and motivational factors such as effort (Nicholls, 1978; Stipek, 1981, Stipek and Tannat, 1984; Yussen and Kane, 1985). This is very similar to findings from research with adults who have identified verbal ability, problem solving ability, motivation and social competence as components of intelligence (Sternberg *et al.*, 1981).

Older children are less likely to report that intelligence is malleable than are younger children, so as children get older they are more likely to view intelligence as a fixed trait (Kurtz-Costes *et al.*, 2005). By late childhood, children believe that both effort and ability play a role in intellectual outcomes, and they are able to manipulate these components independently of one another (Cain and Dweck, 1989). By the time children are in fifth grade (11 years old), they evaluate the amount of effort required to achieve a performance outcome, and assume that the more effort that is needed is indicative of less ability (Nicholls, 1978; Nicholls and Miller, 1984; Pomerantz and Ruble, 1997). Basically, children perceive that intelligent children do not have to work hard and individuals who are not intelligent need to work harder to achieve.

Intelligence and learning orientations

Research into children's concepts of intelligence and how these concepts influence children's learning orientations and academic achievement motivation has primarily been conducted within psychology. One of the basic questions this research asks is: Do children think they need to be intelligent to do well in school or do they think that they can learn if they put in the effort regardless of their intelligence?

Research has shown that children's theories of intelligence predict and influence differences in achievement (Dweck, 1999).

Dweck's work has identified two different academic achievement goals—'performance' and 'learning' (Dweck and Elliot, 1983; Elliot and Dweck, 1988). Children with performance goals want to look intelligent (to themselves and others) and avoid looking stupid. Dweck's research has identified that these children tend to have a more fixed view of intelligence (entity theory of intelligence) and therefore, if faced with failure, tend to react in a 'helpless' manner. On the other hand, children with learning goals tend to see intelligence as malleable or flexible (incremental theory of intelligence) and think therefore that they can increase their competence. If faced with failure, they tend not to give up as quickly and tend to be 'mastery-oriented.'

Furthermore, children with entity concepts of intelligence and performance goals (particularly those children with low confidence) may face many difficulties in achievement settings, difficulties that may limit their ultimate academic attainment. A study of the behavioural implications of entity and incremental theories of intelligence in the social domain showed that entity theorists do less risk-taking in making friends and are more impaired by failure in social encounters (Lepore *et al.*, 1989). Also, entity theorists are more concerned with popularity and are more sensitive to rejection (Benenson and Dweck, 1986; Goetz and Dweck, 1980).

Research conducted by Nicholls (1989) produced similar findings. When adolescents were asked about when they felt successful in school, two motivational dimensions were identified. Task orientation (similar to Dweck's 'learning goal') was associated with beliefs that Interest and Effort cause success, whereas Ego orientation (similar to Dweck's performance goal) was associated with beliefs that Competitiveness causes success. Two additional orientations were identified, Work Avoidance (the tendency to feel successful when work is easy) and Academic Alienation (the tendency to feel successful when messing about). Both of these

additional orientations were closely related to one another and were associated with Ego orientation rather than with Task orientation. This implies that children who have fixed concepts of intelligence are more likely to be focused on performance, rather than learning, and that they may be more likely to experience Work Avoidance and Academic Alienation. Children who view intelligence as flexible are more likely to be focused on learning and mastery of a task, and more likely to feel satisfaction and achievement on completing a task.

In addition, gender differences in children's motivational orientations have been identified (Thorkildsen and Nicholls, 1998). Boys and girls in 5th grade (11 years) differ to a remarkable degree in how they combine their motivational orientations, beliefs and perceptions. Boys have a more limited perception of classroom expectations than girls, but girls have a more limited way of conceptualising their motivational identities. Boys were higher on Ego Orientation, Alienation and beliefs that success was caused by Extrinsic Elements (behave well, be nice to the teacher, dress well). Girls scored higher on Task Orientation and beliefs that Interest and Effort cause success. Girls are also more socially aware of adults' expectations.

Group learning orientations

Like individuals, classes too have personalities. Classes could be characterised as having similar theoretical patterns of cognitive representations as particular children, so a particular class may have a leaning towards either a learning or performance orientation (Thorkildsen and Nicholls, 1998).

Interestingly, differences in learning orientations have also been identified in cross-national studies. A cross-national study conducted with children of various ages found that children in the U.S., compared to children in Germany, are more likely to view intelligence as malleable, stating that smart children are hard working and children who are not smart can become smarter (Kurtz-Costes *et al.*, 2005). Children in Germany are more likely to believe that intelligence is fixed and that smart children do not have to work hard, whereas individuals who are not smart have to work harder to achieve. Children from Asia, on the other hand, are more likely to attribute academic achievement to effort as opposed to ability (Kurtz *et al.*, 1990; Lee *et al.*, 1987; Little and Lopez, 1997; Schneider *et al.*, 1986; Stevenson and Lee, 1990).

This pattern of beliefs in cross-national comparisons is endorsed by parents and teachers, too. Asian parents and teachers are more likely than those in the U.S. to attribute their children's school success to hard work rather than to intelligence, whereas German teachers and parents are more likely than those in the U.S. to attribute their children's school success to ability (Carr *et al.*, 1989; Kinlaw *et al.*, 2001; Kurtz *et al.*, 1990; Stevenson and Lee, 1990).

One of the factors identified as providing a possible explanation for these findings is differences in the educational and professional training systems in the countries in question, for example, ability-level tracking occurs at a greater level and at an earlier age in Germany (Kurtz-Costes *et al.*, 2005). Teacher approaches have also been identified as impacting on students' motivation orientations. Students perceive that teachers have different attitudes toward high- and low-ability students, which are associated with competitive beliefs about the causes of success (Thorkildsen and Nicholls, 1998). Teachers were perceived as devaluing the interest and effort in low-, but not high-ability students. Thorkildsen and Nicholls argue that these views are consistent with ability-based notions of meritocracy and with the competitive ethos that dominates our public discourse on education.

Despite the fact that classes may have particular learning orientations, 5th graders clearly distinguish their own motivational orientations and beliefs from the class ethos that is formed by teachers' expectations and the corresponding beliefs about the causes of success (Thorkildsen and Nicholls, 1998). The children's beliefs about the causes of success have some relationship to both their personal identities and to their interpretations of the social world.

Summary

Children's concepts of intelligence may impact on their achievement motivation. Research suggests that children who have fixed concepts of intelligence are more likely to be focused on performance, rather than on learning, and that they may be more likely to experience Work Avoidance and Academic Alienation. Children who view intelligence as flexible are more likely to be focused on learning and the mastery of a task, and more likely to feel satisfaction and achievement on completing a task. In this present study, we were interested in finding out whether the children who participated in our research entertained fixed or incremental concepts of intelligence, and how their concepts related to their academic achievement motivation. However, this research project also aimed to build on previous research by studying the processes that lead to the development of these children's concepts of intelligence. In this study, therefore, we have focused on children in 5th class, because it seems to be an important transitional year in the development of achievement motivation and because regardless of gender, age 10 would seem optimal for introducing interventions intended to facilitate healthy achievement-oriented identities (Thorkildsen and Nicholls, 1998).

4. METHODOLOGY: ACCESSING CHILDREN'S CONCEPTS

This study employed an ethnographic methodology. In this chapter we discuss why we chose an ethnographic approach to our research and outline the relevant ethical considerations in this research project. We provide an overview of the fieldwork, the various methods employed and how data were collected and analysed. This chapter also provides a brief discussion of the main methodological issues that arose during the course of the research.

The ethnographic approach

Most research on concepts of intelligence tends to use surveys and standardised measures (for a review of studies, see Thorkildsen and Nicholls, 1998). These methods aim to test hypotheses by asking participants to fill in questionnaires or to participate in experiments at specific points in time. Studies undertaken using these methods normally employ large numbers of participants. For example, Fontes *et al.* (1983) had a sample of 994 people and Thorkildsen and Nicholls (1998) had a sample of 536 children who were approximately 10 years old. Nicholls and colleagues developed a number of scales to explore motivation and concepts of ability, i.e. motivational orientation scales; Task and Ego developed orientation scales. Nicholls and colleagues also used various visual tools, for example, photographs (Nicholls *et al.*, 1986) or short films (Nicholls, 1978). Kurtz-Costes *et al.* (2005) conducted individual interviews with 115 U.S. and 100 German children using a structured interview schedule. Dweck and her colleagues employed task completion assignments and the children's responses to the assignments were tracked (Elliot and Dweck, 1988; Henderson and Dweck, 1990).

In terms of building our knowledge of achievement motivation, it has been argued that other research methods are needed.

> *It seems wise to give up the propensity to rely on results obtained solely from impersonal surveys or from experimental manipulations when theorizing about achievement motivation.*
> (Thorkildsden and Nicholls, 1998: 198)

Whereas standardised measures aim to test hypotheses, ethnographic research aims to learn about the ways, language and expectations of the social group it is studying (Emond, 2005).

As this study aimed to obtain an understanding of children's concepts of intelligence in a socio-cultural perspective, an ethnographic methodology was used for a number of reasons. Ethnography stems from the anthropological tradition. It is a research approach that originally aimed to understand 'other cultures' but has been adapted by sociologists to study particular aspects of Western society. Ethnography is, by definition, an open-ended method, which aims to collect in-depth, contextualised qualitative data through the researcher's immersion in the field. It is best that the researcher remains immersed in the field over a substantial period of time, so as to allow the researcher become part of the population under study and thus gain an access to 'insider' knowledge. Although there is a specific research question to be investigated, issues are documented as they arise as opposed to there being a pre-defined set of categories to examine. Ethnographic methods potentially yield fascinating information, because they pick up on the subtleties of the group under study, and often on the 'hidden' unwritten rules and symbols. The ethnographic methods used in this study included participant observation and a series of focused activities, which will be detailed below.

Considering the importance of the 'whole-child' perspective and viewing the child in a holistic manner, it was fundamental that the methodology selected for this study should facilitate a contextual understanding of the child's (school) world. This research was undertaken on the premise that children are worth studying in their own right, and not just as a way of understanding adults or how we become socialised adults.

Using ethnographic research methods allows children a more direct voice and facilitates their participation in the production of sociological and arguably psychological data (James and Prout, 1997). In the same way, ethnographic research with children has been critical to the changing understanding of 'childhoods' and has been central to enabling a view of children as social actors in the construction of their daily lives (James, 2001). Ethnographic research with children and young people includes studies

Ethnography is a particularly useful methodology for the study of childhood: children's daily lives and the issues that arise on an ordinary day, especially in an educational context, can be explored.

of children's experiences in hospital (Alderson, 1993) and in residential care (Emond, 2000); of peer relationships and peer culture (Corsaro, 1985; James, 1993); of the development of ethnic and gender identities in childhood (Connolly, 1998) and of play (Thorne, 1993).

Ethnography has also been extensively used in the study of education, particularly in the US and UK. In educational ethnography, it is argued that school and what happens in school should not be taken for granted. The task of the school ethnographer then, is to make the familiar strange (Delamont and Atkinson, 1995). A seminal educational ethnography that explored how working-class boys actively developed a culture of resistance in school was Paul Willis' *Learning to Labour* (1977). Recent ethnographic research in schools has focused on a range of topics, including inclusive education (Benjamin, 2002); teachers and teaching (Hargreaves and Woods, 1984; Woods, 1996); immigrant students' experience of school (Silva, 2004); young people's use of the internet (Moinian, 2004); educational policy (Walford, 2001) and the reproduction of social roles, for example, gender (Mac an Ghaill, 1994); and race (Gilborn, 1990; Troyna and Hatcher, 1992). Ethnography has also been used as a tool in teacher education (Frank and Uy, 2004). Compared to the level of ethnographic educational research internationally, Ireland has a very limited number of studies conducted using this methodology. Lodge (1998) and Bisset (2000) are examples of such research.

Reflexivity

A key feature of ethnographic research is that the researcher is required to reflect on his or her impact on the research context. The researcher is the main research tool in ethnography and cannot be considered independent from the data collection and analysis (Emond, 2005). As Stanley and Wise (1983: 157) point out: 'Whether we like it or not, researchers remain human beings complete with the usual assembly of feelings failings and moods. All these things influence the way we feel and understand what is going on.'

For this reason, it is important to locate the researcher in the research process. In this study, the research was conducted by the first author, a middle-class woman in her mid-twenties. In order to maintain reflexivity, she kept a reflexive notebook in addition to a field notebook. The reflexive notebook recorded personal responses to the fieldwork, hunches and insights; the field notebook recorded field data only. The reflexive notebook allowed the researcher to document and appraise the impact she was having on the research context, as well as to review ongoing methodological and ethical issues arising in the field.

The choice of methodology had implications for ethical issues, in terms of access to and gaining consent from participants, and it raised issues of its own that will be discussed below.

Ethical issues in research with children

Integrity and respect for research participants is important for both adults and children, and many of the ethical needs of child research participants are similar to those of adult subjects. Involving children as participants in research projects requires particular consideration of their ethical needs (Hill, 1998, 2005; Lindsay, 2000; Morrow and Richards, 1996). Morrow and Richards raise three areas of consideration when conducting research with children—vulnerability, competence and power relations (Morrow and Richards, 1996). In addition, ethnographic research with children throws up particular considerations (Fine and Sandstrom, 1988). Adherence to a prescriptive ethical code is not sufficient for ethnographic research, not least because it may deflect researchers from the reflexive pursuit of ethical practice (Murphy and Dingwall, 2001). Ethnographic research requires a flexible, situational and responsive ethics (Murphy and Dingwall, 2001; Morrow and Richards, 1996). It is not simply at access and data collection stages of research that ethical issues must be considered. It is also at the interpretation and analysis stage, where the power relationship between the children and researcher lies (Mayall, 1994; Qvortrup, 1987).

For the purposes of this study, we will focus on the two factors that are central to any discussion of research ethics: firstly, that the participants are fully informed and consent to participate in a study and secondly, the protection of the participants (Morrow and Richards, 1996).

Accessing informed consent from the parents and children

Children, in the same way as adults, must be fully informed about the research project and must be given every opportunity to question it and decline participation (Hill, 2005). Every effort was made to inform the children fully about the present study, what was expected of them and any implications it might have for them. Their choice to participate in the study was constantly affirmed and re-negotiated. The children were also informed that the data collected would be written up as a report.

Before the participant observation began, the researcher came to the school to give the children an initial introduction to the study and also to give them open letters to bring home to

their parents. With the children, she brainstormed the term ‘research’ and explained that she wanted to find out about what it is like to go to school and what children think about school. Even at this early stage in the research process, the importance of the children understanding the role of the researcher became apparent. At this stage the children had a number of questions, such as ‘when will I be able to ask you questions?’

The open letters to the parents allowed the children to read about the study and what was requested of their parents. Consent was sought from the parents, who were given the opportunity of ‘opting–out’ if they did not want their child to be involved in the study. The parents were asked to contact the researcher or research supervisor if they had any queries about the study or if they had any objections. To facilitate easy contact, the letter stated that the researcher would be available outside the school at home-time for three days, or else they could contact her by telephone. Of course, parents could also contact the teacher if they had objections to their children participating in the study.

As there were no queries or objections from the parents, the researcher introduced the project to the children in more detail during the first two days of participant observation. Each time, she asked them questions like ‘do you remember who I am and why I am here?’, and she encouraged them to ask questions.

On the third day, the children were asked to fill in a consent form. The consent form took the shape of a booklet, which had a multiple choice and cloze test format. It required the children to fully understand what they were agreeing to. The following issues were addressed in the consent booklet:

- the researcher’s role;
- where the researcher sat; what she wrote about and what was done with the information;
- the children’s involvement with data collected about them;
- issues related to confidentiality—it was agreed that confidentiality would be maintained unless an issue arose that gave the researcher cause for concern, in which case she would speak to the class teacher or school principal after informing the child;
- issues related to anonymity—the children and their school were not to be identified by name.

The researcher read through the booklet out loud with the children and then the children filled in the form in the classroom in the presence of the researcher, so that they could ask questions if they wished. The consent forms were photocopied for the researcher and then the originals were returned to the children.

All but one child agreed to participate in the research at this stage of the project. No research notes were taken about this child. Consent for the focused activities, with the exception of the individual interviews, did not require parental consent or the children to sign a form. Although the children may have verbally agreed to participate in the focused activities, their desire to participate or not was demonstrated by their actions and their actual participation. Consent was constantly re-negotiated (Hill, 2005). Children volunteered for the individual interviews and parental consent was also required for these interviews.

Protection of participants and confidentiality

Generally speaking, research participants are assured that the information they give will remain confidential and that they will not be identified. Hill (2005) identifies three levels at which confidentiality is important—that participants will not be identified either publicly, in reports and presentations, or privately, among their social network such as family, friends or teachers. Confidentiality is a specific ethical consideration for ethnographic research with children. Researchers must be responsible if an issue related to child protection arises. As the researcher remains in the field for a significant length of time, the possibility of observing behaviours that could cause concern increases. Children may also choose to disclose information relating to their safety or protection. In this study, a procedure was agreed with the school principal, class teacher and the children if such situations arose, and this procedure was specifically detailed in the children's consent form.

It was also agreed that the participants' names would be changed to preserve anonymity. At first the children were asked to choose their own pseudonyms; however this presented difficulties. Some children wanted their own names to be used and did not want to give a pseudonym. Some children continuously changed the names they had picked and others, the boys in particular, picked names which were unsuitable such as '007', 'Bond' and 'Austin Powers'. In the end, it was decided that the researcher would choose participants' pseudonyms. In some cases different names have been allocated to the same participant as a means of providing layered anonymity and thus of protecting confidentially, especially as

participants in school-based research, both students and staff, know each other very well and would be able to recognise each other from particular situations.

Preparation for fieldwork and the pilot studies

Ten schools were chosen through the Primary Schools Educational Disadvantage database (http://www.spd.dcu.ie/main/academic/edc/database.shtml). These schools were written to in June 2002 with a brief description of the project and were asked whether they would be interested in participating in the research. Six responded favourably and after meetings with representatives from all of them, pilot days were carried out in three of the schools, and one school was chosen to be the research site. The pilot day served two purposes. Firstly, it allowed the researcher to get a feel for the school, to meet the children and teachers and to assess how feasible it would be to conduct the research in the school. In one school, for example, there was no place for the researcher to sit in the classroom, as there was no spare seat in the classroom or even enough room for another chair to be placed at the back of the classroom. In another school, the teacher was not sure whether she would be present in the school the following year. The pilot day also allowed the teachers and children to experience what it was like to have a researcher in their classroom and to learn more about the project. One school was selected in September 2002 and the fieldwork began in October 2002.

Fieldwork

The fieldwork was carried out over a 9-month period in four distinct stages, from the first meetings with the school to the final day when the children came to the Children's Research Centre on a day out.

Stage 1: Accessing and negotiating informed consent from participants

The first stage of the research was the process of gaining access to the school and also to the children, seeking and negotiating consent. This stage included the initial meetings with the class teacher and school principal, agreeing access, seeking and negotiating consent with teachers, parents and children and the first few days of participant observation, during which time the school was given the option to reconsider participating in the study. One of the main issues that concerned the teacher, for example, was the amount of time the researcher would spend in the classroom. The number of days of participant observation was reduced from 30

days to 20 and was spread out over a longer period of time. Also, it was decided that the researcher would spend only mornings or afternoons in the classroom: from 9.30–12.30 (including a 20-minute break) or from 11.00–2.00 (including a half-hour break). The school also sought clarification regarding how the information given by the children to the researcher would be used and the specific role of the researcher was agreed. This period provided an important insight into the concerns of the school and potential barriers to the successful completion of the fieldwork.

The other staff members were also informed about the project through informal discussion with the researcher and also by the placing of an account of the project on the staff noticeboard.

Stage 2: Participant observation

The second stage of the research involved 20-days participant observation over a 4-month period. The researcher went to the school 2 or 3 days a week, and spent no more than three-and-a-half hours with the class at any one time, but always taking in both break times.

Participant observation involves the researcher observing and participating in the field as much as possible. Observation during the present study took place in the children's spheres (classroom, corridor, playground, on school outings, etc.), as opposed to in adult spheres (staff room). The researcher's notes were written up in detail after every period of observation. She took any opportunity to participate in activities in which the children invited her to participate, without causing disruption to or interfering in their schoolwork. She was most often invited to play in the yard or play board games. She also participated during PE, singing and art classes. After the initial introduction period, she refrained from spending time in the adult domains in the school and from being seen in conversation with the teachers. In the boys' yard, she mainly spent time with resource teachers, whom the children knew by their first names.

Notes were taken where possible throughout the observation period and occasionally afterwards if, for example, the researcher participated in a physical activity or game. Notes were taken not only on events, actions, activities and conversations, but also on such variables as the use of space, the kinds of objects and materials used, time sequences and patterns of behaviour and, importantly, feelings and emotions (Spradley, 1980). Analysis was

ongoing and thus the research questions became more specific and refined over the period of observation.

Stage 3: Focused activities

The third stage of the data collection involved conducting a series of focused activities with the children. These activities had two specific aims: firstly, they aimed to build on the data collected through participant observation. The kinds of data collected during these focused activities were very different to those collected during the participant observation, and indeed, each activity produced its own data, reflecting a certain aspect of the children's perceptions. In this way, the focused activities created a mosaic of data through individual activities (survey, classroom drawing and individual interviews) and group activities (photographic project and focus group interviews) (Clark and Moss, 2001). Secondly, this form of participatory data collection, particularly the creative methods such as the drawing and photography project, aimed to provide an opportunity for the children to participate in data building and analysis, and it was also a way of providing feedback to the children. The activities were task-based and aimed to incorporate learning potential. Creative methods provide research participants with tools to analyse their experiences and give meaning to them (Veale, 2005). The focused activities comprised:

Survey

A short survey was conducted with the children, asking them in general about school, what subjects they liked, disliked, were best at, etc. The questions also asked about their role models and future aspirations. Questions were based on measures developed by Nicholls et al (1985; 1989).

Classroom drawing

Each child was asked to do a drawing of him- or herself in the classroom, in order to find out how the children represented their classroom and also to develop a medium for conversation about the classroom with the children in the individual interviews. During the time they were drawing, the children were interviewed about their drawings and their classroom generally: what they liked and disliked about it; why is was laid out like it was; about seating—where did people sit, what was considered a good place to sit; what kind of activities did they do in the classroom?

Photographic project: the school

This activity was conducted as a group and it aimed to get an understanding of the children's perceptions of the school as a whole. Again, it developed a medium made by the children to talk about school. Using a story-telling approach, the researcher asked the children to imagine a group of aliens were coming to the school. These aliens had never been in a school and did not even know what school was. To help the aliens understand what school was, the children were asked to make a poster with the photographs they took.

The children were divided into groups of four and sent out to take photographs of their school. Each child took five photographs. When the photographs were processed, the children were again asked to form groups of threes to make a poster. Each child had to include three of his or her own photographs in the poster and each volunteered for a specific task—one designed the poster, another wrote about each of the photographs, and the third child interviewed his or her group mates with a tape recorder about why they took their photos and why they chose the particular photographs for the poster.

After each group had finished making its poster, they presented it to the class. The children were also given an extra set of the photographs. This was to minimise the risk of the children keeping the photos they liked for themselves instead of using them for the poster.

Small group interviews

Four small group interviews, which lasted for approximately 40 minutes each, were held with the children. There were four or five participants in each group. There were two group interviews with boys only, one with girls only and one mixed group. Two researchers facilitated the interviews, which were recorded on audio cassette. The discussion focused on themes that had emerged from the previous two exercises and the participant observation and specifically aimed to gather data on the research question, ‘what is smart?’ Other questions included: What is school for? How do you get to be smart? Do you learn to be smart in school? What is success? Who are successful people? The aim of the small group interviews was not only to elicit information, but also to record the discourse and social interaction around the discussion.

Individual interviews

Individual interviews were held towards the end of the school year with 9 children (half the class) and aimed to focus on the research questions in depth with particular children. The children volunteered for the interviews and parental consent was required. The interviews were recorded on audio cassette.

The children were given the opportunity again to talk about their drawings and photographic projects. There was a particular focus on the activities they did in school. They were asked to sort the activities they did in school into four categories—like/don't like/important/not important. They were then asked to rank the activities they thought were worth doing by creating an 'activity pyramid' with the most important activity at the peak of the pyramid. They also talked about what helps them learn and what makes it easier to learn. Finally, they were asked about their future aspirations and hopes.

Stage 4: Day out

It was considered important to acknowledge the school for facilitating the research and the children's participation. A trip to the Children's Research Centre and Trinity College in June 2003, including lunch, for the children and the teacher was organised. This was not just a day out; it was important that the children could see where the researcher worked and spent her day, especially as she had spent so much time in their 'workplace'.

Feedback

Throughout the project, opportunities arose for immediate feedback on the findings to the children, especially during the focused activities. It was considered very important to feed back to the participants the initial findings and analysis in a formal way. The researcher gave the children a brief presentation of the findings in June 2004. In addition, copies of the final draft of the report were sent to the school principal and class teacher for their comments.

Analysis

The qualitative software package *NVivo* was used to manage the data and assist with analysis. Data were analysed firstly by activity and secondly by theme. The research process was supported by regular meetings with the research team and through consultation with

colleagues. This support was invaluable and is very important in this kind of in-depth research.

Some methodological challenges

A feature of ethnographic research is that ethical issues are intricately interwoven with methodological issues. This can present some methodological challenges. For the purposes of this report, three such challenges that arose during the course of this study will be discussed.

The first challenge was related to the depth of information collected through the participant observation, in that more data was collected on the girls' perspectives than on the boys' perspectives. Gaining consent from participants does not automatically imply that the researcher has access to their lives. This is especially the case with children. The researcher was dependent on the children's decisions to allow her to enter and access their world, especially outside the classroom in the yard. Relationships with the girls developed more easily and quickly; however, it was clear that another two or three months of participant observation would have yielded a lot more data on the boys' perspectives and experiences of school.

The second challenge was related to negotiating and maintaining the researcher role with the children and adults in the school. In relation to the children, it was made very clear that the researcher was not a teacher, an inspector, a social worker or anyone else whom the children might perceive as having the power to impact on their lives. In this way, the researcher had to actively be different from other adults in the school. Perhaps the most important factor defining the difference between the researcher and the roles of other adults in the school was that the researcher would not discipline children, inform teachers or even comment about disobedient or disruptive behaviour. Consequently, one difficulty arose when the researcher's role changed from participant observer to facilitator of activities. As a facilitator, the researcher had to be in control and command authority. Some of the children, particularly the girls, did not take to this change in role, and attitude, of the researcher.

The researcher's role was also a new role for other adults in the school to deal with. This role was maintained with adults mainly through a process of negotiation. As previously discussed, the parameters of the project were agreed with the class teacher from the outset. This

included agreeing the times that the researcher would be present in the classroom. It was also agreed that the research focus was on the children's perspectives and experiences of school and that the researcher was not researching the teacher's practice.

The third challenge was related to the fact that the presence of the researcher in the classroom impacted on the classroom dynamic in a number of ways. As the researcher sat at the back of the class, she was in constant view of the teacher. This may have been the source of additional stress to the teacher, who was constantly aware of the researcher's note-taking. For this reason, it was important that the researcher was sensitive to times when taking notes about an event or situation was not appropriate. In addition, the researcher's presence altered the group and gender dynamics in the classroom, despite the fact that she was not there on a daily basis and remained passive most of the time. The researcher's presence increased the number of girls in the classroom and also the number of adults. This resulted in some of the girls looking to the researcher for support when they felt that they were being unfairly treated—because they were girls—by either the teacher or boys in the class. However, the boys also looked to the researcher for support as the other adult in the classroom on some occasions when they felt they were being unfairly treated. In this way, the researcher had to be aware of and sensitive to her potential influence on the classroom dynamic.

Summary

This research project aimed to explore the concepts of intelligence of children in 5th class and how these concepts influence their motivation to learn and achieve. The study employed an ethnographic methodology. Various research methods were used to collect data, including participant observation and a series of focused activities.

Having set the context for this study by reviewing relevant literature and by detailing the methodology, the following chapters will present the findings of the study. Chapters 5 and 6 set the scene for the study by providing a description of the class, the classroom, the school and the locality in which the school was based; by offering an overview of the daily routine in school; and by introducing some of the terms, identifying characteristics and concepts the children used when discussing intelligence and 'what is smart'.

The next three chapters develop an analysis of the children's concepts of intelligence in three domains—schoolwork, presentation of self and peer group dynamics. Chapter 7 will focus on how the children's concepts of intelligence influence their relationship to schoolwork, their aspirations and their motivation to achieve academically. Chapter 8 reviews some of the ways that the children tried to show that they were smart in school by successfully negotiating the school environment, and Chapter 9 will show how concepts of intelligence are constructed and reinforced by group dynamics within the classroom.

5. SETTING THE SCENE

This chapter will aim to set the scene for the study by providing a description of the locality and the school in which the class under study was based, the classroom and an overview of the daily routine in the school.

The spaces that children occupy and the way they spend their time are primarily ordered by adults (Ennew, 1994; Kovařík, 1994). This ordering is often taken for granted by adults and children alike. For example, it is easy to forget that the physical school environment is structured in a very specific way. Similarly, children's lives in school are structured around a very clear time frame. Asking children about how they understand and utilise the ordering of space and time in school provides insight into their perceptions of the school experience. The following description of the school spaces and daily routine draws on the perspective of the children in the study. Before describing the school, we will provide some details about the children who participated in the study.

The class

The research was conducted with one 5th class. There were 19 children in the class, 12 boys and 7 girls. Most of the children were 11 years of age, except for two who were 10 years of age at the time of the research. As related in the previous chapter, all but one of the children consented to the participant observation stage of the research. All of the children were from the locality, except one boy from Eastern Europe, who left the school after Christmas 2002. Some of the children in the class were related to each other and so their relationships were more complex than just being classmates. The group was very spirited and there were many strong personalities in the class.

The locality

The school was situated in the inner city, in an area of Dublin that is perceived as being underprivileged. On a number of occasions, some of the children talked about how they did not like where they lived and about the fact that there were few amenities. Based on the Census of Population figures for 2002, almost 70% (69.2%) of households in the area lived in flats or apartments. Almost half of occupancies in the area (44.4%) were rented from the local authority, compared to 6.9% nationally. There was a relatively high percentage (28.8%) of

lone parent families in the area, as compared to the percentage of lone parent households in the country as a whole, which stood at 11.9% in 2002 (ADM, 2002).

In 2002, there were 2,595 people in the area aged 15 years and over. In terms of educational attainment, 30% of the population whose education had ceased comprised people aged 15 and over with no formal education or with primary education only, and a further 22.9% had lower secondary education only. A total of 46.5% of the population in this area was at work and 15.5% of the population was unemployed. For Ireland as a whole in 2002, the population at work accounted for 53.1% of the population (aged 15 and over) and 5.2% of the population nationally was unemployed (ADM, 2002).

The school

The school was surrounded by a visually diverse environment. Although there were many beautiful old buildings in the locality, many were derelict and had boarded up windows. Nearby, there were many cheap accommodation facilities and blocks of flats provided by the local authority. The school consisted of a number of buildings and prefabs. Inside the main building, the school was bright, warm and new looking because of its recent refurbishment. The classrooms were big and airy.

As the school was designated disadvantaged, it was entitled to a number of additional resources, including extra teaching staff, extra funding and the home-school-community liaison scheme. The school staff was very committed and a significant number of the teachers had worked in the school for over 20 years, and had therefore taught some of the children's parents.

The openness of the school to participate in this study was noteworthy. The school principal informed the researcher that the school had never before been approached to participate in research or to participate in consultation about educational programmes or what the staff perceived were the greatest needs of the community, the children and indeed the school itself. This is surprising considering the location and designation of the school and the number of interventions to combat educational disadvantage in the last decade.

The yard

The school was surrounded by a small wall and heavy black railings. The play 'yard' had a tarmac surface that surrounded the main school buildings. There were no play facilities in the yard as such, but the children used various different features in the yard as play facilities, including the arch in the main building, the railings, the walls and so on.

When the research began, the boys and the girls played in separate parts of the yard. The boys had more area for play than the girls. This may have been due to the fact that there were more boys in the school than girls. The boys were encouraged to play football and a number of unmarked football pitches were located in the yard. These pitches did not have actual boundaries; however, walking through the middle of one caused quite a lot of consternation. The girls tended not to play football, as the space they had for play was long and narrow, and therefore was not suitable. Instead, the girls usually played ball games, skipping, chasing and fantasy games.

In the boys' yard there were two trees. The trees seemed to be much loved landmarks in the yard and 'our tree' was often referred to by the children throughout the course of the project. Another popular play space was the 'security camera', which stood beside a concrete block. This appeared to be a good spot to stand and hang around. Behind the security camera were a number of small trees, which provided a small grassy 'nature' area. Beside the security camera was a prefab, which had steps with railings going up to the doors. The boys often played around the steps of the prefab and used the railings to climb on and hang off when the teachers were not looking, as they were not permitted to do this. 'Behind the prefab' was another good but forbidden play space, especially for playing chasing or fantasy games. Other play spaces the children used included the 'arch', the corners (which make useful 'dens'), 'in between the walls' and the hopscotch court.

The way space was utilised in the school yard changed during the period of the research, in that at the end of the period there were no longer girls' and boys' designated play spaces in the yard. Most of the class said that they preferred it this way as it meant that there was more space to play and therefore a greater choice of games and people to play with; as Steven said: 'it's good to be able to play with the girls sometimes.' Previously, the boys could not play chasing because they could not run through the many football pitches on the boys' side of the yard, but now as Kieran explained:

It's better, cause you can just be on two yards and you can play chasing.

Some of the children, however, were not pleased with the change. One of the girls complained about how she was hit by footballs more often because the yards are mixed. A couple of boys did not like having to share their space with the girls. Connor said that:

It's stupid like that cause you hardly have enough room to play. All the girls do be running through the yard and all, and you're not even allowed walk through the arch.

Images of school

The photographic project aimed to elicit an understanding of the children's perceptions of the school as a whole. This activity was conducted by the whole class. The children were asked to make a poster about their school using photographs.

Eighty-seven photographs were taken by 17 children, and these photographs represented the spaces in the school that were important for the children. There were restrictions on where the children could take photographs; for example, they were not allowed to disturb other classes. On leaving the classroom to take their photographs, all the groups went straight around to the boys' yard; this is where most of the photographs were taken (51 out of 87 photographs). Most of the photographs were of the tree (14) and of the prefabs (9). In addition, 14 photographs were taken of the arch, 12 photographs were taken in the girls' yard (mainly of the school gates) and 10 photographs were taken inside the school (4 were taken in the PE hall).

Each of the six posters produced by the groups of children included a photograph of the arch, which gives further indication of how central the arch was as a space in the school. The tree also featured strongly in four of the posters, with three posters having 2 photographs of the tree.

It is telling that only 10 of the 87 photographs were taken of the school interior, and 4 of these were in the PE hall. Despite being allowed to take photographs in the classroom, only one child wanted to take a photograph inside the classroom, and another took a photo of the class from the yard. That the remainder were taken outdoors indicates the importance of the

outside play areas for the children in their experience of school and would seem to play down the importance of the classroom.

The classroom

The classroom is the environment in which formal learning occurs; for this reason, it is important to examine the physical and social layout of the classroom (See Diagram 1). Spaces in the classroom were defined physically through the organisation of classroom furniture and objects, including desks. Spaces were also defined socially by how the children were seated and how different spaces in the classroom were used.

Physical environment

The classroom was large, bright and airy. It was very colourful with posters on all the walls. There were two doors in the classroom. One door, on the left hand side, led into the corridor and to the toilets. This door had a window in it but only the taller children could look in or out when standing at the door. The other door was across the room at the top right corner of the classroom. This door was transparent and looked out onto the yard, the school gates and the principal's office. The bins were also near to this door so children paring their pencils could look out of the window and stand making eye contact with their friends or make faces at their classmates.

Along the right-hand wall, there were bookshelves with books, copies and games, and a table with boxes of copybooks. Along the back wall were the sink, the computer and a bookshelf with novels and extra books. The left-hand side of the room was lined with radiators. This was considered a good place to sit in winter time. At the top left-hand corner of the room, was a noticeboard on which the teacher pinned relevant information such as notices, photographs and the class timetable.

Next to the noticeboard was a large cupboard, beside the teacher's desk. This contained materials and objects that only the teacher had access to, such as the kettle for making tea and the CD player. Valued objects that the teacher looked after—such as footballs—were also kept in this corner.

During the period of participant observation, the children's desks were laid out in three columns and the children were seated in twos, all facing the green board, the white board and

the teacher's desk. It became apparent that the children's seating positions were integral to the social interaction in the classroom. There were distinct social spaces defined by seating. Although the children's seating positions were mostly determined by the teacher, the children also influenced the seating patterns in the classroom, for example, by swapping seats or asking the teacher if they could sit in a specific place.

Boys and girls tended to sit on different sides of the classroom. Some girls would occasionally sit in the boys' half and two boys sometimes sat in the girls' half. Some children never changed seating position in the classroom, so the places they occupied were defining or focal spaces in the classroom. Five children did not have regular seating positions and would change seats normally under the teacher's instruction or by default, because someone was now sitting where they had last been sitting.

In addition, different sections of the classroom were claimed by different groups of children. If the researcher walked from the back of the classroom to the front, she would pass through at least two different territories. Different sections of the classroom were characterised by different atmospheres—some were safe and friendly, others were a little less so. From the researcher's perspective, the boundaries of these territories were continually maintained.

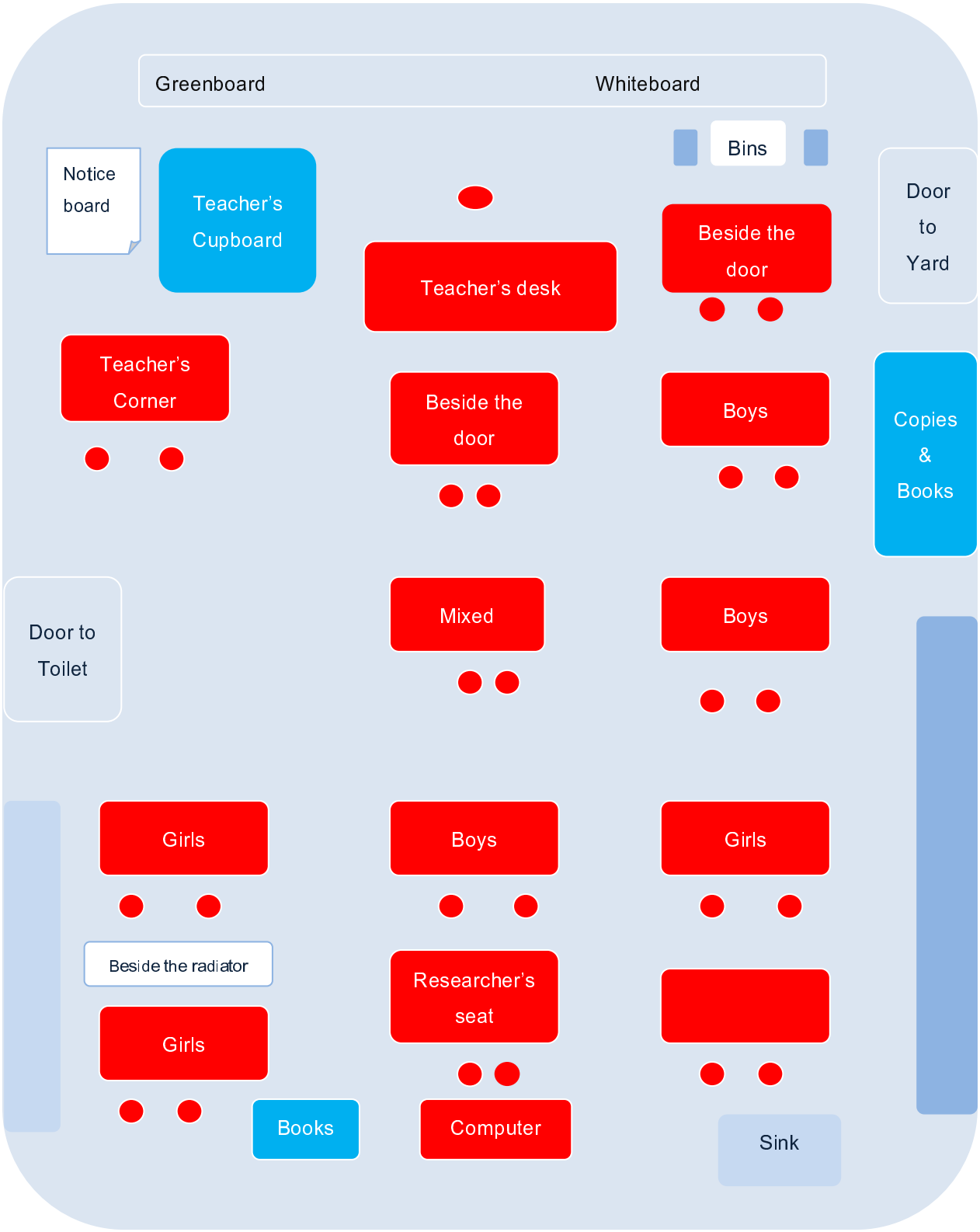

Diagram 1: Classroom layout

Defining social spaces: girls' side

There were a number of defined social spaces in the classroom. On the girls' side these were:

Teacher's corner

The teacher's corner was at the top left-hand corner of the room. Children would have no reason to go into this space unless they were sitting at the desk beside it. This seemed to be a privileged seat. Firstly, it was beside the radiator, which, according to the children, was important in winter. Secondly, it was beside the door and meant that children sitting there would often get sent on errands. Thirdly, and perhaps mostly importantly, many of the conversations between the teacher and other teachers would take place in this corner, so children sitting at this table could quite possibly overhear 'private' conversations between the teachers and also conversations between the teacher and researcher. The fact that the table was near the teacher's desk was not really a disadvantage, as mostly the teacher's gaze was directed towards the middle and back of the room. The only disadvantage about sitting at this table was its isolation, as there were no tables directly behind it because of the door.

This seat was mainly occupied by two of the most assertive characters in the class, both of whom were girls, and sitting there reinforced their position. These two girls also occasionally sat with the boys at the front of the class.

Girls' group

The other girls sat in the four seats at the bottom left-hand corner of the room. According to Mark, this was the best place to sit in the classroom because it was warm in winter and was at the back, away from the teacher. One of the girls always remained in the same seat, whilst the other girls would inter-change seats.

Defining social spaces: boys' side

The seat in front of the teacher's desk

The seat directly in front of the teacher's desk was usually reserved for children to whom the teacher wanted to pay particular attention. This was considered either a good or bad place to sit depending on the reasons for sitting there. For example, a child may have sat in that seat

so the teacher could provide extra support to him or her, or alternatively may have sat there because he or she was misbehaving.

Beside the glass door into the yard

Beside the glass door into the yard was a seat. Although this seat was at the very front of the room, which meant having to crane one's neck to see the white and blackboards, and was near to the teacher, it was a good seat in many ways. Firstly, it was near the door, so the person closest to the door had a prized view of what was happening outside; for example, he or she could see the school gates, whether other class groups were already on their break and who was going into the principal's office. Secondly, this seat was beside the bins and so anyone sitting there would be able to converse with a child standing at the bin.

Boys' groups

There were two core groups of boys in the classroom. The first group sat mainly at the top right-hand corner of the classroom, seemed to be particularly good friends and often played together in the yard. Similarly to the group of girls, one of the boys sat in the same seat for the duration of the participant observation, with the other three boys changing seats occasionally. This group barely changed their seating positions in the classroom during the four-month period of participant observation.

The other group of boys sat in the middle column and towards the back of the room. This group were not so closely knit. As stated previously, some girls occasionally sat in the boys' half of the room. One girl always sat in the right-hand column of the boys' half. She mostly sat on her own and did not change seats at all during the duration of the research.

Researcher's seat

Once the research began, the researcher's seating position in the classroom also became a defined social space. When she first arrived, it was agreed that she would sit at the back of the room in the centre column, although this displaced some of the children who sometimes sat in this seat. Sitting in this position meant that most of the children were unaware of her presence on a daily basis. It also implied, however, that the teacher was always aware of her presence as he could always see her.

Daily routine

The daily routine of the class was characterised by a lot of movement; children going in and out to the toilet, other children coming to the class with messages for the teacher and so on. Over the fieldwork period, the constant traffic of children around and in and out of the classroom began to change from apparent chaos into a clear routine, and patterns of movement began to emerge. For example, two children came around everyday at approximately 10.00 to collect the roll book from the teacher. Others came around with a basket of sandwiches at 11.00.

The school day officially started at 9.00 and finished at 14.30. It was formally divided into three parts, broken by the two break times—a short break of 10 minutes at 11.00 and a lunch break of 30 minutes at 12.30. Within these three periods, the times were broken down further by the teacher, who selected what subjects and exercises to do and the time given to each exercise. Schoolwork did not usually begin until 9.30 or so because some of the class received extra tuition with another teacher first thing in the morning. The members of the class who were there from 9.00 normally completed 'work sheets' or 'dictionary words' before the whole class came together. This was often a cheerful time as the teacher and children who were there were able to converse. As soon as the rest of the children returned from their extra tuition, the more formal class work began, starting with oral geography (which the children called maps), and then moving onto the core subjects—Irish, Maths and English.

Generally, the morning times were quite relaxed, the atmosphere was good and a lot of work seemed to get done. As the day progressed, however, the level of disruption tended to increase and the classroom environment became more tense as patterns of disruption began to dominate the time. This would interrupt the learners' flows of thought and the rate of task completion. Quite often some of the children were visibly irritated that they could not finish an exercise, and this sometimes led to outbursts of frustration. The more tense the atmosphere became the more everyone wanted to get out of the classroom and into the yard. The last period after lunch was often the most difficult time of day. Not only were the children's levels of concentration lessening, but quite often events or disagreements that had happened in the yard needed to be discussed or clarified. Home-time seemed to come as a relief to both students and teachers.

Summary

In this chapter, we have set the scene by providing a description of the school and classroom. The following four chapters will present the research findings relating to the children's concepts of intelligence, how these concepts influence the children's relationship to schoolwork and how the concepts are actively demonstrated and constructed in school.

6. WHAT DOES SMART MEAN?

As previously discussed, the term 'smart' was used in this study for a number of reasons, primarily because the term 'intelligence' is often associated with academic discourse and in terms of evaluation. Neither is 'smart' necessarily a word that the children would be familiar with, therefore it was important to find out what terms the children used when referring to intelligence in their conversations and discourse. This chapter will introduce some of the terms, identifying characteristics and concepts the children used when discussing intelligence and 'what is smart'. By way of introduction to the findings of this chapter, let us briefly review some of the children's comments about the characters in the *Harry Potter* book and film series, which came up in the course of the focus group discussions. These comments provide us with a number of terms familiar to the children and offer insights into the children's concepts of what is smart.

Harry Potter and Hermione

The children's discussions about the characters in the *Harry Potter* series of books and films provided an insight into the children's concepts of what is smart. Many of the class agreed that Harry Potter was smart for a number of reasons.

Robbie:	*Harry Potter is smart because of his glasses.*
Damien:	*Everything he does, like, he goes everywhere without getting caught.*
Ciara:	*He figures everything out.*

The first reason Harry was smart, according to Robbie, was that he wore glasses. This immediately conjured up the traditional association that people who are intelligent wear glasses. It also suggested that, in Robbie's eyes, wearing glasses is possibly an identifying visual characteristic of someone who is smart. It is interesting to note that none of the children in the class wore glasses. Also, Harry was smart because he was able to work out solutions to problems and, as Damien remarked, he did not get caught when he did things he was not supposed to do.

However, it was agreed that Harry's friend Hermione was the smartest.

Dillon: *Harry always sorts out the things and all by thinking and all, but she [Hermione] already knows about all the stuff and all, and where you'd find this and look for that and all.*

Ciara: *She's the smarter, that one…she's the smartest, coz she gets everything, in all her lessons, she gets everything out the first.*

Whereas Harry Potter was good at sorting things out, Hermione already knew a lot of things and also knew *how* to get information. Therefore, knowing a lot was considered more important than problem solving ability. In addition, Hermione was diligent—completing all her work and finishing it first—and she was also well behaved. These were other characteristics the children considered smart.

However, some of the children identified other aspects to Hermione's character too, which coloured how they viewed her.

David: *Hermione, she's smart, even in the way that she knows all her books, knows all the potions and all.*

Sharon: *She needs to brush her hair.*

Sinead: *She's a bit stupid.*

Researcher: *What do you mean?*

Jason: *She's a bit of a windbag [moans a lot].*

Sinead: *She could know loads of things, but say like…*

Jason: *She's real bossy.*

Researcher: *Bossy*

Jason: *She's a brainiac.*

David: *She's a brainbox.*

In this conversation, Hermione's smartness was undermined by some other aspects of her character related to how she was perceived by her peers. She did not pay enough attention to her physical appearance and could irritate her peers by the ways she interacted with them. She was bossy and moaned a lot, which Sharon called 'stupid'. In this way, Sharon introduced the notion that intelligence was related to ways of behaving and interacting socially. Jason and David introduced two new terms for someone like Hermione, who was good academically, but not particularly popular amongst her peers—'brainiac' and 'brainbox'.

Ciara also disagreed that Hermione was smart for another reason:

> *No, [Hermione is not smart], it's not smart to leave on your own, you're not really meant to leave, not meant to go places on your own…I know it's only a film but…*

Ciara's comment suggested that in her opinion one must be able to look after one's personal safety and stay out of danger to be smart, and so she introduced the notion that intelligence is related to personal skills.

A discussion about another character, Ron, presented other ideas of what is smart.

He was called smart by some of the children, primarily because he was the best chess player (which they stated was a difficult game), although other children disagreed.

Damien:	*No, Ron's thick.*
Mark:	*He doesn't know anything.*
Damien:	*He breaks his wand and all…*

Here, it is suggested that Ron was 'thick' for two reasons. Firstly, Ron did not 'know' anything. In this sense 'knowing' may have not only been related to knowledge of facts, but also to 'knowing' how to manage situations and to 'being in the know', that is being socially astute. The second reason that Ron was considered thick was related to clumsiness, and perhaps to a lack of physical co-ordination.

The final character the children talked about was, Malfoy, who was perceived to be smart for another reason.

Jason:	*[Malfoy is smart] cause he gets Harry into trouble.*
Dillon:	*He always starts on people.*
Steven:	*He always starts trouble and then Harry Potter gets everybody out of it.*

In this conversation, two ways of being smart were identified. Malfoy was able to manipulate social situations to further his own interests. He caused other people to get into trouble with the teachers and also started fights amongst his peers. Again, Harry was able to find a way to get out of trouble and sort out conflicts between peers.

Further insights into the children's associations regarding what is smart were provided in their discussions about the actors that play the characters in the *Harry Potter* films.

Damien: *[Harry Potter is smart] because he got lots of awards for the film.*

Sarah: *He made his own video when he was a little boy, he tried his hardest.*

Kieran: *Ron is the richest.*

David: *…and famous as well, and rich*

In this conversation, the children pointed out some features that in their view identified the actors as smart. These features reflect some of the traditional perceptions of intelligence, in that they were related to achievement, rewards or recognition of success, being creative, being diligent and making money.

These discussions of the characters in the *Harry Potter* films provided an insight into some of the characteristics that the children associated with being smart. Some of these were related to academic achievement, figuring out problems, knowing a lot and knowing how to acquire knowledge. However, the children mostly identified characteristics that were related to social and personal skills, such as maintaining good relationships with peers, sorting out problems, manipulating social situations, managing conflict, not getting caught and looking after one's personal safety. The importance of 'knowing', being 'in the know' and 'knowing how' were also characteristics that the children associated with smart people, as were characteristics such as diligence, good behaviour and attention to physical appearance. Finally, a number of 'stupid' characteristics were also identified, including being bossy, moaning, getting into trouble and getting caught and clumsiness.

Different sorts of smart

Having reviewed some of the characteristics the children associated with being smart, we will now look more specifically at the terms they used. So what were people who were smart in school called? One group of boys talked about someone who's good at everything being a 'brainiac', 'brain box' or simply 'brainy'. Another group of boys ascribed specific characteristics to 'someone who's good at everything'.

Researcher: *What do you call someone who's good at everything?*

Dillon: *If you're born with CT or something…*

Researcher: *IQ?*

Dillon: *Yeah, IQ.*

Kieran: *It's a gift from God, a geek.*

Steven: *You shouldn't actually jeer them, it's just that…freak.*

These boys were familiar with the term IQ but were not quite sure of what it means. However, it is clear that they link IQ to a notion that intelligence is innate, something one is born with, *a gift from God*. It was also clear that being a 'brainiac' had implications for how one is perceived by peers. Such people could be called 'geeks' and were considered to be somehow abnormal or 'freaks'.

Ciara talked about how she did not think 'brainiac' was a good word to use when talking about people who were good at everything, but that 'gifted' was better. Ciara used the term 'gifted' to describe people who were good at everything. She continued to explain that 'some people are gifted at singing; some people are gifted at knowing everything'. Similarly, Sarah and Noelle distinguished between being gifted at home or being gifted in school. They talked about how it is possible to be smart in different contexts.

Noelle: *You can be gifted at home, you have everything you want, but you're a dope in school.*

Researcher: *What do you mean by that Noelle, that's really interesting?*

Noelle: *Cause you don't know any of your maths and all, and you're gifted at home.*

Sarah: *You're not a dope, you're only learning slow, you're just learning slow.*

Researcher: *And if you're gifted at home, what kind of things do people that are gifted at home do?*

Sarah: *baking cakes, that's gifted and…*

Noelle: *Like washing up and helping your Nan [grandmother], you're gifted then.*

Sarah summarised this view by saying:

Say you're gifted at dancing, and another person is gifted at something, everyone is different cause they all have different gifts.

Asking 'what's the opposite of a brainiac?' also indicated a fixed concept of intelligence. The kinds of words used to describe such people were *not brainy*, *stupid*, *not intelligent*, *thicko*, *dope.* A dope is 'when you're not brainy', 'a bit stupid', a 'freak':

Ciara: *You're a bit stupid, a freak.*

Lisa: *Like you go on real stupid, you get a freak, I'd slag you.*

Noelle: *We'd be like, dope, what's 2 and 2?*

[Laughter]

According to this conversation, a dope is someone who is a bit stupid, in this case does not know basic mathematics. Again, it is clear that there are social implications to being a 'dope', as it might result in 'slagging' or teasing. The examples given of what a dope or a 'thick' person might do were not only related to academic ability, but to physical co-ordination, forgetfulness and absent-mindedness. A dope might, 'do stupid things, like kick the ball into your own goal or trip over a bag'. We recall that Harry Potter's friend, Ron, was called 'thick' because he was clumsy. We will return to the social implications of terms such as 'freak', 'dope' and so on in Chapter 9.

Intelligence and learning

Whereas there seemed to be general agreement among the children that being good at something implied an innate ability to do it, suggesting a fixed concept of intelligence, some of the children resisted the notion of innate stupidity, and preferred instead to think of stupidity in terms of learning. Previously, Sarah distinguished between being a 'dope' and somebody who is a 'slow learner'. In the following conversation, Kieran similarly distinguished between *stupid* and *not intelligent*.

Researcher: *So what do you call someone that's not brainy?*

Kieran: *Stupid*

Steven: *No, like, not intelligent.*

Kieran: *No*

Steven: *That's the only good word for it, not smart enough…*

Kieran: *He's not stupid, it's just like he'd have to listen like…and pay attention.*

Kieran was clearly uncomfortable with the word 'stupid' and suggested that it was more accurate to refer to someone having to 'pay attention' and 'listen'. Kieran made a distinction between intelligence and capacity to learn. He proposed that although someone who is intelligent may not need to listen and pay attention in order to learn, someone who is less intelligent can still learn, and become smarter through learning. This way of thinking is consistent with an incremental concept of intelligence—if a child is weak at something, it does not mean that he or she stupid, but that the child can get smarter at it by working hard—learning, listening and paying attention. In this way, school was a place to learn and provided a valuable experience.

In sum, it seemed that the children entertained notions that intelligence can be both fixed and incremental. Another concept of intelligence was also presented by the children: the idea that intelligence could decline was introduced by David during a conversation about learning. David said that one of the reasons why one needs to learn is 'so you don't get stupid'. Sinéad also talked about needing to go to school so 'you won't be stupid', which implied that stupidity is something that can exist already and be overcome by education. School was important in another way. Not only can one get smarter in school, but one can also 'get stupid' if one does not learn and go to school.

Discourses influencing the development of concepts of intelligence

The children's discussions provided an insight into the popular discourses that influenced the development of their concepts of intelligence. It is possible that the children picked up terms such as 'brainiac' from media discourses. For example, 'Brainiac' is an extremely intelligent comic book character, often appearing as an opponent of Superman, and there is also a TV programme presenting science experiments called 'The Brainiacs: Science Abuse'. IQ is also a term that is widely used in media and educational discourses.

Similarly, theories that are increasingly discussed in educational settings, such as Gardner's Theory of Multiple Intelligences, may have been reflected in the children's idea that there are different sorts of 'smart'.

We will briefly look at two of the children's discussions about how intelligence is contextual and their particular understanding of the term 'gifted', which have clearly been influenced by wider social discourses on the importance of education, valued skills and the relationship between educational achievement and having access to resources.

Smart is contextual

One theme arising through the children's discussions was related to the relevance of knowledge acquired through schooling. As highlighted above, the girls argued that one can be 'smart in school', whilst being a 'dope' at home, or vice versa. According to the children, there were different sorts of smart and one could be smart in different contexts. Although many of the children thought that one can learn to be smart in school, it was debated whether one needed to go to school to be smart. Intelligence is different to having a capacity to learn. David said:

> *You don't need to be good in school to be smart, you go to school for an education.*

In this way, David distinguished between getting an education and being smart. Dillon talked about the distinction between being smart in school and being smart on the street.

> *In school, it's like different questions than on the street, it's the way all your mates ask you and all,…like some people know better than you do…it's just like on the street, you know things that them other people don't know and you're much more brainy than them like.*

Being smart on the street was called 'being wise' by some children. So the next question was whether it was more important to be wise or to be smart in school? Two boys argued about this:

Jason: *Wise*

David: *Smart in school and…*

Jason: *And wise outside school.*

David: *You have to get a good education cause…*

Jason: *You have to be wise outside school to know what to do and all.*

David: *Yeah but, if you're smart in school you get an education for your good job…*

Jason: *What if you get lost?*

David: *You get a good education for your job.*

Jason: *What if you get lost, what job can you get?*

People who were smart outside school were called 'wise' by Jason. In this conversation, David argued that it was important to get an education to increase employment opportunities, and he seemed to value this highly. Although Jason did not argue that getting an education was not important, he did emphasise the importance of 'knowing what to do' outside the school, and arguably the academic setting. 'Knowing what to do', according to Jason, is related to being able to look after yourself outside school and being able to use common sense. Simply put, Jason and David were arguing about whether developing academic skills and achieving in formal education is more important than the development of personal and life skills. It is clear that the boys were familiar with, and were trying to make sense of, the wider popular discourse about valued skills in society, as discussed in Chapter 2. This takes us back to the importance of the formal recognition of non-academic skills, what Jason calls the skill of 'knowing how to get through life,' as put forward by NESF (2002).

Intelligence and having access to resources

We saw that some of the children preferred to use the term 'gifted' when talking about someone who is intelligent. The term 'gifted' is used in educational discourse when describing children who are intellectually advanced for their age. However, this term was not simply related to intelligence. Ciara adopted this term, but put her own spin on it by linking 'giftedness' to having access to resources. Ciara talked about how a 'gifted' person is someone who is spoilt, someone whose parents could buy them anything they need to do well in school.

> *…like they have everything in their room…like your mam would go out and buy you a proper, 3 or 4, around 5 bottles of paint one day and the next day she'd go out and get you more, and the next she'd go out and get you around 100 euros worth of clothes and the next day…*

Ciara was not the only person in her class to make this connection. In all the focus group discussions with the children, the notion that being smart was linked to having access to

resources was voiced. The term ‘gifted’ not only referred to people being ‘gifted’ in different ways, but also to ‘having anything you want’.

In a conversation about the film character Richie Rich, some of the boys argued that rich people are brainiacs, ‘cause they get the best attention and all that, and they can boss their teachers around’ and ‘you can get your teacher assassinated’. In this way, they argued that if they were wealthier, they could have more influence over their school experience. Although this idea may have been influenced by the film Richie Rich, it was clear that other children in the class perceived that the brainiest boy in the class was better off financially than they were. They identified this boy as being smart in various ways; however, some children also perceived that he was wealthy because of his clothes and particularly his expensive runners. The perception that the brainiest boy in the class was also the wealthiest confirmed for some of the children the link between smartness and having access to resources. This also provided some children with a justification for why they were not smart or able to learn as easily as others.

The reconstruction of the term ‘gifted’ by Ciara is an example of how children are not simply passive absorbers of cultural discourses, but can absorb and recreate the meaning of discourses to make sense of it from their own point of view (Devine, 2003). In this way, culture is itself changed through discursive processes, which generate new frameworks for meaning (Haste, 1999).

Summary

In this chapter, some of the terms, identifying characteristics and concepts the children used when discussing intelligence and 'what is smart' were reviewed. Some of the terms used to describe people who are intelligent or not intelligent included: brainbox, brainiac, brainy, gifted, having IQ, stupid, thicko and dope. These terms demonstrated that, according to the children, there were different levels of intelligence and that this had implications for how one was viewed by peers.

There were some identifying characteristics of smart children. These included various characteristics related to intellectual ability, such as being knowledgeable and being able to solve problems, or physical ability, such as being physically co-ordinated. Sometimes smart children can be visually identified, for example, they wear glasses or wear expensive clothes, implying that they have access to resources (gifted). Smart children also get recognition and rewards for their smartness. Many characteristics, however, were related to social interaction and behaviour, such as being well behaved and hard working, not getting caught (whilst still doing what you want), being able to sort out conflicts, being able to handle oneself socially and getting others into trouble to further your own interests. Quite an emphasis was also placed on personal skills, such as knowing how to look after oneself and how to take care of physical appearance.

According to the children, being smart was contextual. There were different sorts of smart and one could be smart in different environments. Some people were good at academic work and some were good at doing things outside school. These discussions also suggested that the children entertained fixed, incremental and decremental concepts of intelligence.

It was suggested that people were gifted in different ways and that they had innate capacity for different skills. This implied that the children inferred that there were different sorts of fixed intelligences. The children also entertained an incremental concept of intelligence, especially in relation to skills they found difficult. The children distinguished between being smart and having a capacity for learning. They argued that one does not need to be smart to learn, and that learning can make you smarter. In addition, it was argued that intelligence can decrease if one does not learn, suggesting that some children entertained a decremental concept of intelligence.

Finally, the children's discussions indicated their awareness of some of the wider educational and social discourses about the importance of education, valued skills and the relationship between educational achievement and having access to resources.

7. CHOOSING TO LEARN AND LEARNING TO CHOOSE

In the previous chapter, some of the terms, identifying characteristics and concepts the children used when discussing intelligence and 'what is smart' were reviewed. This chapter will focus on how their concepts influence their relationship to schoolwork, their aspirations and their motivation to achieve academically. We will begin setting the context of the children's educational experience by outlining their general views on school.

What's the point of school?

Through the discussions with the children about the subjects and activities that they did in school, it became apparent that for them learning was a conscious activity. They realised that they could choose to learn or not. They had opinions about the value of the subjects they had to learn and prioritised them accordingly.

They were asked about the point of school and why they needed to learn. When asked what the point of school was, various goals were named. These were related to general personal achievement, such as 'learning'; self-progression, such as 'getting an education'; and 'building up skills' and increasing employment opportunities so they could 'get good jobs'. The children also recognised that school provided opportunities to build social relationships and 'meet your friends'.

When asked 'why do you need to learn?', one clear theme that the children articulated was that education was a preparation for adulthood. As Connor put it:

> *…Cause when you grow up you can do anything you want then, once you stay in school.*

Connor felt that staying in school was important for his future life choices. School was related to improving quality of life. The point of school was 'to go to college', 'to get a good job', 'to get a better job' and 'to get a good life'. There was a sense that a good education would provide them with new opportunities and a better life than their parents had. Through schooling, they could improve their socio-economic circumstances. Some children felt that school was important because their parents had hopes for their futures, as Jason put it: 'your ma wants a better life for you'.

Lisa thought learning was the most important thing to do in school because it provides a general knowledge base:

> *Because if you didn't go to school you wouldn't get an education you wouldn't know anything. You wouldn't know how to spell or anything like that, count or stuff like that so it is worth going to school for.*

Geraldine felt that most things you learn in school will help you in later life:

> *All the stuff that you learn is going to help you later in life. Like geography you could go off and travel the world and if you didn't know your geography you'd get lost straight away and if you didn't know your English and your Irish, just say some say some part of this country only spoke Irish then you couldn't get a job over there.*

Steven pointed out that there were negative possible consequences of not going to school.

> *…Cause if you don't learn, like if you don't go to school, how are you meant to get a good job when you're older? Like, you'd just be staying at home, lying on the streets doing nothing when you could be off doing a successful job.*

It was clear from these responses that the children generally perceived that school had a particular purpose. School was not simply a place for children to spend time or be looked after, but its purpose was to prepare them for the future and for adulthood, specifically so that they could get jobs.

When asked why they wanted jobs in the future, the children talked about becoming financially independent and building a future for themselves. Most said that they wanted a job 'so you can get money like'; 'buy your houses and all that'; 'pay your bills and your tax and get your house paid for', 'and your car'. Various conversations with the children highlighted the importance of family to them. Many aspired to having their own family and hoped to be able to support and provide for their family. However, jobs were not only seen as a means of becoming financially stable and providing for family. Some children talked about how a job would be enjoyable and satisfying. Steven said a job would be good because 'you're doing new experiences, once you get a job'.

Of the 17 children who filled in the survey, 12 had a specific job/career in mind when they left school. These included careers in singing, dancing, football, Gaelic football, beauty therapy, hairdressing, carpentry and veterinary. Some children talked about the possibility of further education, going to college, getting a degree or trying to get a scholarship. One hoped to go to the USA. When asked why they aspired to do these things, seven of the children said that they would enjoy their chosen career and three said that they wanted to better themselves.

Smart is knowing what to do

The children perceived that there was a purpose and value to school. Following on from the survey questions about what the children understood as the point of school, we decided to enquire as to what their opinions and perceptions were of their daily experiences of learning in school.

It became apparent that the activities the children thought were most worthwhile were activities that they perceived would be of particular benefit to them when they were older. Worthwhile activities were those in which one learns how 'to do' something and to 'know what to do' to get through life. Smart people know how to do things, as Cormac said, 'smart is knowing what *to do* and all'. Unequivocally, being stupid meant that 'you don't know how to do anything'. Jason stated that if you were stupid:

> *You wouldn't know what to do, lead your life.*

School is important, according to the children, as it reduces one's potential to be stupid 'because you learn about things and places' and 'you learn things to do'. As was demonstrated in the previous chapter, a number of the children entertained an incremental concept of intelligence and talked about how one can become smart if 'you keep on learning and reading books all day' and if 'you learn, listen and try your best'.

Some children thought that in school they were learning what they needed to know for the future. Specific subjects that were considered worthwhile were named. Some subjects were worthwhile because they related directly to particular careers, for example, Dillon thought religion was the most worthwhile subject to do in school:

> *…Cause if you wanted to become a priest you'd have to learn all about it you would.*

Other subjects were worthwhile because 'they teach you' practical skills. Dillon said science is a worthwhile subject because it 'teaches you how do things like rewire a plug'. He thought the general knowledge he learned in school would come in useful in the future:

> *…Cause when you're on a plane and you like crash down and something and like you have a compass and you know where the countries are and you know where the nearest country is and all.*

Robbie thought maths was very important:

> *[Maths] is good, say because you get older and you are in a business and you have so many things and you sell a quarter and you don't know what it is.*

Subjects were viewed as worthwhile by the children if they were useful and could be applied in practical settings. The children talked about how they like to learn how to do things that are useful:

Researcher:	*What kind of stuff would you like to learn in school that you don't learn?*
Connor:	*Use your bankcard…*
Dillon:	*Sort your taxes and all, insurance…*
Kieran:	*Learn how to drive…*
Dillon:	*The young ones would probably take care of children…*
Connor:	*Home-economics…*
Dillon:	*Learn how to take care of babies when they're older…*
Connor:	*How to put a nappy on.*
Researcher:	*Would you like to learn how to do that Connor?*
Connor:	*No, no!*

As can be seen in this conversation, the boys thought that some knowledge was particular to gender. Some of the girls also talked about gender-specific knowledge. Sarah talked about how school is an important place to develop social and personal skills. She thought that one needs to learn how to look after oneself and have the skills to raise a family:

> *You need to learn about how to take care of yourself, how to evolve a family and all that, how to bring people in the world and all that.*

Another reason why some subjects were considered worthwhile was because they were helpful for day-to-day life. For example, Sarah said she loved singing because it helped her on a daily basis: 'it's quiet, it settles your nerves'. Activities that the children said they would like to do more of included learning different languages, a greater variety of sports, creative subjects such as drama, art and dancing. They wanted to do more of these activities not only because they were enjoyable, but because these activities were perceived as providing them with useful skills for the future.

Knowing how to read and write

Most of the class agreed that two of the most important things to know how to do were reading and writing. The usefulness of these skills was apparent to the children at many levels. On a daily basis, being able to write and pass notes as a way of communicating with friends in the classroom was advantageous. In terms of future career aspirations, Steven could see that being able to read and write was essential:

> *Like if you're going to become a singer and you don't go to school, how are you meant to write your songs? How are you meant to read what you're going to do?*

Dillon talked about how important reading and writing were because you need to know how to fill out forms. Cormac felt that spellings were very important because they help you to read and get a sense of achievement.

> *Spellings, because you keep on doing spellings, you get better and better at them and you get to read a few words.*

Lisa felt handwriting was important:

> *Because you are getting, because if you are going to college or anything, you have to have good handwriting and stuff like that.*

The importance of reading and writing to the children was also apparent from the researcher's observations in the classroom. During reading tasks and when practicing handwriting, the class were generally very quiet and concentrated. On a number of occasions, the researcher overheard conversations between children about the books that they were reading. They discussed the content of the stories and how quickly they were reading the book. In fact,

reading was one of the only academic activities she heard them talk about outside of class time. It also became very clear that the children recognised that reading was a task you can get better at and that your level of expertise in reading was a good indicator of how smart you were. Children who were good readers were identified and respected. Alex was considered to be a very fast reader and Sinéad was too. As Connor put it 'you can see the steam coming out of Sinéad's pen when she writes'. Reading and writing exercises were the key ways through which the children felt you could demonstrate that you were smart.

'Work' and learning

Whilst most of the children clearly placed a value on what they learned in school, further exploration with them about their day-to-day experience of learning provided further insight into their motivation to do schoolwork.

The findings of the survey questionnaire showed that the children differentiated between academic subjects, including Maths, English, Irish, History, etc, and non-academic subjects, including PE, football, dancing, singing, art and playing games. It was clear that there was a lot of motivation for and importance attached to non-academic subjects. For example, when asked in the survey *what is the best thing about school?*, 12 out of the 17 children who responded named non-academic subjects, such as playing football, games, PE, going on trips, singing and dancing and art as the best thing about school. The responses of the remaining 5 children were rather negative—two said the best thing about school is 'doing nothing', 2 answered that there is no 'best thing' about school and 1 said the best thing is 'going home'.

Conversely, when asked what *the worst thing about school* was, 14 named 'everything', 'work' and 'homework'. Only 1 said there was 'nothing' she did not like about school. Again, when asked *what they didn't like doing in school*, 8 of the children named an academic subject (5 named maths) and 6 simply said 'work'.

There were a number of possible reasons why the children said they did not like 'work'. One reason was because they were frequently bored in class. When Mark was asked if he could see the point of school, his response was overwhelmingly negative.

> *No, nearly most of us in the class hate school…*

The reason why there was not any point to school was that it was boring. The levels of boredom expressed by the children may lie in the fact that they could not see the relevance of a lot of what they did in school. As Connor said: 'sometimes the Sir teaches you things that you're not going to, like, do in the future'. Kieran also echoed this opinion 'sometimes there's no meaning to doing it, there's no point'. Repetition of exercises and going over the same topics again was a contributor to this boredom. As Kieran explained:

> *Sometimes. Like we're reading a book now, and the Sir like, anytime if it's a short story, the Sir keeps on going over it and over it again…It's annoying that is.*

Boredom was also the main reason that people leave school, according to the children, because '…they just get a pain doing the same thing', 'they get sick of it'. Lisa said that children leave school early:

> *Because they get bored. They get bored of doing, coming to school every morning and like writing. They want to get jobs.*

Despite the levels of boredom the children experienced on a daily basis, it was clear that they recognised that school, however boring, was also providing for their futures.

For many of the children, the subjects they perceived as most important were in fact the ones they found the most difficult and had no choice about doing. When asked in the survey what they tried hardest at, the majority said they tried hardest at academic subjects (6 said 'work' in general, 5 said one particular subject, and 2 said reading/writing.) They tried hardest at these activities because they wanted to improve themselves and recognised that these subjects were necessary for their futures. A number also perceived that they simply had to do these subjects, and two children perceived that they would be punished if they did not try hard in these subjects.

Although they attached importance to academic subjects, they found it hard to be motivated and did not feel particularly confident in their ability in these subjects. From the survey, it became clear that many children in the class lost confidence in themselves when they did not achieve what they considered to be a satisfactory result. Six said that they felt bad about themselves in school when they 'got their work wrong', when 'bored' or when they 'had to do

work'. This, in turn, led to a dislike of subjects that they found difficult. Maths in particular was a subject that a number of the children said they did not like because they were not good at it.

In addition, for many in the class, the subjects they thought they were best at (non-academic) were the ones they perceived were of least importance. These subjects were seen as fun and enjoyable, without the same pressures as some of the other subjects. They were not evaluated in the same way as subjects such as maths.

The negative feelings associated with 'work' were reinforced in two ways. In some instances 'work' was used as punishment for bad behaviour. Connor and Dillon were often given 'lines' because of bad behaviour. This punishment was greeted with frustration by the boys because they both considered writing a very important skill. As Dillon put it:

> *…If we get lines and we do them, the Sir only has a look at them and then just rips them up he does, and throws them in the bin…*

In a similar vein, the subjects that many children thought they were best at were offered as rewards or incentives for good behaviour (such as art or PE), as opposed to being done on a regular basis.

The children perceived that there was a hierarchy of knowledge in the classroom. Academic subjects were considered more important and valuable than non-academic subjects. Certainly, the perception of this hierarchy was supported by the process of using specific activities as a reward or punishment. It is possible that the children rebelled against this hierarchy by actively engaging more with the non-academic subjects. However, the findings indicate that many of the children genuinely felt that they were better at subjects like art, music and sport, which do not focus on logical-mathematical and linguistic intelligences.

In sum, many of the children found academic subjects the most difficult and felt that they were more likely to fail in these subjects. Although they appreciated the importance of these subjects, they found learning them boring. Many of the children did not feel smart doing the subjects they perceived as most important. They wanted to spend more time doing activities that they thought they were good at, they enjoyed and which gave them a sense of satisfaction and achievement. In short, they wanted to do activities that made them feel smart.

Summary

From the findings presented in this chapter, we see that learning was a conscious activity for most of the children. They were aware that they had to learn in school so that they could provide for themselves in the future. There are many skills in which one can achieve competence, so it was a matter of deciding which skills are important or are worth putting time and effort into improving. There are the skills from which one can achieve a sense of personal satisfaction, there are those which one simply needs to learn to get a good education and there are those which teach practical skills and show you 'what to do.' Most of the children were motivated to achieve in skills they valued and thought were useful. Some academic subject areas, such as reading and handwriting, were enthusiastically responded to; however, many of the children found these difficult. According to the children, smart children were good at these subjects.

It was clear that the children made decisions about how they would use their own time and made choices about what activities they were going to engage in, not only regarding academic subjects but also in relation to other activities.

These choices were made in a strategic manner, whereby they prioritised what they wanted to do, what they wanted to achieve and on what they would spend their time. It was important to many of the children to be able to make their own decisions about life, from day-to-day and moment-to-moment. Being smart was not simply about being able to make choices, however; it was also about being able to follow through with these decisions.

From the children's discussions, it can be seen that classroom experience has the potential to knock self-confidence in academic ability—either the child loses confidence or else resists the classroom experience and finds a way of thinking about his or her perceived lack of performance: 'no choice about it, you just have to do it'; 'not worth learning, useless'; 'boring, can't see the point'; 'no good at it.' Quite often, distraction from academic work is understood as work avoidance (if you do not do the work then you cannot experience failure). This research has shown that distraction is not simply about wanting to avoid work, but in some cases it is clearly a way of work management based on a decision to focus on achieving in activities that the children felt they were good at and made them feel better about themselves. For the children, it was important that they did activities that helped them feel smart in school.

8. BEING SMART IN SCHOOL

The previous chapter identified that the children in this study prioritised certain academic and non-academic activities according to how worthwhile they thought they were and how difficult they were. Observing the activities that went on in the classroom gave the researcher a valuable insight into the kinds of classroom skills that were valued by the children. It became very apparent that academic work was but one of the things that went on in the classroom. As far as the children were concerned, there were lots of different activities that were important to do and lots of goals to be achieved.

This chapter reviews some of the ways in which the children tried to show that they were smart in school by successfully negotiating the school environment. This required achieving a number of goals, which included appearing to be relatively successful in schoolwork; impressing the teacher through apparent good behaviour; maintaining and building positive relationships with peers and, most importantly, maintaining personal autonomy in the school environment.

Appearing smart in the classroom

An important aspect of the children's daily life in the classroom was to appear to classmates, friends and to the teacher to be relatively successful at schoolwork. Quite a lot of importance was attached to doing well, achieving good marks and getting recognition for the effort put into schoolwork. As we have already seen, many children thought that they could become smarter if they 'listened and learned' and worked hard to achieve personal academic goals. However, there was also a competitive element to being smart, as smartness was something one could compare. The notion that some children are more intelligent than others was aired. Lisa talked about a child who was 'intelligent' because he had skipped 3rd class. She said that 'he knows everything and he's ahead of everyone'. Intelligence, therefore, included knowing more and being better at schoolwork than people your own age.

Therefore, trying to appear smart resulted in certain kinds of behaviour that aimed to demonstrate intelligence. These behaviours included trying to be the first to finish an assignment, finishing work as fast as possible, demonstrating knowledge by calling out answers and getting the answers right.

Being fast at what you do

One way of appearing smart in the classroom was by being fast at whatever it is one was trying to do. The speed at which a task was completed, for example handing out copybooks, was perceived by many children as an indication of how easily the task was completed. Smart people were able to think, respond and act quickly. Mark told me that a brainiac is someone who is:

> *Very smart like, they ask you anything and you just give it to them, like just say…say a [person] asks you a real hard thing and you just gave it to them, like.*

Connor gave another example, which was related to playing football. A brainiac can make a quick decision and knows what to do in a situation:

> *…Cause you'd know what to do in a situation when they're coming at you, like, if I am here and I point it at this angle and I kicked that point.*

In the classroom then, it was not only important to finish work but also to finish it as soon as possible. As Sean put it:

> *If you're smart, you're first to finish your work.*

It was very important to demonstrate that you were finished your work, and many children took great pride in shouting out 'finished'. Shouting out 'finished' was often accompanied by a physical reaction—such as standing up, or putting up a hand to wave the completed work in the air. Even if the teacher assigned other work to those who had 'finished', the rest of the class knew that someone else was finished before them. Finishing work first had a number of functions. Firstly, it provided a sense of achievement in completing a task. Secondly, it provided an opportunity to assess how fast you were in comparison to your classmates.

Getting the right answer

The children perceived that smart people were knowledgeable. Knowledge included being able to spell a 'big huge word' when asked, already knowing 'stuff' that is taught in school and knowing about stuff that one learns outside school. People who know a lot get the right

answer. Although it was smart to finish work first, Damien said it is only smart to finish work first if you get it right:

> *If you're the first one to finish and you get it all wrong, that's not smart like, that's just putting answers everywhere just to finish first.*

Another way of demonstrating smartness then, was to get the right answer. Apart from working out the right answer, there were many other ways the children were skilled in demonstrating that they had the right answer. Some of the most straightforward ways included copying answers from a book or magazine and asking a classmate. Steven talked about how people beside him, in front of him and behind him ask him for the answers by signalling to him:

> *I just help them, cause they're always like that [signalling to him]…so I just tell them the answers.*

Geraldine talked about how people also copy her work:

> *Everyone asks me cause like everyone thinks that I'm the smartest one in the class…And start copying off what I do.*

Another way to get the right answer was to wait until the teacher completed the questions on the board or orally and then to write the answers down. In this way, the copybook would not be spoiled with 'x' marks, which was very important as the copybook provides the evidence of 'good' work to others—teachers, peers and family.

Cheating or copying work from other people was not seen as an unacceptable behaviour, rather it was seen as a skill. It was not necessary to 'know the right answer'; instead, in line with the current 'information society', it was important to know where to find the right answer. What was considered unacceptable, however, was getting caught in the act of cheating or copying because this could result in getting into trouble with the teacher. For example, one day Mark copied a review of a film from a magazine for his homework, which the teacher identified. The teacher asked him about it in class the next day and Mark admitted that he had copied it. Rather than making him appear smart in class, this public discussion about his schoolwork revealed that he had been caught trying to appear smart and led to him being reprimanded, teased by his classmates and feeling embarrassed in front of his peers.

These examples show how, for most of these children, the outcome, or result, was considered more important than the learning process. Being smart was about having the right answer documented, rather than about learning how to get the right answer. This was highlighted by the importance some of the children attached to not having any 'x' marks in their copybooks. There was reluctance on the part of the children to show that they were struggling with the process of getting the right answer. In this way, it can be seen that the children were aware of the value placed on assessment in school, and rated 'good work' more highly than the learning process.

In terms of concepts of intelligence, these examples provide two insights into the children's concepts of intelligence. Being smart was associated with getting the correct answers easily, without struggling with the process. This train of thought indicated fixed concepts of intelligence. Also, struggling with the process led to feelings of inadequacy whereas getting the right answer led to feeling smart. It was also smart to know how to get the correct answer through other skills, such as cheating and copying from the board. These skills, however, are not valued within the education system.

Reinforcing being smart in the classroom

There were a number of examples of how certain children, who were considered to be smart by their peers, reinforced this perception of their smart position in the class group. One way was by trying to influence the pace of the classroom work.

Martin was one of the most responsive children in the class and tended to call out answers and ask many questions. He was usually the first person to finish an exercise and call out 'finished', and he normally got the correct answers. The boy Martin sat beside also seemed to have little difficulty with his schoolwork. On many occasions, these two boys showed how they were able to finish an exercise first and get the right answer while doing something else, like playing games, drawing pictures or writing lists of football favourites. In this way, they displayed to their peers their ease with the schoolwork. Because Martin generally demanded a lot of attention from the teacher, the teacher's gaze was often directed to the part of the classroom where he sat.

Martin attempted to influence the pace of classroom work in a number of ways. As he was usually finished an exercise before other children, he had time left over. He would then get

permission to go out to the toilet or, if he had already been out many times, he would go up to the bin. He spent a lot of time moving about the classroom—going to the bin, and back, out to the toilet and back. Even if he was told to stay in his seat, he would shuffle about or start asking the teacher questions. This movement resulted in the disruption of the 'work' atmosphere within the classroom. It also led to his classmates feeling pressurised to complete their work quickly. The noise level and the levels of tension within the class began to increase as the class became distracted, which would in turn hurry the pace of the exercise. Martin was aware of the impact of his movement on the work environment, and he used it to his benefit by influencing the pace of the exercises and causing them to finish. Martin's influence on the pace of exercises frustrated a lot of the children, who argued that they did not have time to finish their exercises.

Smart ways of behaving

Throughout the discussions with the children about 'what's smart?', the notion that smart was related to a certain way of behaving was introduced. There were many different types of smart behaviour, which we will review below.

Goody-two-shoes and trouble makers

One of the most important goals in school was to remain in favour with the school authorities, and particularly with the teacher. According to the children, smart people behaved well so as to keep them in favour with the relevant authorities. Many of the children perceived that being in favour with the authorities would result in positive outcomes and encourage self-progression. The girls in particular talked about how a person who was good at everything could be called a 'goody-two-shoes' or a 'lick-arse', like Hermione's character in *Harry Potter*. Such people did not get into trouble, even when they did something wrong, as Kieran and Connor explained.

Kieran:	*like, if they do something wrong, they won't get into as much trouble*
Connor:	*like, for today, like you know Johnny, Johnny…he didn't do all his homework, and cause he does it all the time, the Sir let him away with it, but if that was me or Kieran or Dillon…*

Connor thought that Louise too was smart because she was quiet, did all her work and rarely got into trouble.

Conversely, there was a clear link made between 'not smart' and getting into trouble. Children who get into trouble are at risk of getting thrown out of school and therefore of being viewed in a negative light. Getting thrown out of school not only resulted in exclusion from school, but in potential exclusion from the peer group also. When asked what the worst thing about school was, Dillon stated that the fear of getting expelled was the worst thing because he would miss all his friends. The boys in particular often talked about how some children 'end up in a school like Don Boscos'[1].

Discussions about exclusion arose during a conversation about the footballer Roy Keane. Although Roy Keane reputedly retired from the Irish football team in the spring of 2003, some boys talked about how he obviously was not smart as 'he got hisself thrown out of the team' during the World Cup 2002. Similarly, the boys also referred to how Mick McCarthy, then manager of the Irish football team, was not successful because he had also been sacked from his job. Although it was fact that both Roy Keane and Mick McCarthy had resigned from the team and had not been dismissed, the boys interpreted their actions, which resulted in exclusion from the team, as failure.

There were other reasons why some children did not think Roy Keane was smart.

Ciara:	*he's not smart coz he won't play for the Ireland team and the Ireland team need him…a smart person would tell the truth about why he doesn't want to play*
Geraldine:	*he told it in the newspaper yesterday*
Ciara:	*he didn't, he didn't, he made up an excuse*
Sarah:	*can I say something, he made his choice [pointing to a photo of Roy Keane], he made his own choice, and he doesn't want to be on the team*

Ciara thought Roy Keane was not smart because firstly, she perceived he was dishonest and secondly, she argued that he did not place loyalty to the Irish team as a priority. These were

1 The Don Bosco Houses offer a comprehensive care system for boys and young men who, for whatever reason, are out of home.

characteristics that Ciara considered to be smart. Ciara was often called a goody-two-shoes by the other children. She was often sent on errands and made an effort to get on well with the teacher. It is likely that Ciara's opinions were also influenced by the public debate about Roy Keane at the time, which was very critical of his actions. Ciara was concerned with remaining in favour with not only the authorities, but also with people generally.

Sarah, on the other hand, defended Roy Keane because she argued that he made a choice, which is was entitled to make, and followed it through despite the public disapproval of his actions. Sarah often made clear that personal autonomy and exerting choice were very important to her. Sarah explained what she meant by smart:

> *Smart is like when you're clever, smart is a bit better cause you know when you're smart you can choose you're own things to do, you can choose not to smoke, you can choose this…you know if your friend asks you to smoke or have a drag, you're clever if you say 'no'.*

In this instance, Sarah used an example of a situation where she might be offered a cigarette. She said that saying 'no' would be clever, not because it is wrong to smoke but because she made a choice and followed it through. Sarah thought that knowing one's own mind was smart. Smart was not simply about being able to make choices, however, it was also about being able to follow through with decisions. Sarah often asserted her opinions and challenged the teacher.

Good behaviour versus self-expression

This dialogue between Ciara and Sarah was reflective of a greater ongoing debate in the classroom between the children about which was more important in terms of self-progression—good behaviour, which often resulted in being rewarded, or exerting one's own choices, which could result in punishment. The intensity of this debate was perhaps not surprising, considering the main classroom dynamic revolved around being rewarded or punished by the teacher. Significantly, punishment was weighted more heavily in the children's eyes because it normally resulted in negative repercussions for the class group as a whole, not just for the individuals involved. Rewarding of actions, on the other hand, normally resulted in praise or positive affirmation for the individual involved. In this way, conforming to authority was an incentive to the children.

Taking a closer look at the patterns of praise for good behaviour gave further insights into the link between behaviour and intelligence. The teacher sometimes praised good behaviour by saying 'that was an intelligent thing to do', 'that's smart', 'that's using your cop on'. Some of the children then related being intelligent to 'being good'. This connection may have been affirmed by the teacher's usage of words, such as 'good', in the classroom. If, for example, the teacher was praising a child for good schoolwork, or behaviour, rather than saying 'that was good' or 'good work', the teacher would simply say 'good girl'. In this way, it is possible that the children internalised the notion that it was not their work which was good but they themselves were good, and consequently, if their schoolwork was not good, that they were 'not good' people. In the survey questionnaire, a third of the children stated that they 'felt bad about themselves' when they did not do good work in school.

Being in trouble with the school authorities was a real worry for many of the children. They associated getting into trouble with failure. However, they also questioned school—the way they were treated, what they were expected to learn and spend their time on. At the same time, neither was being a 'goody-two-shoes' considered in a favourable light by the children, and it was a term that was used to tease other children. Being a 'goody-two-shoes' implied that the relationship with the teacher was prioritised over relationships with peers. It also implied that impressing the teacher and conforming to authority was prioritised over fulfilling one's own desires and needs.

This debate about good behaviour versus self-expression is in many ways very standard for children of this age group. However, it is possible that this debate is reflective of the changing discourse around children in contemporary society. As we saw in the literature review, the view of children has changed in recent years, from regarding them as passive, dependent, incompetent to seeing children as being actively involved in constructing their lives, being autonomous and having a voice. The National Children's Strategy in 2000 placed a greater emphasis on the importance of listening to children. Goal 1 of the Strategy states that 'children will have a voice in matters which affect them.' Perhaps the children in this current study were aware of these wider societal debates about childhood and were engaging with them, trying to find the right balance between being conformist and being autonomous.

Reinforcing smart behaviour

As being smart was about 'not getting into trouble' and 'not getting caught', there was competitiveness about doing what one wanted without getting into trouble. There were many attempts, therefore, made by various children to get others into trouble and thwarting others' plans to get into the teacher's 'good books'. Some children were well known for this.

Sinéad was described as being smart by her classmates. She often finished her work first and was a very fast reader and writer. In terms of personality, she was an extrovert, rather vocal and demanded a lot of attention. Sinéad was called smart on a number of occasions by the other girls, mainly because she would boss them about and sometimes got them into trouble. As Sarah put it: 'Sinéad is smart because she can get us into trouble, that's being smart'. The commentary about Sinéad, and other children like her, was similar to the discussion about Malfoy's character in *Harry Potter*.

Attempting to further one's own interests through undermining others was called smart by the children. Dillon gives an example of how it's smart to take advantage of someone.

Dillon:	*and if you're playing with your friend all day, and…and he walked off with somebody else, you'd just go, yeah, you're smart you are, you've been in me house all day…just say like if he was in your house all day and all, and at the end of the day he just goes off with another person*
Connor:	*getting his dinner in your gaff*
Researcher:	*using you kind of*
Dillon:	*yeah*
Connor:	*yeah*
Researcher:	*so a smart person might use you*

Some people are smart because they try to stay in favour with the authorities, others are smart because they manage to do what they want without getting caught, and yet others are smart because they try to further their own interests by undermining someone else. All of these ways of being smart have one common denominator: being smart is about self-progression.

Smart is exerting personal choice

The important thing for the children then was to find a balance between not getting into trouble and being a 'goody-two-shoes'. In this way, being smart was doing what you want without getting caught. There were many examples of how the children would do what they wanted without getting caught. These included simple actions like eating sweets in school even though it was forbidden, bringing things into school which were not allowed (Louise showed me how she carried a radio under her sweater) and finding ways of getting out of doing schoolwork. Below, we will review some of the ways the children manipulated the classroom rules to 'do what they wanted' and demonstrate their smartness.

Managing your own time

The importance of the daily routine in structuring the school day and the children's time was discussed briefly in Chapter 5. Despite the day being structured by the school and class time table, it was clear that many children placed a priority on having control over how their time was used in the classroom. The school day was not just broken down by the three official time periods (before little break, before big break and after big break); or by how the teacher structured the classroom activities; time was also broken down more minutely by the children. Counting the time was a central activity of the day. Children were always asking each other for the time or looking at their watches. On a number of occasions, it was evident that Connor was the time keeper. Classmates would ask him (or signal to him) that they wanted to know how much time was left before break time, and he would respond with hand signals. The time just before the breaks and just after the breaks were specific time periods, during which plans for the break-time games would be made or events that occurred during the break would be discussed. Also, the interludes in between lessons were distinct time periods, which could be taken as an opportunity for the children to discuss other matters.

Individual children also made decisions about how to break down an assignment, for example trips to the bin or the toilet were used by children to manage their own time, including providing breaks for themselves while completing an assignment and to delay beginning an assignment, or indeed to avoid doing an assignment. There were examples of children also going out to the toilet at opportune moments, to get out of doing something they did not want to do. Ciara and Lisa told me that if, for example, their class was being amalgamated with another class for a day and they did not want to go to that teacher's class, they would

sometimes ask to go to the toilet just before the classes would join so when they came back from the toilet the class was gone. Then they could go into any class. In this way, children maintained their personal autonomy in the classroom by managing their own time.

Controlling home–school communication

Trying to control communication between home and school was another way in which the children attempted to maintain a sense of autonomy. One example of how the communication between home and school was controlled was when letters were sent home. On a number of occasions, letters, including information about parent/teacher meetings and the parental consent forms for the research project, were scrunched up by the children and thrown in the bin.

In terms of attaining parental consent from parents for the individual interviews, it became clear that six out of the nine children all signed their parental forms themselves, using their parents' names. It is possible that they showed their parents the form or read it to them and then signed it on their parent's behalf. It is also possible that they simply made the decision to participate in the interviews themselves.

Situations when the teacher tried to establish more direct contact with the children's parents or guardians, were more difficult for the children to control and often resulted in more direct conflict with the teacher, such as the children refusing to be co-operative in terms of facilitating home–school contact or meetings.

Challenging the teacher

Another way of being smart in the classroom was to challenge the teacher. This was often done in subtle ways, for example pointing out that an exercise that the teacher assigned had already been completed, or pointing out that he had made a mistake on the blackboard.

There were also many situations where the children openly challenged the teacher about actions he took which impacted on them and argued their case or disclosed their discontent, despite the fact that this could result in further conflict. Challenging the teacher was not done as a matter of course; it was strategic. Sometimes the children challenged the teacher, knowing that it would have consequences, because they perceived it was important to stand up for themselves or what they thought was right. On some occasions, the children would try

to intervene in the teacher's disciplining of another child. Sometimes the children would also object to doing activities that they did not want to do.

This type of behaviour was called 'being smart' or 'cheeky smart', as Kieran put it. Sarah called it 'giving back cheek' or 'talking back to someone'. Although this kind of behaviour might have been interpreted by the teachers as defiance, for the children it was an action that aimed to maintain or promote their autonomy.

Maintaining communication with peers in the classroom

Peer relationships were very important in the children's lives. One of their main goals in the classroom was clearly the maintenance of friendships and the pursuit of important social interactions, such as organising games for break time, managing a disagreement or defending one's honour with peers. Although such communication was not permitted during lessons, the children found ways of achieving this goal in class time.

Communication through writing notes to each other was a common way for friends to interact. It was important, however, that notes would be passed without attracting the teachers' attention. Some innovative methods of doing this included scrunching up the note in a ball (as if it was discarded paper) and accidentally dropping it on the floor. Another way was to insert notes into a paper plane that the children would then fly to each other.

Other ways of attracting a friend's attention included throwing an object such as a pencil near to the friend's desk, thus creating an opportunity to move near to them, or finding a reason to borrow objects such as pencils, erasers and so on from each other. Communicating through hand signals and gestures were also common ways for children to talk to one another. All of these actions were conducted with one eye on the teacher.

There were many examples of how the children used the classroom rules to promote their own interests. Creating opportunities to move around the classroom provided ways for the children to continue important conversations or conflicts that were the main focus of attention during the day. The route taken to the bin or the toilet or the sink was rarely the most direct one. Taking a trip to one of these locations was often used as an opportunity to walk by a friend's desk, and thereby to give them a note, whisper something or even just give them a grin or a 'dirty' look. Certain areas of the classroom were meeting points, especially the bookshelf at the back and the bin at the front of the room. These were places where children

could meet to discuss matters that required more co-ordination. As the researcher sat at the back of the classroom near to the bookshelf, she sometimes overheard the brief conversations that went on there. It became apparent that a lot of discussions at the bookshelf were about organising play time—deciding what games would be played and setting up teams for those games.

Maintaining control of body and movement

One of the most subtle, but clear, ways that the children used to challenge authority and exert personal autonomy in school was through maintaining control of their bodies and movements. In the school environment, which is structured, regulated and controlled, being able to be autonomous in terms of one's own movements and to resist unwanted control by others was important. Monitoring children's movements is one of the ways in which children are controlled by adults. In school, for example, children are instructed on where to sit, how to sit and how not to sit, how to hold their books, how to manage their possessions. There are distinct time periods for moving around and sitting down. Adults also comment on how children use their bodies—'hurry up', 'you're too noisy'.

Although all of the children in this study had their movements monitored by the teacher at some level, some children in particular contested this. They used their bodies to exert their choice and to stand up for themselves. Often, this resistance to the control of movement was subtle; for example, going out to the toilet and to the bin without asking permission or continuing to do something after having been asked to finish.

Two of the girls in particular, Sinéad and Ciara, resisted the control of their movements in an explicit way. Both of the girls were 'movers' within the classroom. Although class members had set seating, Sinéad and Ciara managed to manipulate the classroom rules in such a way that they could shift their seating positions. Both of them occupied dominant social positions in the class, which were maintained by moving around, providing them with opportunities to meet and communicate with other classmates. This allowed the two girls to keep on top of what was going on socially and in various friendship circles and to stay 'in the know.'

On different occasions, both Sinéad and Ciara moved into other people's spaces, for example, by sitting on someone else's desk or lying across the laps of some of the other girls, thus reinforcing their positions amongst their peers.

Both girls, however, also explicitly challenged teachers' attempts to control their movements. Mostly, they conducted their challenges in such a way that they did not get into trouble. Sinéad frequently moved around the classroom and challenged the teacher if she was corrected. Ciara often performed unconventional movements in the classroom such as doing elaborate stretching exercises in the aisle beside her desk. In contrast to other children's movements, Ciara's were rarely commented on by the teacher or by other children. Like Sinéad, Ciara also challenged the teacher if she objected to her movements being controlled. Consider the situation that occurred in PE one day. PE time was one of the most awaited activities of the week. Any disruption in the schedule that resulted in PE not taking place caused eruptions of discontent and annoyance among the children. On the occasion being described, PE was not taught by the class teacher.

> Field notebook, Wednesday, 20th November, 13.50
>
> *Today, PE was being held out in the school yard and the teacher had asked them to stand in two lines. The PE teacher waited for silence before the actual activity could begin. Silence was not forthcoming, however, as soon as some of the class stopped talking with each other, another couple here and there began to chat. All of a sudden, Ciara just stormed off, coming over to where I was standing on the side line. With that, the class was dismissed and they had to return to their classroom. There was uproar. Some of the classmates started to argue with her because they were going to miss out on PE. Ciara refused to apologise to the PE teacher or her classmates for walking out despite the potential consequences. When the class was all seated again, the class teacher asked Ciara why she walked out. Ciara said 'Sir, she had you standing like a thick'.*

Although it was quite normal for the teacher to expect silence, Ciara felt that the PE teacher was treating the pupils like they were stupid and she was unwilling to accept this. Ciara's objection to the way she had been treated was also related to the kind of activity she and her classmates were expected to do—which she perceived was degrading. Ciara objected to what she considered gratuitous control of her movement. To demonstrate her resistance, Ciara physically moved out of the situation.

The photographs taken for the photographic project also included many examples of how the children used their bodies and space in ways that would be forbidden in school. A photo taken by Sinéad showed Sharon swinging from a door handle by using the wall to brace herself. This is not an activity that would be encouraged in school. It is not only important that Sharon took advantage of the freedom of participating in an activity with a researcher to use her body and space in a way she would never be allowed to in school; the fact that Sinéad captured this forbidden activity in a photograph for a project, as an example of something that represented school for her, is important. Perhaps the most significant aspect about this photograph is that Sharon and Sinéad decided to use it in their photographic poster. On the poster, they labelled the photograph 'Too cool for school'. This acrobatic activity that Sharon carried out was considered cool, and not only that, it was 'too cool' for school. Sharon again exerted choice about how to use her body, simultaneously challenging authority without getting into trouble.

In all of the above examples, the children use their own bodies as a fundamental resource to exert their choice, express their opinions, control their movements and stand up for themselves. Through their bodies and how they moved into spaces, Sinéad and Ciara both reinforced their position as children who were smart. Being able to balance the controlling environment of school through the appropriate use of the body was smart. These scenarios also provide an example of how the children's concepts of intelligence—what is smart and what is thick—were actively constructed and reinforced within the group.

Summary

Whereas the previous chapter focused on the children's prioritisation of certain academic and non-academic subjects according to how worthwhile they were, this chapter has focused on ways in which the children tried to be smart in school by balancing teacher and school authority expectations with their own choices about how they present themselves and spend their time.

School is a regulated and a controlled environment where children are constantly monitored. This monitoring includes attempts on the parts of teachers to control children's actions, talk and movements (Devine, 2001). This monitoring also includes the constant scrutinising of one's actions by peers and classmates and the intense competitiveness of being included and accepted as 'normal'. Maintaining positive peer relationships was therefore a goal shared by many of the children, if not all.

For some of the children then, being smart was being able to successfully negotiate this controlling environment whilst maintaining a sense of personal autonomy in the regulated school setting. This negotiation process was closely watched by teachers and peers. Failure to negotiate the environment and to balance the various goals to be achieved—successful engagement with school authorities, the teacher, peers and schoolwork—resulted in negative repercussions.

Being smart was about being able to successfully negotiate these expectations through appearing smart in the classroom, behaving in smart ways and exerting personal choice. This chapter has also shown how some children reinforced their smart positions through monitoring the classroom work, getting others into trouble and maintaining control of their own body and movement. The next chapter will consider the context of relationships in school and the importance of group dynamics in the development of concepts of intelligence.

9. FITTING IN—BRAINIACS, GEEKS AND THICKOS

The previous chapters have looked at how the children's concepts of intelligence influenced their schoolwork and the way they present themselves in school. This chapter will focus on how terms related to intelligence were used by children in interacting with peers, thus providing further insights into the children's concepts of intelligence in the social and peer contexts.

In Chapter 6, the different terms the children used to describe different sorts of smart were reviewed. Terms such as 'brainiac', 'geek', and 'dope' were not simply neutral terms used to describe the perceived level of intelligence of an individual, but had implications for how one was viewed by peers. From the focus group discussions with the children, there seemed to be a consensus in the class that there was such a concept as a 'normal' amount of intelligence, which was considered acceptable. There were margins of normality and anyone who stood outside these margins could be taunted. According to the children, someone who was smart could be called a *freak*, and someone who was considered stupid could also be called a *freak*. 'Freak' was a word that denoted abnormality. Freak was not the only word used to describe children outside the margins of 'normal' intelligence. Other words included 'dope', 'thicko' and 'geek'. Whereas 'dope' and 'thicko' were used to describe children who were perceived to be stupid in different ways, 'geek' and 'nerd' were used to describe brainiacs who were, for some reason, unpopular.

Although achievement at schoolwork was considered important to many of the children, as detailed in the previous chapter, being too smart at schoolwork could have a detrimental impact on peer relationships. The following conversation provided some additional insight into why geeks were taunted.

Researcher:	*what's a geek?*
David:	*[someone] who knows everything*
Sharon:	*a geek can't play football, can't play anything…*
Cormac:	*just a big nerd*
Jason:	*plays computers, messes around on computers*

Football was a very important activity for the children in this class. Play, of any kind, is an important activity for developing social relationships. A geek, according to this group of

children, was someone who knew everything but could not play football or play anything. A geek or nerd was someone who preferred to play with computers than interact with his or her peers.

Monitoring motivation

Geeks and nerds were not taunted simply because they were brainy. Reasons why such children might be jeered were explained to me. Dillon was teased when he was younger for being smart.

Researcher: *Dillon was saying when he was younger he used to get picked on in school?*

Sean: *cause he was too smart*

Damien: *yeah, everybody getting jealous*

Dillon was teased because others were jealous of him and resented it when he gave the right answers in class. Some children believed that brainiacs did not have real friends, because the main reason people talked to them was to ask them for help and to get the answers. As Sinéad explained, smart people have friends 'cause they always want to get the answers off you and all'. Mark gave an example:

> *If you were having a test, and you were smart like, and your friend was asking you for the answer and they'd just ask you for the answer to be your friend.*

Steven also talked about how brainiacs do not have friends because others are jealous of them and jeer them. Steven himself was often jeered by other children because of his academic ability and said himself that people pick on him. He described how it happened:

> *…When I'm doing it [schoolwork] and I get all the questions right and nobody else knows, they're all saying like, 'you shouldn't be doing all that, we should be getting all the answers right', but if they're not going to listen what's the point? And they're going to feel a bit left out like cause they're all messing and all, and then when they slag me, like saying, I'm a goody-two-shoes and all that, it's stupid.*

According to Steven, other children resented it when he got the answers right. This irritated him because he felt that if they listened they too could get the right answers. He believed that

others teased him for being a goody-two-shoes to make themselves feel better when they did not do well in their schoolwork. When asked how he dealt with being slagged he said:

> *I just go, 'if you want to say something, just cause you don't know, there's no point in being jealous of me'.*

Steven's understanding was that other children teased him in an attempt to control his motivation to perform well at his schoolwork. This suggests that this type of name calling was used by some children to discourage children such as Steven to attempt to push out the margins on what was perceived to be a standard level of intelligence and an acceptable level of motivation to achieve.

Steven's motivation to achieve was monitored in many ways. In this following conversation, one of Steven's career aspirations was not viewed favourably by the other boys. When Steven suggested he would like to become a policeman, Connor and Dillon tried to put him off.

Steven:	*I'd like to be a police officer*
Connor:	*would you stop!*
Dillon:	*when you get a bang off a baton when you're older*
Kieran:	*before, when I was younger, I was going to want to be a police officer, but I don't want to be now*
Steven:	*I might be an electrician like me Da*
Connor:	*that would be good*

Although Steven seemed to concede to the boys in this conversation, he was not swayed from his desire to become a police officer. A few months later, when asked again what he would like to do when he finished school, he still said that he wanted to be a police officer, and if he could not do that he would like to be a solicitor. Neither did teasing discourage Steven from trying to be the smartest boy in the class. Steven certainly maintained a high status in the classroom. The situation outside the classroom in the yard, however, was different. Notably, he did not play with his classmates in the yard but usually played with younger boys from another class. Steven, aware of his vulnerability outside of the classroom, strategically decided to ally himself with younger children in the yard and on other occasions when different classes came together. Looking after himself in this way was something Steven considered smart. He talked about how it is not smart to get into fights in school:

Messing and fighting…it gets you into trouble, if you're fighting in school and there's only two people fighting and everybody's saying 'go on, hit him' in school. But when you're going home when you're on your own, a gang can come after you, so what's the point so. If you're fighting one person and you hurt them and then walk away, the next time you see them, they might have a huge gang with them, there's loads of them…no one will help you…

Steven was aware that how he managed his relationships with peers in school could influence his relationships with the same and other peers outside school. Fighting in school, which is a protected and regulated environment, is very different to fighting outside school, a less protected and more exposed environment. Although Steven made the decision to remove any possibility of getting into fights and reducing his exposure to being bullied in school, being teased nevertheless impacted on his daily experience in school.

Positive peer relationships are integral to a positive school experience. Steven was able to manage his peer relationships in school. He maintained a high status in one context and recognised his limits in another. He was aware of the different contexts in which one can be smart.

Constructing meanings and reinforcing identities

Whereas some children taunted Steven in an attempt to monitor his motivation to achieve, calling children names such as 'geek', 'thicko' and 'dope' served other functions.

As the situations outlined in the previous chapter showed, Ciara and Sinéad successfully negotiated the classroom environment and were able to exert personal autonomy by the way they used their bodies and by controlling their own movements. In contrast, Leanne was not very skilled in this manner. For example, she often tried to move seating places in the classroom, but unlike Ciara or Sinéad, would draw attention to herself while doing so. When she would enter the classroom, she never quite knew where to sit and would wait for the teacher to direct her. This pattern of Leanne waiting to be told where to sit stood out starkly from the behaviour of the other children, who would all go directly and confidently to their seats. Leanne's loitering often irritated some of the children, who then called her 'thick' or 'thicko'. It seemed that some children thought that Leanne's actions indicated a lack of personal autonomy on her part.

As we have already seen in a number of previous conversations, being able to stand up for one's self was considered smart by the children. It follows that for some children, not being able to stand up for one's self was considered 'thick'. Quite often, Leanne found herself in situations where she had to stand up for herself. Consider the following scenario:

> Field notebook, Friday, 6th December, 14.00
>
> *This afternoon, the class was allowed to choose their own activity, either to play a board game or read a book of their choice. The teacher then left the classroom for a moment. I was playing draughts with Mark. To my left, I became aware that Leanne and Peter were play-fighting. What started as a play fight (physical) within moments changed into an actual fight and Peter began to hit Leanne. When it was quite clear that the fight was no longer a play fight, Ciara physically intervened by standing in between them and said to Peter, 'if you're going to fight a girl, fight one that can fight back.' She then began to walk forwards so that Peter backed off. He then ran out of the classroom. During this fight, Mark said to me 'you shouldn't hit girls.' When the teacher came back to the classroom and the children were relating what happened, he asked Ciara whether she had been hit. She looked at the teacher in disbelief and said, 'hit me?'*

Smart is being able to look after yourself and keep yourself out of trouble, either with peers or with teachers. In the scenario just outlined, it seemed that Ciara reinforced her status as being a smart girl in the class by successfully intervening in the fight between Leanne and Peter. Her intervention, however, involved undermining Leanne when she said 'if you're going to fight a girl, fight one that can fight back', which may have reinforced Leanne's image of being powerless, often getting herself into trouble and therefore of being 'thick.'

This scenario also demonstrated that there is a gendered dimension to being smart. Boys and girls are smart in different ways and clearly, for the girls especially, smart was about being able to handle yourself with boys. From Ciara's remarks to the teacher, we can infer that Ciara thinks that a smart girl knows how she should be treated by boys and would never let a boy hit her.

This scenario also provides another example of how the children's concepts of intelligence—what is smart and what is thick—were actively constructed and reinforced by the group.

We have seen how Leanne's actions were used by the group to construct an idea of what is thick. Another individual around whom concepts of intelligence were constructed and reinforced was Gina. Most people in the class agreed Gina was smart, because she knew more than anyone else, did all of her work and was very quiet. On numerous occasions, Gina said that she loved school. Her favourite pastime was reading, she loved learning and was rarely in trouble. Gina was not very popular and she was often alone. On a number of occasions, she was actively excluded from her peer group.

Gina's status as a brainiac, but also as someone who was excluded, meant that she was labelled as a 'geek'. Gina's status as a geek was reinforced through her continuous and public marginalisation. For example, during PE Gina was frequently booed by a lot of the class when she did not play well. Another example of Gina's marginalisation, specifically related to her being considered a 'geek' by some of her peers, occurred during a focus group interview with five girls, one of whom was Gina. As the researcher had heard the word 'geek' being used by some of the children, she asked them what it meant:

Researcher:	*what about this? [holding up a page with 'geek' written on it]*
Lisa:	*you're like a brainiac*
Sarah:	*you know more than anyone else*
Researcher:	*a geek knows more than anyone else?*
Sarah:	*a geek just knows more, and say, all the cool people just say like, 'geek', and they know nothing*
Ciara:	*a geek will sit at the end of the room on their own, while there's a big of, like just say, when we're having our lunch, she sits on her own for some reason, and the gang of the young ones are sitting together and people just say like she's a brainiac, like a… geekish*

It is clear that Ciara was referring to a specific person when describing what a geek does when she stated 'she sits on her own when we're having our lunch.' Although Ciara did not state that she was speaking about Gina, it was clear that she was referring to her, as Gina often sat alone during lunchtime. Ciara used the opportunity of the focus group to taunt Gina. The girls reinforced Gina's marginal position by calling her a 'geek', an appropriate term because she was a brainiac. The striking thing about this conversation is that Gina was sitting with group at the time.

It was also clear that the girls' understanding of 'geek' was influenced by their understanding of Gina's position within the class—a brainiac who was not popular. The focus group extract above shows how the girls constructed a meaning for 'geek' using Gina as a reference point.

Summary

This chapter has demonstrated how concepts of intelligence are constructed and reinforced through group dynamics. Terms related to intelligence that are used by the children are not merely neutral descriptive terms but are clearly loaded with meaning and are used to maintain boundaries that define 'normal' amounts of intelligence. There is also a gender dimension to these concepts—boys and girls are smart in different ways. The boundaries that define 'normal' intelligence are constantly negotiated and reinforced by small groups within the class, and by the class group as a whole. Ways of maintaining boundaries include monitoring achievement, name calling, and reinforcing some children's marginal status in the class through group processes.

10. CONCLUSION

This research project aimed to explore how children who are at risk of educational disadvantage can be supported, by finding out from them what motivates them to achieve, what they think is worth learning and how they experience their daily lives in school. The study sought specifically to focus on children's concepts of intelligence and how these concepts influence their motivation to learn and achieve. The study also aimed to contribute to the development of a new understanding of children in disadvantaged contexts.

The research was conducted with one 5th class in an inner-city Dublin school. There were 19 children in the class, 12 boys and 7 girls. The children were, on average, 11 years of age. This study adopted an ethnographic methodology to facilitate the collection of socio-cultural data. The main research methods employed were participant observation over a four-month period and a series of focused activities, including classroom drawings, a photographic project and group and individual interviews.

Background to the study

The focus in Irish educational discourse over the last thirty years has been on cognitive theories, which view learning as an individual activity (Conway, 2002). There is evidence within the Irish experience that concepts of ability and intelligence as fixed are prominent. There is also an indication that the individual is still understood in Irish educational discourse in essentialist terms and that intelligence and ability are viewed as fixed and innate characteristics (Flynn, 1998). This can lead to an understanding that individuals who do not perform to a normalised standard of achievement, in both academic and social settings, are viewed as being deficient. These views of children are particularly pertinent with regard to how intelligence and ability are conceptualised, particularly in contexts where children are considered to be educationally disadvantaged. There is a danger that the focus in Irish education still remains on blaming the child who experiences educational disadvantage for poor school performance, as opposed to holding wider educational structures responsible.

Previous research has shown that fixed concepts of intelligence lead to motivation towards performance goals as opposed to towards learning goals. Performance goals may lead to thinking about educational achievement as something that is competitive, as opposed to it being learning oriented. Learning goals, on the other hand, have been shown to provide

students with a higher level of satisfaction and fulfilment with their schoolwork (Dweck, 1999). The development of the study presented here was influenced by research that has argued that there is a risk that students in disadvantaged contexts in particular are encouraged towards performance goals.

Considering the lack of debate about socio-cultural theories of education in the Irish context, achieving a better understanding of children's concepts of intelligence, what and who they think is smart and in what contexts they think they are smart through a socio-cultural perspective would provide a very useful insight into their motivation for achieving.

Most research in this area has been conducted within psychology and has tended to gather quantitative data through using standardised measures and experimental manipulation. This research project, however, aimed to build on previous research by studying the processes that lead to the development of concepts of intelligence and how valued knowledge is actively constructed by learners in a formal school setting. It did so using social-anthropological and sociological approaches and methods, specifically ethnography.

The research gave the children in the study the opportunity to express their views about their experience of education and aimed to achieve a better understanding of their lives in school. This study also aimed to provide a better understanding of how children's social interaction in the classroom, their 'community of practice', influences their concepts of intelligence and their motivation and aspirations.

Summary of the Findings

This research highlights the dynamics and complexity of the children's concepts of intelligence. The findings have supported previous research that has shown that children's concepts of intelligence influence their achievement motivation. However, the findings have also shown how the children's experience of achievement (or lack of achievement) influenced their concepts of intelligence. As the children's notions of achievement were context relevant and constructed within the class group, so too were their concepts of intelligence. In attempting to make sense of their experience of school, the children continuously constructed and reconstructed their concepts of intelligence, of achievement, of learning and of what is worth learning in school. This in turn influenced each individual's actions, their decisions about what they wanted to learn and their understanding of their own skills and capabilities. In this way, the children's continuous construction of their concepts of intelligence was dynamic (see diagram 2 below).

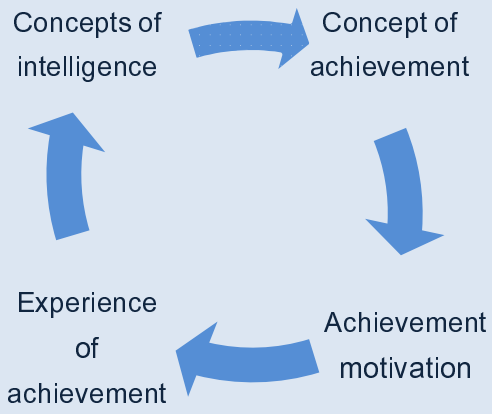

Diagram 2

As a group, the class negotiated the importance and value of various skills. Being smart was not simply associated with being good at schoolwork or with intellectual competence. The children placed just as much weight, if not more weight, on social skills as on academic skills. Social skills included managing relationships with the teachers as well as with peers. It was also very important for the children to be seen

to be able to exert personal choice and agency in the formal school environment. This included for example, doing what you want without getting into trouble, demonstrating intellectual competence and personal skills, such as knowing how to look after yourself. Being smart was about being able to successfully negotiate these expectations through appearing smart in the classroom, behaving in smart ways and exerting personal choice. Some children reinforced their smart positions through influencing the pace of the classroom work, getting others into trouble and maintaining agency of body and movement.

What is smart?

Identifying characteristics of smart children included some characteristics related to:

- Intellectual ability, such as being knowledgeable (both in school and out of school); being able to solve problems and finding out where to get information;
- Physical ability, such as being physically well co-ordinated, competency in physical activities such as sport, and bodily kinesthetic awareness;
- Social ability, such as being competent in interacting with peers and teachers, being able to sort out conflicts, being able to manage and manipulate social situations, i.e. getting others into trouble to further your own interests;
- Personal skills, such as knowing how to look after oneself, taking care of physical appearance, being able to make decisions and follow them through and doing what one wants without getting into trouble;
- Behaviour—many of the children connected good behaviour to being intelligent, and conversely felt that getting into trouble was not intelligent. Smart people were able to do what they wanted, without getting into trouble (or getting caught). It was smart to stay out of trouble;
- There was also a gendered dimension to the children's concepts of intelligence—boys and girls should be smart in different ways; for example, smart girls know how they should be treated by boys.

Influences on the development of concepts

Peer group discourse

- The children's concepts of 'what is smart' were concretely based on their associations with others, primarily peers, who they considered smart or not smart. When children talked about intelligence, they did so in reference to others. A variety of terms were used when the children were talking about smart or not smart people, for example, 'brainiac', 'geek', 'dope' and 'thicko'. These terms were not neutral and descriptive but were loaded with meaning.
- There seemed to be a constant discussion about what was considered to be a 'normal' amount of intelligence. Such discussions were conducted within small groups in the class, but also by the whole class group. Some children who stood outside the boundaries of this 'normal' amount of intelligence were often marginalised by name calling and teasing. In this way, concepts of intelligence were constructed and reinforced through group dynamics.

Social discourses

There were a number of discourses that influenced the children's discussions about their concepts of intelligence. These included:

- Media discourses such as TV programmes, films, comic books, etc.
- Educational discourses such as the terms IQ, gifted, slow learner, drop-out. The term 'gifted', for example, was interpreted by some children as meaning having access to resources to achieve in education. The children were aware of the discourse about the link between socio-economic wealth and educational achievement, and of the social debates about valued skills.
- Popular discourses about, for example, current affairs (for example, the 'failure' of Roy Keane or Mick McCarthy), about intelligence being a 'gift from God' and about the right of children to express their views and make choices, etc.

Concepts of intelligence and achievement motivation

Fixed, incremental and decremental concepts of intelligence

- There was a view among the children that people have innate ability (or inability) for specific skills. In this way, the concept of fixed intelligence was entertained. Being 'gifted' at something meant that it was easily accomplished and there was no need to exert much effort into learning in these areas. Similarly, one could be 'stupid' at something so there is little reason to put effort into learning how to do it.
- However, there was also the view that if a child was weak at something, it did not mean that child was stupid, but that he or she a slow learner, and would be able to get smarter at the task in question by learning. In this way, an incremental concept of intelligence was entertained.
- The idea that intelligence could decline was also voiced by some children. It is possible to 'get stupid' if one does not go to school and keep learning. This was cited by the children as a reason why going to school is important.

Intelligence is context specific

- Being smart was contextual as far as the children in this study were concerned—there were different sorts of smart and one could be smart in different environments. Different contexts named by the children included school—both in classroom and in the yard; in various settings outside school; and at home.
- It was possible to be smart at one thing and a dope at another, to be 'gifted' in one context and a dope in another.
- As intelligence is contextual, and one can be gifted in particular ways; the children made decisions about the skills on which they would focus their learning. For the children, it was important that they engaged in activities that helped them feel smart in school. Smart children were able to make choices about what they learned and on what they focused their attention. These choices were made in a strategic manner, whereby they prioritised what they wanted to do, what they wanted to achieve and on what they would spend their time.

Learning goals

- In terms of the children's approach to academic subjects, performance goals were predominant. The outcome or result of an activity was considered more important than the learning process. Being smart was about having the right answer documented, rather than being able to work out the answer. It was smart *to know how to* get the correct answer through skills such as cheating and copying from the board.
- There was reluctance on the part of some of the children to show that they were struggling with the process of getting the right answer. One of the reasons given was that it made them feel inadequate or 'bad' at the work.
- However, many children showed a mastery orientation in subject areas they felt they were good at or in skills they valued—these were mostly non-academic subjects such as football, art, dancing, etc. The main focus was on learning these skills as opposed to performing or achieving a specific outcome.

Valued skills

- In general, school was considered important because it prepares children for adulthood. Learning was a conscious activity for most of the children in this study. They were aware that they had to learn in school so that they could provide for themselves in the future.
- Most of the children were motivated to achieve in subject areas they valued and thought were useful, regardless of whether they felt they were 'gifted' in these areas or not.
- Most of the children were motivated to learn how to read and write, especially as they could see the relevance of these skills; however, many found these tasks difficult to master.
- There was a lot of motivation to learn practical skills. The children talked about how smart people 'know what to do' and also about how they wanted to learn 'what to do'. Some of the subjects they were interested in learning included languages, sports, technical skills such as changing a light bulb, and life skills, including looking after oneself and raising a family.

Daily experience of school

- Most of the children talked about how they did not like school. This was primarily because they thought it was boring. They could not see the relevance of particular subjects they

were learning in school, and they found the subjects they considered to be most important most difficult.

- However, there was a general recognition that it was important to get an education as it would improve life chances. The children were aware of their social position and talked about how going to school would improve socio-economic circumstances, provide them with opportunities and enable them to have a better life than their parents had.
- Many of the children were also aware that they were being evaluated in school, both in terms of their academic work and their behaviour. As smartness was as much about behaviour as about intellectual competence, failure at school could result from not achieving in either domain.

Implications for policy and practice

An understanding of children's concepts of intelligence, of the development of these concepts and of how they relate to children's academic achievement motivation will give educators a better awareness of what motivates children to achieve and also of the media through which children can be encouraged to learn. The findings from this study have highlighted some key areas that may assist educators with the task of motivating children to achieve.

Supporting children to be active learners

The children in this study were conscious and reflective of their experiences of school. They were not passive learners but were thoughtful about their own learning processes. They made decisions about the activities they wanted to put effort into, in accordance with the importance or value they attributed to different activities.

- It was clear that the class group was trying to make sense of its own educational experiences. The children were conscious of their 'disadvantaged' context, and related education to improving their socio-economic circumstances and life quality. They were trying to make sense of the relationship between learning, achievement, evaluation and failure. Consideration should be given to actively encouraging this discussion kind of in the classroom.
- Children should be encouraged to think about why they are learning and how they learn. Learning could be made more meaningful to children by asking children about

what they would like to learn and how, and by engaging in discussion about the value of learning.

- Concepts of intelligence, learning processes and achievement are constructed in relation with others. Teachers can contribute to this construction of intelligence, and thus to what knowledge and skills are valued, in a positive way.

Children need to feel 'smart' in school

It was clear that some of the children who participated in this research had already begun to disengage from the learning process and that they did not feel smart in school. For many of these children, there was a discontinuity between home and school. Many of the children could not see the relevance of what they were learning. This led to boredom and to a feeling that they were wasting their time. Boredom was one of the reasons given for early school leaving.

- Many of the children had concrete goals and aspirations for the future. Although these were changing, they did impact on the children's motivation and on their decisions about where to focus energy in school; thus it is important to foster these hopes and aspirations and to listen to what they are.
- Children find it much easier to learn when they see the relevance of the subjects they have to study. The usefulness of different skills they learn in school should be exemplified.
- Children's daily experience of school impacts on their desire to participate. It is important for children to feel smart in school. For children who struggle with academic skills, there are very few opportunities to experience mastery and achievement in the classroom. It would be helpful if the opportunities for children to 'feel smart' were increased.
- The children demonstrated some very positive learning strategies in subject areas they thought they were good at and felt were worthwhile, for example, playing football or writing songs. They should be encouraged to employ these strategies in subject areas they find difficult.
- As recommended in NESF (2002), consideration should be given to how non-academic achievements can be formally recognised at primary level (including attendance, punctuality, interpersonal skills and skills in demonstrating, presenting, finding sources of information and engaging in current affairs).

- In support of the NESF recommendations (NESF, 2002: 26), strengthened and continuing early intervention and assessment of educational needs are required at primary, but more especially at pre-primary levels. In an effort to further the recommendation from NESF (2002), a small number of schools from the School Completion Programme (Primary) should be selected to test the Multiple Intelligences approach at primary level.
- More research on the development of learning orientations of children in an Irish context would be useful.

11. BIBLIOGRAPHY

Alderson, P. (1993) *Children's Consent to Surgery*. Buckingham: Open University Press.

Anyon, J. (1981) 'Social class and school knowledge', *Curriculum Inquiry*, 11, 1: 3–42.

Area Development Management Limited (ADM) (2002) *Dublin Inner City Baseline Data Report—2002*. Prepared by Gamma. Dublin: ADM.

Bempechat, J., London, P. and Dweck, C.S. (1991) 'Children's conceptions of ability in major domains: an interview and experimental study', *Child Study Journal*, 21, 1: 11–36.

Benenson, J. and Dweck, C. (1986) 'The development of trait explanations and self-evaluations in the academic and social domains', *Child Development*, 57: 1179–1187

Benjamin, S. (2002) *The Micropolitics of Inclusive Education: an ethnography*. Buckingham: Open University Press.

Bisset, J. (2000) *Waiting for the great leap forward: an ethnography of the educational process in a working class Dublin school*. Unpublished PhD thesis. Dublin: University College Dublin.

Boldt, S. (1994) *Listening and learning: a study of the experiences of early school leavers from the inner city of Dublin*. Dublin: Marino Institute of Education.

Boldt, S. and Devine, B. (1998) 'Educational disadvantage in Ireland: literature review and summary report' in Boldt, S., Devine, B., Mac Devitt, D and Morgan, M. *Educational disadvantage and Early School Leaving in Ireland: discussion papers*. Dublin: Combat Poverty Agency.

Brown, A.L. (1994) 'The advancement of learning', *Educational Researcher*, 23, 8: 4–12.

Cain, K. and Dweck, C.S. (1989) 'The Development of Children's Conceptions of Intelligence: a Theoretical Framework', in Sternberg, R.J. (Ed.) *Advances in the Psychology of Human Intelligence*, *Vol. 5*. New Haven, CT: Yale University Press.

Carr, M., Kurtz, B.E., Schneider, W., Turner, L., and Borkowski, J.G. (1989) 'Strategy acquisition and transfer among U.S. and German children: environmental influences on metacognitive development', *Developmental Psychology*, 75, 765–771.

Clark, A. and Moss, P. (2001*) Listening to Young Children—the Mosaic Approach*. London: National Children's Bureau.

Combat Poverty Agency (CPA) (2002) *Submission to the First Educational Disadvantage Forum of the Educational Disadvantage Committee.* Retrieved on 24th March 2005

from http://www.education.ie/servlet/blobservlet/edf_combat_poverty.doc?language=EN.

Conference of Major Religious Superiors' Education Commission (1992) E*ducation and Poverty: Eliminating Disadvantage in the Primary School Years.* Dublin: CMRS.

Conference of Religious in Ireland (CORI) (2002) *Submission on Educational Disadvantage from the Education Commission of CORI November 2002*. Retrieved on 24th March 2005 from http://www.education.ie/servlet/blobservlet/edf_cori.doc?language=EN.

Connolly, P. (1998) *Racism, Gender Identities and Young Children*. London: Routledge.

Conway, P.F. (2002) 'Learning in communities of practice: rethinking teaching and learning in disadvantaged contexts', *Irish Educational Studies*, 21, 3: 61–92.

Corsaro, W.A. (1985) *Friendship and Peer Culture in the Early Years*. Norwood, NJ: Ablex.

Crooks, T. and Stokes, D. (Eds) (1987) *Disadvantage, Learning and Young People: the Implications for Education and Training.* Dublin: CDVEC Curriculum Development Unit, Trinity College Dublin.

Darling-Hammond, L. (1997) *The Right to Learn*. San Francisco: Jossey Bass.

Deegan, Jim (2004) '"Intentionally or otherwise": children and diversity in statutory and policy discourses in Ireland', in Deegan, J., Devine, D. and Lodge, A. (Eds) *Primary Voices: Equality, Diversity and Childhood in Irish Primary Schools*. Dublin: Institute of Public Administration.

Delamont, S. and Atkinson, P. (1995) *Fighting Familiarity: Essays on Education and Ethnography*. Creeskill, NJ: Hampton Press.

Department of Education and Science (2005) *Delivering Equality of Opportunity in Schools: an Action Plan for Educational Inclusion.* Dublin: Department of Education and Science.

Devine, D. (1999) 'Children: Rights and Status in Education—A Socio-Historical Analysis', *Irish Educational Studies*, 18: 14–28.

Devine, D. (2001) 'Locating the Child's Voice in Primary Education', in Cleary, A., Nic Ghiolla Phádraig, M. and Quinn, S. (Eds) *Understanding Children Volume 1: State, Education and Economy*. Cork: Oak Tree Press.

Devine, D. (2003) *Children, power and schooling: how childhood is structured in the primary school*. Stoke on Trent: Trentham.

Devine, D., Lodge, A. and Deegan, J. (2004) 'Activating voices through practice: democracy, care and consultation in the primary school', in Deegan, J., Devine, D. and Lodge, A.

(Eds) *Primary Voices: Equality, Diversity and Childhood in Irish Primary Schools*. Dublin: Institute of Public Administration.

Drudy, S. and Lynch, K. (1993) *Schools and Society in Ireland*. Dublin: Gill and Macmillan.

Dweck, C.S. and Elliot, E.S. (1983) 'Achievement motivation', in P.H. Mussen (Gen. Ed.) and E.M. Hetherington (Vol. Ed.) *Handbook of Child Psychology: Socialisation, Personality and Social Development*. New York: Wiley.

Dweck, C. S. (1999) *Self-Theories—their role in motivation, personality, and development*. Colombia University: Psychology Press.

Educational Disadvantage Committee (2005) *Moving Beyond Educational Disadvantage: Report of the Educational Disadvantage Committee 2002–2005*. Dublin: Department of Education and Science.

Elliot, E. and Dweck, C. S (1988) 'Goals: An approach to motivation and achievement', *Journal of Personality and Social Psychology*, 54: 5–12.

Emond, R. (2000) *Survival of the Skilful: An ethnographic study of two groups of young people in residential care*. Unpublished PhD thesis, University of Sterling.

Emond, R. (2005) 'Ethnographic research methods with children and young people', in Greene, S. and Hogan, D. (Eds) *Researching Children's Experience: Approaches and Methods*. London: Sage Publications Ltd.

Ennew, J. (1994) 'Time for Children or Time for Adults?', in Qvortrup, J., Bardy, B., Sgritta, G. and Wintersberger, H. (Eds.) *Childhood Matters: Social Theory, Practice and Politics*. Aldershot: Avebury.

Fine, G.A. and Sandstrom, K.L. (1988) *Knowing Children. Participant observation with minors (Qualitative Methods Series)*. Newbury Park, CA: Sage.

Flynn, M. (1998) 'Changing Views, Changing Assessments: Intelligence, Inequality and the Need to "Even the Score"', in Hyland, A. (Ed.) *Innovations in Assessment in Irish Education*. Cork: Education Department, University College Cork.

Fontes, P., Kellaghan, T., Madaus, G.F. and Airasian, P.W. (1983) 'Opinions of the Irish public on intelligence', *The Irish Journal of Education*, 17, 2: 55–67

Frank, C. and Uy, F. (2004) 'Ethnography for Teacher Education', *Journal of Teacher Education*, 55, 3: 269–283.

Gamoran, A. and Hallinan, M.T. (1995) 'Tracking students for instruction: consequences and implications for school restructuring', in Hallinan, M.T. (Ed.) *Restructuring Schools: Promising Practices and Policies*. New York: Plenum Press.

Gardner, H. (1983) *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.

Gardner, H. (1993) *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

Gash, H. and Murphy-Lejeune, E. (2004) 'Children's perceptions of other cultures', in Deegan, J., Devine, D. and Lodge, A. (2004) (Eds) *Primary Voices: Equality, Diversity and Childhood in Irish Primary Schools*. Dublin: Institute of Public Administration.

Gilborn, D. (1990) *'Race', Ethnicity and Education: Teaching and Learning in Multi-Ethnic Schools*. London: Unwin-Hyman/Routledge.

Goetz, T.E. and Dweck, C.S. (1980) 'Learned helplessness in social situations', *Journal of Personality and Social Psychology,* 39: 246–255.

Government of Ireland (2000) *The National Children's Strategy—Our Children, Their Lives*. Dublin: Stationary Office.

Hallinan, M. (1994) 'Tracking: from theory to practice', *Sociology of Education*, 67, 2: 79–91.

Hanafin, J. (Ed.) (1997) *Towards New Understandings: Assessment and the Theory of Multiple Intelligences*. Cork: The Printing Office, UCC.

Hannan, D. with Boyle, M. (1987) *Schooling decisions: the origins and consequences of selection and streaming in Irish post-primary schools*. Dublin: Economic and Social Research Institute.

Hannan, D. and McCoy, S. (1995) *The education, training and labour market experiences of young people upon leaving school*. Dublin: Economic and Social Research Institute.

Hargreaves, A. and Woods, P. (Eds) (1984) *Classrooms and Staffrooms. The Sociology of Teachers and Teaching*. Milton Keynes and Bristol: Open University Press.

Haste, H. (1999) 'Moral understanding in socio-cultural context: Lay social theory and a Vygotskian synthesis', in Littleton, K., Woodhead, M. and Faulkner, D. (Eds) *Making Sense of Social Development*, London: Routledge, in association with the Open University.

Henderson, V. and Dweck, C. (1990) 'Motivation and Achievement', in Feldman, S.S. and Elliot, G.R. (Eds) *At the threshold: The developing adolescent*. Cambridge, MA: Harvard University Press.

Hill, M. (1998) 'Ethical issues in qualitative methodology with children', in Hogan, D. and Gilligan, R. (Eds) *Researching Children's Experiences: Qualitative Approaches*. Dublin: The Children's Research Centre, Trinity College.

Hill, M. (2005) 'Ethical considerations in researching children's experiences', in Greene, S. and Hogan, D. (Eds) *Researching Children's Experience: Approaches and Methods*. London: Sage Publications Ltd.

Hyland, A. (Ed.) (1998) *Innovations in Assessment* in Irish Education. Cork: Education Department, University College Cork.

Hyland, A. (2000) *Multiple Intelligences, Curriculum and Assessment Project: Report of the Project*. Cork: University College Cork.

Hyland, A. (2002) 'Looking to the future – Ending Disadvantage?', in National Forum on Primary Education *Primary Education: Ending Disadvantage. Proceedings and Action Plan of National Forum, 1–5 July, 2002, St. Patrick's College, Drumcondra, Dublin*. Dublin: St. Patrick's College, Education Faculty, Educational Disadvantage Centre.

Irish National Teachers' Organisation (INTO) (1994) *Poverty and education disadvantage: breaking the cycle*. Dublin: Irish National Teachers' Organisation.

James, A. (1993) *Childhood Identities: Self and Social Relationships in the Experience of the Child.* Edinburgh: Edinburgh University Press.

James, A. (2001) 'Ethnography in the Study of Children and Childhood', in Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland, J. (Eds) *Handbook of Ethnography*. London: Sage Publications Ltd.

James, A. and Prout, A. (Eds) (1997) *Constructing and reconstructing childhood: contemporary issues in the sociological study of childhood*, 2nd Edition. London: Falmer.

James, A., Jenks, C. and Prout, A. (1998) *Theorizing childhood*. Cambridge: Polity.

Kellaghan, T., Weir, S., Ó'hÚallacháin, S. and Morgan, M. (1995) *Educational Disadvantage in Ireland.* Dublin: Department of Education.

Keogh, A.F. and Whyte, J. (2005) *Second Level Student Councils in Ireland: a study of enablers, barriers and supports. A report by The Children's Research Centre on behalf of the National Children's Office.* Dublin: Stationary Office.

Kinlaw, C.R., Kurtz-Costes, B. and Goldman-Fraser, J. (2001) 'Mothers' achievement beliefs and behaviors and their children's school readiness: a cultural comparison', *Journal of Applied Developmental Psychology*, 22, 493–506.

Kovařík, J. (1994) 'The Space and Time of Children at the Interface of Psychology and Sociology', in Qvortrup, J., Bardy, B., Sgritta, G. and Wintersberger, H. (Eds) *Childhood Matters: Social Theory, Practice and Politics*. Aldershot: Avebury.

Kurtz, B.E., Schneider, W., Carr, M., Borkowski, J.G. and Rellinger, E. (1990) 'Strategy instruction and attributional beliefs in West Germany and the United States: Do teachers foster metacognitive development?', *Contemporary Educational Psychology*, 15, 268–283.

Kurtz-Costes, B., McCall, R., Ryan Kinlaw, C., Wiesen, C. and Holland Joyner, M. (2005) 'What does it mean to be smart? The development of children's beliefs about intelligence in Germany and the United States', *Applied Developmental Psychology*, 26: 217–233.

Lee, S., Ichikawa, V. and Stevenson, H. (1987) 'Beliefs and achievement in mathematics and reading: a cross-national study of Chinese, Japanese, and American children and their mothers', in *Advances in Motivation and Achievement*. Greenwich, CN: JAI Press.

Lepore, S., Kiely, M., Bempechat, J. and London, P. (1989) 'Children's perceptions of social ability: Social cognitions and behavioural outcomes in the face of social rejection', *Child Study Journal*, 19: 259–271.

Lindsay, G. (2000) 'Researching children's perspectives: ethical issues', in Christensen, P. and James, A. (Eds) *Research with Children: Perspectives and Practices*. London: Falmer Press.

Little, T.D. and Lopez, D.F. (1997) 'Regularities in the development of children's causality beliefs about school performance across six sociolcultural contexts', *Developmental Psychology*, 33, 165–175.

Lodge, A. (1998) *Gender Identity and Schooling: a two year ethnographic study of the expression , exploration and development of gender identity in seven to nine year old children in their school environment*, Unpublished PhD thesis, Education Department, NUI Maynooth.

Lodge, A. (2001) 'Gender Identity in the Primary School Playground', in Cleary, A., Nic Ghiolla Phádraig, M. and Quinn, S. (Eds) *Understanding Children, Vol, 1: State, Education and Economy.* Dublin: Oak Tree Press.

Lynch, K. (1999) *Equality in Education*. Dublin: Gill and Macmillan.

Lynch, K. and Lodge, A. (1999) 'Essays on School', in Lynch, K. (1999) *Equality in Education*. Dublin: Gill and Macmillan.

Lynch, K. and Lodge, A. (2002) *Equality and power in schools: redistribution, recognition, and representation.* London: Routledge Falmer

Lyons, C. (2002) 'Conceptions of intelligence and educational disadvantage', *Irish Educational Studies*, 21, 1: 1–19.

Mac an Ghaill, M. (1994) *The Making of Men*. Buckingham: Open University Press.

Mayall, B. (1994) 'Children in Action at Home and at School', in Mayall, B. (Ed.) *Children's Childhoods: Observed and Experienced*. London: Falmer Press.

MacRuairc, G. (2004) '"Big Mad Words"—schools, social class and children's perceptions of language variation', in Deegan, J., Devine, D. and Lodge, A. (Eds) *Primary Voices: Equality, Diversity and Childhood in Irish Primary Schools*. Dublin: Institute of Public Administration.

Moinian, F. (2004) 'The Construction of Identity on the Internet: A Study of Swedish Young People's Self-Presentation in a Web Community', in Troman, G., Jeffrey, B. and Walford, G. (Eds) *Identity, Agency and Social Institutions in Educational Ethnography. Studies in Educational Ethnography*, 10. London: JAI.

Morrow, V. and Richards, M. (1996) 'The Ethics of Social Research with Children: An Overview', *Children and Society*, 10: 90–105

Murphy, E. and Dingwall, R. (2001) 'The Ethics of Ethnography', in Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland, J. (Eds) *Handbook of Ethnography.* London: Sage Publications Ltd.

Nash, R. (2001) 'Class, "ability" and attainment: a problem for the sociology of education', *British Journal of Psychology* 22, 2: 189–202.

National Council for Curriculum and Assessment (NCCA) (2002) *Initial Submission to the Forum to Address Educational Disadvantage.* Retrieved on 24th March 2005 from http://www.education.ie/servlet/blobservlet/edf_ncca.doc?language=EN.

National Economic and Social Forum (NESF) (1997) *Early school leavers and youth unemployment*. Dublin: National Economic and Social Forum.

National Economic and Social Forum (NESF) (2002) *Early school leavers. Forum Report No. 24*. Dublin: National Economic and Social Forum.

National Forum on Primary Education (NFPE) (2002) *Primary Education: Ending Disadvantage. Proceedings and Action Plan of National Forum, 1–5 July, 2002, St. Patrick's College, Drumcondra, Dublin*. Dublin: St. Patrick's College, Education Faculty, Educational Disadvantage Centre.

Nicholls, J.G. (1978) 'The development of concepts of effort and ability, perception of academic attainment and the understanding that difficult tasks require more ability', *Child Development*, 49: 800 - 814.

Nicholls, J.G. (1989) *The competitive ethos and democratic education*. Cambridge, MA: Harvard University press.

Nicholls, J.G. and Miller, A.T. (1984) 'Reasoning about the ability of self and others: A developmental study', *Child Development*, 55: 1990–1999.

Nicholls, J.G., Patashnick, M. and Nolen, S.B. (1985) 'Adolescents theories of education', *Journal of Educational Psychology*, 77, 683–692.

Nicholls, J.C., Patashnick, M. and Meettetal, G. (1986) 'Conceptions of ability and intelligence', *Child Development*, 57: 686–645.

Oakes, J. (1986) 'Keeping Track, Part 2: Curriculum inequality and school reform', *Phi Delta Kappan*, 168: 61–80.

Oakes, J., Gamoran, A., and Page, R.N. (1992) 'Curriculum differentiation: opportunities, outcomes and meanings', in Jackson, P.W. (Ed.) *Handbook of Research on Curriculum*. New York: Macmillan.

Oakes, J. and Lipton, M. (1999) *Teaching to Change the World*. Boston: McGraw-Hill College.

O'Brien, M. (2001) *A Study of Student Transfer from Primary to Second Level Schooling: Pupils', Parents', and Teachers' Perspectives*. Dublin: Department of Education and Science.

OECD (1991) *Ireland. Reviews of National Policies for Education*. Paris: OECD.

O'Sullivan, D. (1980) 'Teacher socialisation and teaching style in an Irish Cultural Context', *European Journal of Education*, 15, 4: 387–397.

Pomerantz, E.M. and Ruble, D.N. (1997) 'Distinguishing multiple dimensions of conceptions of ability: Implication for self-evaluation', *Child Development*, 68, 1165–1180.

Power, C. and Tormey, R. (2000) *Refocusing the Debate: An Examination of the Interplay between Measurement and Intervention in Educational Disadvantage. CEDR Occasional Paper Number 2.* Limerick: Centre for Educational Disadvantage Research.

Qvortrup, J. (1987) 'Introduction', *International Journal of Sociology*, *Special Issue*, 'The Sociology of Childhood', 17, 3, 3–37.

Schneider, W., Borkowski, J.G., Kurtz, B.E. and Kerwin, K. (1986) 'Metamemory and motivation: a comparison of strategy use and performance in German and American children', *Journal of Cross-Cultural Psychology*, 17, 315–336.

Seifert, K. and Hoffnung, R. (1994) *Child and Adolescent Development*, 3rd Edition. Houghton Mifflin Company.

Silva, R. (2004) 'Naming and Dealing with Inequality: Immigrant Students? Perspective of Unequal Spaces in the Classroom', in Jeffrey, B. and Walford, G. (Eds*) Ethnographies of Education and Cultural Conflict. Studies in Educational Ethnography*, 9. London: JAI.

Smyth, E. (1999) *Do schools differ?: academic and personal development among pupils in the second-level sector*. Dublin: Economic and Social Research Institute.

Smyth, E. and Hannan, D.F. (2000) 'Education and Inequality', in Nolan, B., O'Connell, P.J. and Whelan, C.T. (Eds) *Bust to Boom?: The Irish Experience of Growth and Inequality*. Dublin: Institute of Public Administration.

Spradley, J.P. (1980) *Participant observations*. New York; London: Holt, Rinehart and Winston.

Stanley, B. and Wise, S. (1983) *Breaking out: feminist consciousness and feminist research*. London: Routledge and Kegan Paul.

Sternberg, R.J., Conway, B.E., Ketron, J.L. and Bernstein, M. (1981) 'People's conceptions of intelligence', *Journal of Personality and Social Psychology*, 41: 37–55.

Stevenson, H.W. and Lee, S. (1990) 'Contexts of achievement: a study of American, Chinese, and Japanese children', *Monographs of the Society for Research in Child Development*, 55, 221, 1–2.

Stipek, D. (1981) 'Children's perceptions of their own and their classmates' ability', *Journal of Educational Psychology*, 73: 404–410.

Stipek, D.J. and Tannat, L. (1984) 'Children's judgements of their own and peers' academic competence', *Journal of Educational Psychology*, 76: 75–84.

Thorkildsen, T.A. and Nicholls, J.C. (1998) 'Fifth graders' achievement orientations and beliefs: Individual and classroom differences', *Journal of Educational Psychology*, 90, 2: 179–201.

Thorne, B. (1993) *Gender Play: Girls and Boys in School*. New Brunswick, NJ: Rutgers University Press.

Tormey, R. (2004) 'Introduction: Initial Teacher Education and Socio-Economic Inequality', in Tormey, R. (Ed.) *Time for Action: Re-shaping Initial Teacher Education to Meet the Challenge of Socio-Economic Inequalities in Education*. Limerick: Centre for Educational Disadvantage Research.

Tormey, R. and Prenderville, T. (2000) *Making Sense of the Cacophony: Understanding the Different Voices on Rural Educational Disadvantage. CEDR Occasional Paper Number 1*. Limerick: Centre for Educational Disadvantage Research.

Troyna, B. and Hatcher, R. (1992) *Racism in Children's Lives: A Study of Mainly White Primary Schools*. London: Routledge.

Veale, A. (2005) 'Creative methodologies in participatory research with children', in Greene, S. and Hogan, D. (Eds) *Researching Children's Experience: Approaches and Methods.* London: Sage Publications.

Walford, G. (Ed.) (2001) Ethnography and Educational Policy. Studies in Educational Ethnography, 4. London: JAI.

Whelan, Olive (1999) *Concepts of Intelligence and Motivation and their Effects on Teaching Practice and Student Success.* Unpublished MEd thesis, Department of Education, UCD.

Willis, P. (1977) *Learning to Labour: How Working Class Kids Get Working Class Jobs.* Farnborough: Saxon House.

Woods, P. (1996) *The Divided School*. London: Routledge and Kegan Paul.

Yussen, S. and Kane, P. (1985) 'Children's conceptions of intelligence', in Yussen, S.R. (Ed.) *The growth of reflection in children*. New York: Academic Press.

Zappone, K. (2002) *Achieving Equality in Children's Education*. Dublin: St. Patrick's College.