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Ollscoil na hÉireann Má Nuad

STUDENTS WHO HAVE DOWN SYNDROME

A STUDY OF THEIR SCHOOL PLACEMENT EDUCATIONAL SUPPORTS AND PARENTAL EVALUATION OF THEIR EDUCATION

A DISSERTATION SUBMITTED
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BY

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Abstract

The focus of the study was a group of Irish students who have Down syndrome. The research objectives were: to identify patterns of their school placement; to explore the basis for placement decisions; to report and quantify the supports and services received; to elicit and analyse parents' evaluation of students' educational experiences, and to identify implications for educational policy.

The interviews that formed the basis of the study took place between February and May 1999. The study sample consisted of parents of seventy-eight students who had Down syndrome aged sixteen, twelve and eight years, living in seven counties in the Republic of Ireland. In-depth interviews with parents explored the students' educational experience from early childhood to time of interview. The study sought to elucidate their experiences in the multiple contexts which influenced their development.

Part I is a review of literature. It is in three chapters. The first reports findings of studies of cognitive learning and development in students who have Down syndrome. The second compares international data regarding school placement. The third considers the concept of learning disability articulated in Irish policy documents. *Part II* describes the methodology. *Part III* reports the findings. The students are described and families profiled. Early childhood services and their effect on preschool are explored. Preschool experiences are described and the degree to which children were prepared for primary school analysed. The role of psychological assessment in parents' school enrolment decisions is investigated. The pattern of school enrolment and factors determining parental decisions are reported. The schools attended are profiled and in-school learning supports quantified. Aspects of student well-being are considered. Student academic attainment levels are reported and compared. Parents' perceptions of the students' school experience are examined. *Part IV* discusses the findings, and identifies implications for education policy.

Introduction

Since the writings of Jean-Etienne Esquirol,[1] who provided the first description, and of John Langdon Down,[2] who described some of their characteristics, a group of people have been identified as sharing a common condition which has come to be known as *Down syndrome*.

Although identified more than a century and a half ago, the causes and effects of the condition have frequently been misunderstood and misinterpreted. It was not until 1959 that the genetic basis of the condition was discovered. In that year, Professor Jerome Lejeune, working in Paris with a team of scientists, first identified the characteristic combination of chromosomes.[3]

Down syndrome is a congenital condition that occurs worldwide in approximately one out of every six hundred live births. Ninety-five percent of all cases of Down syndrome are caused by a meiotic non-disjunction of autosomal chromosome pair-21 resulting in the triplication of the chromosome. There are two other relatively rare cytogenic subtypes. *Translocation* occurs when part of a chromosome breaks off during meiosis

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[1] Esquirol, J. (1838). Des Maladies Mentales sous les Rapports Medical, Hygienique et Medico-legal. Paris: Bailliere.

[2] Down, J. (1866). Observations on an ethnic classification of idiots. *London Hospital Clinical Lectures and Reports,* vol.3, pp. 259-262.

[3] Lejeune, J., Gautier, M., and Turpin, R. (1959). Études des chromosomes somatiques de neuf enfants mongoliens. *Comptes Rendus Hebdomanaires des Séances de l' Académie des Sciences,* vol. 248. pp.1721-2.

and attaches to another chromosome. *Mosaicism* is the term applied when not all the cells contain the trisomy.[4]

People who have Down syndrome do have features in common, but they also closely resemble their parents and their families. Many characteristics are attributed to Down syndrome, but any individual will only have some of those traits. It is not only the presence of the extra copy of chromosome pair-21 which affects a child's development, but the content of that extra copy and forty-six other chromosomes. The extent to which a person shows the physical characteristics of the syndrome is no indication of his/her intellectual capacity. Each person who has Down syndrome is an individual with unique appearance, personality and set of abilities.

Attitudes towards persons who have Down syndrome have changed over the past forty years. In 1960, in the *Irish Journal of Medical Science,* Michael Elyan stated that a person who has Down syndrome:

> ...can be trained to do quite a number of simple tasks and indeed will often perform, with training, repetitive procedures. He can be taught to dress and keep himself tidy... Sociologically he presents a very considerable problem.[5]

Writing in the new millennium, Siegfried Pueschel acknowledged the contribution that people who have Down syndrome make to society:

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[4] Cicchetti, D. and Beeghly, M. (eds.) (1990). *Children with Down Syndrome: A developmental perspective.* Cambridge: Cambridge University Press, p. x.

[5] Elyan, M. (1960). Mongolism. *Irish Journal of Medical Science.* October, pp. 460-465, p. 462.

> It is imperative then that we as parents, professionals and friends of persons with Down syndrome affirm the absolute fullness of their humanity and the absolute worth and significance of their lives. Let us recognise our children for their strength and their abilities and not for their limitations. Let us celebrate our children for their beauty, their compassion for life, and for their humanizing influence on society.[6]

The educational placement of students who have Down syndrome has been affected by societal perception of the condition. Narrow views about the students' abilities and perceived limits to achievement have often led to their uncritical allocation to schools designated for pupils with moderate learning disabilities. Prejudice about their appearance has at times precluded them from schools designated for pupils with mild learning disabilities. However, in recent years, led by parent initiatives, attitudes may be changing.[7]

There are few Irish aetiology-based studies that compare students' experience in different educational settings. This study enquired into the educational needs of students who have Down syndrome. It also explored the question of which strategies are effective in obtaining positive outcomes to their education. Students who have Down syndrome have both similar and different educational needs to other groups of students who have learning disabilities, and to students in general. [8] The extent to which their needs are the same or different from other students who have learning disabilities, and

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[6] Pueschel, S. (2000). Down syndrome at the beginning of the new millennium. *Down Syndrome Quarterly*, vol. 5, no. 1, pp. 10-11, p.11.

[7] Booth, T. (1985). Labels and their consequences. In D. Lane and B. Stratford (eds.), *Current Approaches to Down's Syndrome.* London: Holt, Rinehart and Winston, pp. 3-24, p. 19.

[8] Freeman, S. and Hodapp, R. (2000). Educating children with Down syndrome: linking behavioral characteristics to promising intervention strategies. *Down Syndrome Quarterly*, vol. 5, no. 1, pp.1-9, p. 1.

whether the same strategies are equally effective for all, must await further study.

The objectives of this study

There were five objectives to this study. First, it sought to identify present patterns of school placement for Irish students who have Down syndrome. Second, it attempted to explore the basis for placement decisions and to identify factors which influenced decisions regarding their education. Third, it undertook to report and quantify the educational supports and services received by students in the different types of school placement. Fourth, it aimed to elicit and analyse parents' evaluation of the students' educational experiences. Fifth, it endeavoured, on the basis of the findings of the study, to identify implications for educational policy.

Conceptual framework

The conceptual framework for the study was the *ecological systems model.*[9] The complexity of the relationships between a person and his/her changing environments, and the effect of this interaction over time, is central to this model. This framework was chosen because it takes into account the multiple factors which influence development, the inter-relatedness of those factors, and the cumulative effect over time of those factors on a person's development.[10] This conceptual framework also highlights the importance of

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[9] Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta, (ed.), *Six Theories of Child Development: Revised Formulations and Current Issues.* London: Jessica Kingsley, pp.187-249, p 190.

[10] Bronfenbrenner, U. (1992), pp.218-226.

including in the definition of the developing person's immediate environment "the developmentally-relevant characteristics of the other persons present and participating in that environment".[11] Furthermore, the theory recognises the importance of the belief systems which prevail in the world of the developing person. Belief systems are held to be developmentally-critical features from which "parents, teachers and other agents of socialization draw when they, consciously or unconsciously, define the goals, risks and ways of raising the next generation".[12]

Thus, the characteristics of the students at time of interview were seen as the joint function of their personalities and abilities, and their experiences over the course of their lives up to that time. The beliefs of the parents, and the attitudes and practices of the schools, were considered to be important determinants of those experiences. The characteristics of the other people involved in the students' various learning environments were also seen to be influential.

The task of this study was to elicit information from parents on various elements that relate specifically to the education of students who have Down syndrome. No single study can undertake the totality of that task but each can contribute to the body of knowledge which informs policy and practice.

Outline of study

Part I of this study is a review of literature. It is in three chapters.

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[11] Bronfenbrenner, U. (1992), p. 227.

[12] Bronfenbrenner, U. (1992), p. 228.

Chapter 1, *Cognitive Learning and Development*, defines the concepts of intelligence and intellectual disability as used in this study. It reviews research on students who have Down syndrome in the multiple domains of learning and development.

Chapter 2, *Comparison of International Patterns of School Placement,* provides an overview of international research on school placement practice. It also reviews research on the effect of type of school placement on students who have Down syndrome.

Chapter 3, *Learning Disability in Irish Policy Documents,* traces the evolution of the concept of learning disability as defined in Irish educational policy documents from the 1965 *Report of the Commission of Inquiry on Mental Handicap*[13] to the *Education Act, 1998.*[14]

Part II, Chapter 4, *Methodology*, describes the selection of the study population. The measures taken to maximise the representative potential of the selected population are outlined. The development of the interview schedule, the method of interview, the interview process and the data analysis are described.

Part III reports the findings of the study.

Chapter 5, *The Students and their Families*, describes the students and provides a profile of their families. Variables which will be used in the analysis

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[13] Commission of Inquiry on Mental Handicap (1965). *Report.* Dublin: Stationery Office.

[14] *Education Act ,1998.* No. 51 in public statutes of the Oireachtas.

of educational experience such as age, sex, health, family characteristics, indicators of socio-economic status and location of residence are described.

Chapter 6, *Early Services*, explores the supports and services received by students and their families during early childhood, and the degree to which early services prepared the children for preschool.

Chapter 7, *Preschool*, describes the type of preschool attended, the age the children started and left, and the length of time spent in preschool. The amount of speech and physiotherapy received during preschool years is recorded. Parental evaluation of the benefit of preschool and the degree to which preschool prepared the children for primary school is also analysed.

Chapter 8, *Psychological Assessment*, investigates the role of psychological assessment in informing parents' school enrolment decisions.

Chapter 9, *School Placement*, reports the type of first school enrolment. Factors which determined parental choice of first school enrolment are elicited, changes in school enrolment analysed, and parental priorities in choosing a school for their sons/daughters narrated.

Chapter 10, *Profiles of the Schools and Analysis of In-school Learning Support,* describes the schools attended by type of school. It details the type of in-school learning supports the parents believed were available to their sons/daughters. Comparisons by type of school are made.

Chapter 11, *School Experience: Student Well-being,* compares students' attitudes to going to school by type of school. It considers differences in distance to school and in time spent travelling. Parent knowledge of school

policy on bullying is appraised. Student behaviour difficulties are reported. Parents' evaluation of the degree to which the schools accommodated the students' educational and social needs is analysed. Student social involvement and out-of school contact with friends is explored.

Chapter 12, *Student Academic Attainment,* records parents' assessment of the students' level of attainment in reading, number skills and writing. Attainment is analysed by age, sex, type of school and other variables.

Chapter 13, *Parental Evaluation of School Placement*, examines the parents' perceptions of the advantages and disadvantages of their sons'/daughters' present school placement by type of school attended.

Part IV, Chapter 14, *Discussion, Implications for Policy, Conclusion,* explores the findings of the study, indicates areas for further research, and identifies the implications for education policy.

Terminology

The term *Down* rather than *Down's* is used throughout this study. For several decades, parents of children who have this condition have advocated that the term *Down syndrome* be used because of their concern that their children should not be seen as simple extensions of the syndrome. In agreement with the philosophy of these parents, as well as that of many scientists and educators, the term is used here.[15]

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[15] Cicchetti, D. and Beeghly (eds.) (1990), p. xi-xii.

When referring to a type of school, the terminology of the Department of Education and Science is used. The difference in the designation of the school attended does not necessarily reflect difference in student ability.

Chapter 1: Cognitive Learning and Development

Although students who have Down syndrome may experience developmental delays, they are quite heterogeneous in their developmental profiles. The extent to which a person shows the physical characteristics of the syndrome is no indication of his/her intellectual capacity.[1] Each person who happens to have Down syndrome is an individual, with a unique appearance, personality and set of abilities. However, by considering the behaviour of groups of young people who have Down syndrome, insights may be gained into the effect of the syndrome.

The concept of intelligence

In order to begin an investigation into the cognitive or developmental patterns of students who have Down syndrome, it is necessary to consider what is meant by cognitive ability or intelligence. Lynch suggests that there is a widespread belief that "intelligence is a clearly defined entity on the basis of which people can be hierarchically ordered".[2] She notes that many educationalists conceive intelligence as a given essence, which some have and which others do not, that is fixed over time and quantifiable. Furthermore, the education system traditionally has recognised only two types of intelligence, namely, logical-mathematical and linguistic. She argues that by "defining intelligence in narrow linguistic and logical mathematical terms, we insure that most children will not be particularly intelligent". Not only does this

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[1] Booth, T. (1985). Labels and their consequences. In D. Lane and B. Stratford (eds.), *Current Approaches to Down's Syndrome*. London: Holt, Rinehart and Winston, pp. 3-24, p. 22.

narrow concept of intelligence allow some students to be dismissed as failures, it is questionable on fundamental philosophical grounds. Lynch argues that

> ... by claiming that intelligence is a fixed, measurable entity which individuals possess to a greater or lesser degree, one is claiming that some people are *less human* than others. In other words, one is claiming that some people lack, or possess very little of, what is a defining human characteristic, namely, intellectual ability. [3]

Furthermore, a narrow concept of intelligence "seriously circumscribes one's vision of what is educationally possible."[4] It also fails to appreciate the diversity of human existence and experience.

Lynch proposed that a more dynamic and positive alternative to the narrow view of intelligence might be found in Howard Gardner's concept of *multiple intelligences.*[5] Gardner's ideas are now widely referred to within Irish educational dialogue. To some extent, they have influenced practice.[6]

Howard Gardner states that "if we are to encompass adequately the realm of human cognition, it is necessary to include a far wider and more universal set of competencies than has ordinarily been considered".[7] He identifies seven human intelligences: *linguistic, musical, logical-mathematical*, *spatial, bodily-kinesthetic, intra-personal* and *inter-personal.* Though distinguishable, these

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[2] Lynch, K. (1991). Intelligence, ability and education: challenging traditional views. *Oideas*, vol. 38, pp. 134-149, p. 139.

[3] Lynch, K. (1991), p. 139.

[4] Lynch, K. (1991), pp. 138-139.

[5] Lynch, K. (1991), pp. 142-145.

[6] Hyland, A. (ed.) (2000). *Multiple Intelligences: Curriculum and Assessment Project. Final Report.* Cork: Multiple Intelligences, Curriculum Project, Education Department, University College, Cork.

[7] Gardner, H. (1983). *Frames of the Mind.* London: Fontana, p. 133.

intelligences overlap and serve to support one another. Gardner maintains that "nearly all cultural roles exploit more than one intelligence".[8]

The concept of intellectual disability

Intellectual disability is not a uniform condition that is characterised by an undifferentiated delay in cognitive development. It is varying combinations of deficits in a complex system in which some abilities may be seriously disrupted while others preserved.[9]

Two theoretical models of intellectual disability have been hypothesised. The *difference* model suggests that different cognitive processes are operative. The d*evelopmental* model proposes that the same cognitive stages and processes apply, but that delays and asynchronies are experienced.

Early research into cognitive development in children with learning disabilities was based on the *difference* hypothesis. It was theorised that the children were in some way *defective* in their functioning compared with typically developing children. Lewin and Kounin saw children with developmental delays as more *rigid* in their cognitive systems.[10] Zeeman and House suggested that a deficit in attention was the primary factor accounting for

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[8] Gardner, H. (1983), p. 208.

[9] Vicari, S., Carlesimo, A. and Caltagirone, C. (1995). Short-term memory in persons with intellectual disabilities and Down's syndrome. *Journal of Intellectual Disability Research,* vol. 36, no. 6, pp. 532-537.

[10] Lewin, K. (1935). *A Dynamic Theory of Personality: Selected Papers.* A. Adams and K. Zenner (trans.) New York: McGraw Hill, Chapter 12; Kounin, J. (1941). Experimental studies in rigidity: The measurement of rigidity in normal and feebleminded persons. *Character and Personality,* vol. 9, pp. 251-273.

difficulties.[11] Luria suggested a lack of verbal mediation.[12] Ellis hypothesised that the stimulus trace was both shortened in duration and lessened in intensity and because the stimulus trace was *defective*, there were deficits in learning and retention.[13] Milgram and Furth theorised that the cognitive stages of children with intellectual disabilities differed from those of typically developing children and were more likely to contain traces of developmentally earlier levels and likely to show regressions to those earlier levels.[14]

Zigler and his associates challenged these early studies for failing to take into consideration environmental and motivational factors. Variables such as institutionalisation, social class, the child's expectations about the testing situation, and repeated experience of failure were shown to be related to performance on experimental tasks.[15] Zigler proposed that children with learning disabilities were not fundamentally different, but progressed through the stages of typical development at a slower rate and would stop developing at a lower level.[16] Zigler and Balla argued that cognitive factors alone did not explain differences in performance. They argued that the behaviour of

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[11] Zeeman, D. and House, B. (1963). The role of attention in retardate discrimination learning. In N. Ellis (ed.), *Handbook of Mental Deficiency.* New York: McGraw-Hill, pp. 159-223.

[12] Luria, A. (1963). Psychological studies of mental deficiency in the Soviet Union. In N. Ellis, (ed.) *Handbook of Mental Deficiency.* New York: McGraw-Hill, pp. 353-387.

[13] Ellis, N. (1963). The stimulus trace and behavioral inadequacy. In N. Ellis (ed.), *Handbook of Mental Deficiency.* New York: McGraw-Hill, pp. 353-387.

[14] Milgram, N. and Furth, H. (1963). The influence of language on concept attainment in educable retarded children. *American Journal of Mental Deficiency*, vol. 67, pp. 733-739.

[15] Robinson, H. and Robinson, N. (1965). *The Mentally Retarded Child: A Psychological Approach.* New York: McGraw-Hill, p. 309.

[16] Zigler, E. (1969). Developmental versus difference theories of mental retardation theories and the problem of motivation. *American Journal of Mental Deficiency,* vol. 73, pp. 536-556.

persons with intellectual disabilities, "as for all human beings, reflects more than formal cognitive processes".[17]

The *developmentalists*, led by Zigler, derived three hypotheses regarding children who had developmental disabilities. The *similar sequence* hypothesis predicted that children who had learning disabilities progressed through the same stages of development as typically developing children. The *similar structure* hypothesis predicted that the children performed equally well from task to task at their level of mental development. The *similar response* hypothesis predicted that children who had learning disabilities responded to external factors in ways similar to typically developing children. While children with disabilities may, because of their disability, experience *non-normal* life experiences (e.g., more failure, more institutionalisation, fewer experiences, etc.), their responses should approximate those of typically developing children who undergo such experiences.[18] Weisz and Zigler,[19] Weisz and Yates,[20] Zigler and Balla[21], and Lister *et al.*[22] have produced evidence

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[17] Zigler, E. and Balla, D. (1977). Personality factors in the performance of the retarded. *Journal of the American Academy of Child Psychiatry*, vol. 16, pp. 19-27, p. 20.

[18] Hodapp, R. and Zigler, E. (1990). Applying the developmental perspective to individuals with Down syndrome. In D. Cicchetti and M. Beeghly (eds.), *Children with Down Syndrome: A Developmental Perspective.* Cambridge: Cambridge University Press, pp. 1-29, p. 9.

[19] Weisz, J. and Zigler, E. (1979). Cognitive development in retarded and nonretarded persons: Piagetian tests of similar sequence hypothesis. *Psychological Bulletin*, vol. 89, pp. 831-851.

[20] Weisz, J. and Yeates, K. (1981). Cognitive development in retarded and non-retarded persons: Piagetian tests of similar structure hypothesis. *Psychological Bulletin*, vol. 90, pp.153-178.

[21] Zigler, E. and Balla, D. (1977), pp. 19-27.

[22] Lister, C., Leach, C., McGraw, D. and Simpson, L. (1989). Similar-sequence and similar-structure in retarded children's development. *British Journal of Educational Psychology*, vol. 59, pp. 8-18.

supporting these hypotheses when applied to children with cognitive disabilities without clear organic etiologies.

Overview of cognitive development in students who have Down syndrome

For persons who have Down syndrome there is evidence of a similar sequence of cognitive development. However, aetiology seems to matter in relation to the similar structure prediction. Evidence regarding the similar response hypothesis is limited.

- ***Similar sequence***

Despite delays in timing and certain atypical features, such as hypotonia, facial muscle structure differences, passivity and low levels of arousal, children who have Down syndrome show patterns of development and sequences that are highly similar to those of typically developing children.[23]

- ***Similar structure***

The evidence suggests that children who have Down syndrome do not demonstrate an identical structure of development to that of typically developing children. That is, they do not perform equally well from task to task at their level of development. When matched either with typically developing children of the same developmental stage, or developmentally delayed children who did not have Down syndrome, children who have Down syndrome perform worse on certain skills and better on others. An example of

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[23] Dunst, C. (1990). Sensorimotor development of infants with Down syndrome. In D. Cicchetti and M. Beeghly (eds.), *Children with Down Syndrome: A Developmental Perspective.* Cambridge: Cambridge University Press, pp. 180-230; Cardoso-Martins, C. and Mervis, C.

this sort of *asynchrony* would be their linguistic development. Children who have Down syndrome seem to have particular difficulties with expressive language, abstract thinking and dealing with complex stimuli. In other areas, such as social adaptation and visual perception, their abilities seem less delayed than their overall level of mental development.[24]

Nevertheless, children who have Down syndrome show organised patterns of development.[25] It has been found that there are *local homologies* in development, or relationships among tasks that require common underlying capacities. These homologies involve subsets of skills that appear together. Other skills of the same stage may appear at different times. Certain skills cluster together while others are independent of those skills.

- ***Similar response***

Wishart challenged the similar sequence hypothesis and argued that students who have Down syndrome have "very differing sets of skills and very different ability profiles, arrived at by very different routes".[26] She argued that the delay in attainment of a particular stage or skill in any area of development

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(1985). Maternal speech to prelinguistic Down syndrome children. *American Journal of Mental Deficiency*, vol. 89, pp.177-184.

[24] Hodapp, R. and Zigler, E. (1990), pp. 13-15.

[25] Mundy, P., Seibert, J. and Hogan, A. (1984). Relationship between sensorimotor and early communication abilities in developmentally delayed children. *Merrill-Palmer Quarterly*, vol. 30, pp. 30-44; Messer, D. and Hasan, P. (1994). Early communication and cognition in children with Down's syndrome. *Down's Syndrome Research and Practice*, vol . 2, no. 1, pp. 3-10, p. 9; Hodapp, R., Burack, J. and Zigler, E. (1992). Developmental perspective in mental retardation. In R. Hodapp, J. Burack and E. Zigler (eds.), *Issues in the Developmental Approach to Mental Retardation.* Cambridge: Cambridge University Press, pp. 3-26, p. 18-19.

[26] Wishart, J. (1988). Early learning in infants and young children with Down syndrome. In L. Nadel (ed.), *The Psychobiology of Down Syndrome.* Cambridge, Mass: MIT Press, pp. 7-50. Wishart, J. (1995). Cognitive abilities in children with Down syndrome: developmental instability and motivational deficits. In C. Epstein (ed.), *Etiology and Pathogensis of Down Syndrome: Proceedings of the International Down Syndrome Research Conference.* New York: Wiley-Liss, pp. 57-91, p. 80.

could *in itself* lead to significant differences in the unfolding of the developmental processes.[27] However, Wishart's argument centres on her disagreement with the similar response hypothesis. Wishart and Duffy reported that, unlike typically developing children, children who have Down syndrome engage in a form of cognitive avoidance that adversely affects both the acquisition and consolidation stages of learning.[28] Wishart also has found that the children often used diversionary and delaying tactics, made non-committal responses, misused social skills and underused existing skills.[29] Wishart and Duffy concluded that, if the children responded to their everyday environment in the same way as they did in the experimental situation, they were inefficiently using whatever level of ability they had and adding to their already existing disability.[30] They judged the responses of children they studied to be different compared with those of typically developing children.

- ***Rate of development***

Children who have Down syndrome vary considerably in their attainment of developmental milestones. The data in Table 1.1 shows the wide range of typical development and even greater variation within those who have Down syndrome. This data shows that some children who have Down syndrome attain developmental milestones within the range expected for typically

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[27] Wishart, J. (1988), p. 17.

[28] Wishart, J. and Duffy, L. (1990). Instability of performance on cognitive tests in infants and young children with Down's syndrome. *British Journal of Educational Psychology,* vol. 60, pp. 10-22.

[29] Wishart, J. (1995), p. 81.

[30] Wishart, J. and Duffy, L. (1990), p. 20.

developing children and indicates the considerable delays some children experience.

Table 1.1. Comparison of age of attainment of developmental milestones for typically developing children and children who have Down syndrome[31]

	Typically developing children.	Children who have Down syndrome
Sit	5 - 9 months	6 - 28 months
Walk	8 – 18 months	12 - 65 months
First words	6 – 14 months	9 months - 7 years
Combined words	14 – 32 months	18 months - 11 years

Although children and adults who have Down syndrome continue to learn and to maintain learned skills, some studies have found that the *rate* of cognitive development decelerates over time.

In younger children, social skills are relatively preserved while other cognitive areas, specifically language development, are more affected. Gradual declines in the rate of social skill development have been observed. Hodapp and Zigler noted the effect of linguistic deficits on social functioning. As social skills become increasingly dependent upon concepts of language and symbolic numerical units, linguistic difficulties for persons who have Down syndrome may increasingly come to affect social development.[32]

The body of research regarding specific areas of cognition in persons who have Down syndrome is considerable. The amount of research varies considerably between domains, linguistic ability has been extensively studied. Less research on other cognitive abilities has been published.

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[31] Fowler, A. (1993). Perspective on learning: research on language and memory and implications for treatment. Paper delivered at the 5th International Down Syndrome Conference, Orlando, Fla, August 1993, unpublished.

[32] Hodapp, R. and Zigler, E. (1990), pp. 17-18.

- ***Early language development – concept formation and vocabulary acquisition***

The ability to assign elements to categories provides the child's world with stability. Almost all concrete-nouns are labels for categories or objects within those categories. Entities within a category are alike in important respects and can thus be treated similarly. Without categories, each entity in the child's world would be unique. Categories allow the child to go beyond the information that is perceptibly available and to make inferences about the elements in his/her environment. [33]

Mervis states that an important assumption in understanding early categorisation, or concept formation, is that children believe that, when a person points at or otherwise indicates an object for which the child does not know a name, the accompanying word refers to the whole object. The data available suggests that children who have Down syndrome, like other children, intuitively accept the whole-object assumption concerning the meanings of novel words. [34]

Mervis found that both children who have Down syndrome and typically developing children formed *child basic* categories when naming objects. This

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[33] Mervis, C. (1990). Early conceptual development of children with Down syndrome. In D. Cicchetti and M. Beeghly (eds.), *Children with Down Syndrome: A Developmental Perspective.* Cambridge: Cambridge University Press, pp. 252-301, p. 252.

[34] Mervis, C. (1990), p. 258-260.

suggested that the internal structures of category formation were the same for the two groups of children.[35]

The initial nouns used by young children tend to be concentrated on a limited subset of categories — food, clothing, animals, people, vehicles, toys, household items used in everyday routines and, finally, body parts.[36] Gillham found that initial nouns produced by children who have Down syndrome concentrated on the same categories as for typically developing children, and that the exemplars were remarkably consistent.[37]

Miller found that early language development of children who have Down syndrome differs from that of typically developing children in at least one important way. Their rate of vocabulary acquisition can be significantly slower, even when differences in cognitive development are taken into account. Not all children who have Down syndrome exhibit similar rates of vocabulary acquisition. Thirty-five percent of the children he studied had rates of vocabulary growth consistent with mental age expectations, others progressed more slowly and others seemed even more delayed.[38] A similar

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[35] Mervis, C. (1990), pp. 266-278, p. 290. The author notes that the most effective method of introduction of a new label for an object, already considered by the child to be a member of a category labelled by a different name, was found to be the same for both groups. Either the child noticed the importance of the relevant attributes on his/her own and pointed them out to the adult who provided the object's adult basic name, or the adult drew the child's attention to the salient difference and provided the adult basic name. Such changes were most likely to occur when the relevant attributes were pointed out to the child explicitly, rather than when their existence only is implied.

[36] Mervis, C. (1990), p. 261.

[37] Gillham, B. (1990). First words in normal and Down syndrome children: a comparison of content and word form categories. *Child Language Teaching and Therapy*, vol. 6, pp. 25-32. Gillham, B. (1979). *The First Words Programme.* London: Allen and Unwin.

[38] Miller, J. (1995). Individual differences in vocabulary acquisition in children with Down syndrome. *Progress in Clinical Biological Research*, vol. 393, pp. 93-103.

pattern was observed by Oliver and Buckley.[39] Such intra-group differences should be kept in mind when considering the language development of children who have Down syndrome.

The vocabulary spurt for children who have Down syndrome often does not begin at the mental age expected. Nevertheless, at some stage, most children who have Down syndrome demonstrate a rapid acceleration of vocabulary, which suggested to Miller that they have the same cognitive mechanism for vocabulary acquisition although it may be activated at a different time and with different efficiency.[40]

Children who have Down syndrome use the same principle as typically developing children for understanding that novel words usually represent novel objects in their environment. This ability is known as *fast mapping*.[41] Mervis and Bertrand, and Chapman *et al.* have found that for children who have Down syndrome, as with typically developing children, the ability to fast map a new word to a category was not available at the start of lexical acquisition. However, as the children developed larger productive vocabularies and began to acquire new words more rapidly, they employed this technique.[42]

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[39] Oliver, B. and Buckley, S. (1994). The language development of children with Down's syndrome: first words to two-word phrases. *Down's Syndrome Research and Practice*, vol. 2, no. 1, pp. 71-75.

[40] Miller, J. (1992). Development of speech and language in children with Down syndrome. In I. Lott and E. McCoy (eds.), *Down syndrome: Advances in Medical Care.* New York: Wiley-Liss, pp. 39-50.

[41] Miller, J. (1992), p. 48.

[42] Mervis, C. and Bertrand, J. (1995). Acquisition of the novel-name-nameless category (N3C) principle by young children who have Down syndrome. *American Journal on Mental Retardation*, vol. 100, no. 3, pp. 231-243; Chapman, R., Bird, E. and Schwartz, S. (1990).

- ***Early communicative skills***

Beeghley *et al.* investigated whether the language deficits of young children who have Down syndrome were part of a broader symbolic deficit that could be observed in other aspects of representational functioning such as communicative skills or symbolic play, or whether their expressive language delays were limited to the more structural aspects of language.[43] They observed that, although delayed, children who have Down syndrome exhibited similar sequences of play development as have been observed in typically developing children with three notable exceptions. Relative to their mental age-matched controls, children who have Down syndrome tend to spend more time engaged in simple manipulative object play; they engage in fewer object transformations; and make fewer object substitutions during symbolic play. This suggests that children who have Down syndrome play more concretely than do typically developing children of the same developmental level.

Nevertheless, the delayed expressive language abilities of the children who have Down syndrome does not preclude them engaging in complex episodes of multi-schemed and multi-themed symbolic play.[44] These findings suggest

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Fast mapping of words in event context by children with Down syndrome. *Journal of Speech and Hearing Disorders*, vol. 55, no. 4, pp. 761-770.

[43] Beeghly, M., Weiss-Perry, B. and Cicchetti, D. (1990). Beyond sensorimotor function: early communicative and play development of children with Down syndrome. In D. Cicchetti and M. Beeghly (eds.), *Children with Down Syndrome: A Developmental Perspective.* Cambridge: Cambridge University Press, pp. 329-368.

[44] Cicchetti, D. and Ganiban, J. (1992). The organization and coherence of developmental processes in infants and children with Down syndrome. In R. Hodapp, J. Burack and E. Zigler (eds.), *Issues in the Developmental Approach to Mental Retardation,* Cambridge: Camabridge University Press, pp. 169-225, p. 201.

that, despite their linguistic deficits, the symbolic capacities of young children who have Down syndrome may be relatively intact.[45]

Children who have Down syndrome have been observed to make fewer non-verbal requests and tend not to take the initiative in play situations. Mundy, *et al.* found that individual differences in non-verbal requesting were associated with the subsequent development of expressive language.[46] The development of non-verbal communication and play skills were found to provide an important foundation for the emergence of expressive language in young children who have Down syndrome.

Because of the importance of play activities to language acquisition, two aspects of play should be briefly considered: the activities initiated by playmates, and the manner of play interactions. McEvoy and McConkey noted variations in play activities with different playmates. In the families they observed, mothers initiated more varied activities with the children than did other members of the families. Pretend play occurred more frequently with mothers or siblings. Play with fathers was more usually gross-motor activities. Siblings also engaged most frequently in gross-motor activities.[47] McConkey and Martin found that young children showed higher levels of pretend actions when their mothers were actively playing with them, anticipating and

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[45] Beeghly, M. *et al.* (1990), pp. 359-363.

[46] Mundy, P., Kasari, C., Sigman, M. and Ruskin, E. (1995). Nonverbal communication and early language acquisition in children with Down syndrome and in normally developing children. *Journal of Speech and Hearing Research*, vol. 38, no. 1, pp. 157-167.

[47] McEvoy, J. and McConkey, R. (1983). Play activities of mentally handicapped children at home and mothers' perceptions of play. *International Journal of Rehabilitation Research*, vol. 6, pp.143-151. Cited in McConkey R. (1985). Play. In D. Lane and B. Stratford (eds.), *Current Approaches to Down's Syndrome.* London: Holt, Rinehart and Winston, pp. 282-314, p. 285.

supporting their child's play, than when the mothers were passive observers of the child's play.[48] Thus, the activities initiated by others and *modelling* or *scaffolding* during play may influence the development of symbolic play activities.

- ***Language in older children and teenagers***

Young people who have Down syndrome typically have strengths in language comprehension. They understand vocabulary and grammar better than they are able to reproduce them in speech. Moreover, their expressive language is delayed relative to their other cognitive skills.[49]

Miller, in a review of the literature on the development of the speech, language and communication skills of students who have Down syndrome, reported that, as chronological age increases, deficits in overall language development below mental age expectations are more likely to be found.[50]

The research consistently documents speech intelligibility problems beginning with the appearance of first words and continuing through adulthood. Students who have Down syndrome have a high incidence of speech production problems. Hamilton found that young adults who have Down syndrome showed evidence of impaired muscular control of the tongue resulting in slow

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[48] McConkey, R. and Martin H. (1985). Mother's play with toys: A longitudinal study with Down's syndrome infants. In P. McGinley (ed.), *Research and Practice in the Service of People with Learning Disabilities.* Galway: Brothers of Charity Services, pp. 47-60, pp. 56-58.

[49] Miller, J. (1992), pp. 40-41.

[50] Miller, J. (1987). Language and communication characteristics of children with Down syndrome. In S. Pleuchel, C. Tinghey, J. Rynders, A. Crocker and C. Crutcher (eds.), *New Perspectives on Down Syndrome.* Baltimore: Brooks Publishing, pp. 233-262.

movements, difficulty in tongue tip control and coarticulation.[51] Bray and Woolnough found that the speech for most teenagers who had Down syndrome was unintelligible. The intelligibility of their speech was very dependent upon the listener's knowledge of context.[52] Buckley and Sacks found that intelligibility was a problem even for teenagers who had relatively advanced language skills.[53]

There is considerable evidence to indicate that structural aspects of language present the greatest difficulty. Jenkins, Fowler, and Wisniewski *et al.* have documented language delays that were incommensurate with general developmental status and have cited delays and disruptions in the acquisition of grammar as a major factor.[54] Grammatical production is more severely affected than comprehension of grammar. Difficulties with syntax appear to be the primary problem. There is some evidence that grammar can be taught explicitly.[55] There is also evidence to suggest that at least some young people

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[51] Hamilton, C. (1993). Investigation of the articulatory patterns of young adults with Down's syndrome using electropalatography. *Down's Syndrome Research and Practice*, vol.1, no. 1, pp.15-27.

[52] Bray, M. and Woolnough, L. (1988). The language skills of children with Down's syndrome aged 12 to 16 years. *Child Language Teaching and Therapy*, vol. 4, pp. 311-324.

[53] Buckley, S. and Sacks, B. (1987). *The Adolescent with Down's Syndrome*. Portsmouth: Portsmouth Down's Syndrome Trust, pp.41-43.

[54] Jenkins, C. (1993). Expressive language delay in children with Down's syndrome: a specific cause for concern. *Down's Syndrome Research and Practice*, vol.1 no. 1, pp.10-14; Fowler, A. (1990). Language abilities in children with Down syndrome: evidence for a specific syntactic delay. In D. Chicchetti and M. Beeghly (eds.), *Children with Down Syndrome: A Developmental Perspective*. Cambridge: Cambridge University Press, pp. 313-318; Wisniewski, K., Miezejeski, C. and Hill, A. (1988). Neurological and psychological status of individuals with Down syndrome. In L. Nadel (ed.), *The Psychobiology of Down Syndrome*. Cambridge, Mass: MIT Press, pp.315-343, p. 331.

[55] Buckley, S. (1993, b). Developing the speech and language skills of teenagers with Down's syndrome. *Down's Syndrome Research and Practice*, vol.1, no. 2, pp. 63-71, pp. 64-68.

who have Down syndrome make substantial progress in syntactic development through to and during their teenage years.[56]

- ***Understanding the causes of language delay***

Miller suggests that the course and limits on language learning for children who have Down syndrome cannot be explained as a simple function of general cognitive development. Partial answers may lie in unique *child* characteristics. Children who have Down syndrome often experience associated conditions such as neuromuscular deficits, increased incidence of hearing and visual deficits, otitis media, and structural anomalies in the speech apparatus, which put them at risk for expressive language problems.[57]

Another partial explanation might be that because children usually acquire a considerable number of words before syntactic development begins, the difficulty children who have Down syndrome experience in acquiring initial vocabulary may lead to further delays in the acquisition of grammatical forms.[58]

Aspects of children's social and linguistic environments may also contribute.[59] Because social interactions are reciprocal in nature, the unique characteristics of the language of the person who has Down syndrome may in turn affect the quality of social interaction that he/she experiences. Parental experience and expectations for their children also affect the type of input and language

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[56] Fowler, A. (1990), p. 318.

[57] Miller, J. (1992), p. 40.

[58] Mervis, C. (1990), pp. 280-282.

opportunities a young child receives.[60] The language environments of play groups, preschools and schools the students attend may also effect language development. Speech and language therapy is essential for most children who have Down syndrome to maximise their communicative potential.[61]

- ***Optimal time for language teaching interventions***

The question of optimal method and timing of language teaching interventions remains theoretic and open to controversy. Rondal suggests that there may be critical periods for acquisition of different language components. He proposes that phonological and morpho-syntactic training should be programmed at a maximal rate during childhood as the potential for significant development in these areas may no longer be available after fourteen years of age; semantic, lexical and pragmatic training should also be pursued intensely during childhood, but can be profitably continued in adolescence and early adulthood. He maintains that for these aspects of language there is potential for development beyond childhood.[62]

Rondal summarised the state of our present knowledge about the speech and language of persons who have Down syndrome. The level of language attainment from birth or early age cannot be predicted. In persons who have

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[59] Byrne, A. and Buckley, S. (1993). The significance of maternal speech styles for children with Down's syndrome. *Down's Syndrome Research and Practice*, vol. 1, no. 3, pp.107-117.

[60] Cichetti, D. and Ganiban, J. (1992), p. 209; Cheseldine, S. and McConkey, R. (1979). Parental speech to young Down's syndrome children: an intervention study. *American Journal of Mental Deficiency*, vol. 83, no. 6, pp. 612-620, p. 681.

[61] Kumin, L. (1994). *Communication Skills in Children with Down Syndrome: A Guide for Parents.* Rockville, Maryland: Woodbine House, p.192.

[62] Rondal, J. (1996). Oral language in Down's syndrome. In J. Rondal, J. Perera, L. Nadel and A. Comblain, (eds.), *Down's Syndrome: Psychological, Psychobiological and Socio-Educational Perspectives.* London: Whurr Publishers, pp. 99-117, p. 105.

Down syndrome, the formal aspects of language give the greatest difficulty. Most individuals who have Down syndrome can develop functionally adequate, if not formally perfect, language.[63]

Musical development

There has been scant investigation of the musical development of children and young people who have Down syndrome. Stratford and Ching found that differences in rhythmic discrimination between children who had Down syndrome and typically developing children of the same developmental level were not significant. Children who had Down syndrome performed better on the tests of shadowing rhythms than did other children of the same developmental level who had learning disabilities.[64]

The same team compared children, all of whom had learning disabilities, but who were attended different schools, for their ability to perform a dance to music. Differences between the children by type of learning disability were not significant. Differences by the school attended were. They concluded that specific teaching approaches can significantly affect the development of children with Down syndrome in such creative aspects of the curriculum as music, movement and dance.[65]

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[63] Rondal, J. (1997). Language in Down syndrome: Current perspectives. Paper read at 6th World Congress on Down Syndrome, Madrid, 1997. Unpublished.

[64] Stratford, B. and Ching, E. (1983). Rhythm and time in the perception of Down's syndrome children. *Journal of Mental Deficiency Research*, vol. 27, pp. 23-38.

[65] Stratford, B. and Ching, E. (1989). Responses to music and movement in the development of children with Down syndrome. *Journal of Mental Deficiency Research*, vol. 33, pp.12-24.

Logical-mathematical development

There has been a limited number of studies published on the numerical skills of students who have Down syndrome. It is often assumed, based on very little evidence that they will not progress beyond basic counting, time telling and use of money. Teaching is often with very little expectation that the student will understand the underlying mathematical principles.

Competence in basic arithmetical reasoning, addition and subtraction has been shown to depend on counting skills.[66] Unless students have mastered the concept of counting, they cannot progress to learning money or telling time. Counting forwards and backwards and counting on from a given number can pose difficulties for young students. Games using familiar materials have been shown to increase accuracy in counting.[67]

Nye *et al.* found that there was not a steady progression of numerical skills with chronological age.[68] The authors suggest that this may be in part due to the scant numeracy training that the children had received. They were unable to draw conclusions regarding the relationship between numerical ability and general ability in children who have Down syndrome. They did however

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[66] McEvoy, J. and McConkey, R. (1988). Learning to count: a simple task? *Learn: Journal of the Association of Irish Remedial Teachers*, pp. 27-33.

[67] McConkey, R. and McEvoy, J. (1986). Games for Learning to Count. *British Journal of Special Education*, vol. 13, no. 2. pp. 59-62.

[68] Nye, J., Clibbens, J. and Bird, G. (1995). Numerical ability, general ability and language in children with Down's syndrome. *Down's Syndrome Research and Practice*, vol. 3, no. 3, pp. 92-192.

record that there was a significant correlation between receptive grammar and numerical skills.[69]

Caycho *et al.* found that a group of nine-year-olds who have Down syndrome appeared to show an implicit understanding of the *one-to one* and *stable order* principles, and of the *how many* level of knowledge concerning cardinality.[70] They suggested that the students were capable of developing rule-governing skills and would benefit from a programme of instruction in which general rules are taught. The implication of their study was "not that all children who have Down syndrome have an implicit and explicit understanding of number, but that there is clearly the possibility of developing this understanding".[71]

Evidence of students who have Down syndrome mastering algebraic rules has recently been presented.[72] Once the students had learned algebraic rules and procedures they applied them competently.

Visuo-spatial development

Neurobiological, neuropsychological and behavioural evidence indicates that individuals who have Down syndrome have impaired spatial representational abilities.[73] Children who have Down syndrome often experience difficulties

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[69] Nye, J., Clibbens, J. and Bird, G. (1995), p. 101.

[70] Caycho, L., Gunn, P. and Siegal, M. (1991). Counting by children with Down syndrome. *American Journal on Mental Retardation*, vol. 95, no. 5, pp. 575-583, p. 581.

[71] Caycho, L.. *et al.* (1991), pp. 582-583.

[72] Monari, E. (1997). Teenagers with Down's syndrome study algebra in high school. Paper presented at the 6th World Congress on Down's Syndrome. Unpublished.

[73] Uecker, A., Mangan, P., Obrzut, J. and Nadel, L. (1993). Down syndrome in neurobiological perspective: An emphasis on spatial cognition. Special Issue: the neuropsychological basis of

representing objects and experiences pictorially. Clements and Barret found that on tasks involving the graphic depiction, children who have Down syndrome performed less well than would be expected by their verbal mental age and less well than children with intellectual disability of non specific origin. The children obtained higher scores on picture recognition than they did on drawing production tasks. The differences in the drawings of children who have Down syndrome and other children of the same mental age were seen to stem both from differences in the motor execution of the drawings, and from different levels of planning underlying the production of the drawings. The tendency of the children who have Down syndrome to produce overlaps and fragments in their drawings was seen to be indicative of the different strategies used.[74]

Bodily kinesthetic

There is evidence to suggest that many factors influence the sensorimotor development of children who have Down syndrome. It has been found that sensorimotor development of infants who have Down syndrome can be positively influenced by rearing condition, environment, personal interactions and the provision of learning opportunities.[75]

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disorders affecting children and adolescents. *Journal of Clinical Child Psychology*, vol. 22, no. 2, pp. 266-276.

[74] Clements, W. and Barret, M. (1994). The drawings of children and young people with Down's syndrome: a case of delay or difference? *British Journal of Educational Psychology*, vol. 64, pp. 441-452.

[75] Guralnick, M. (1996). Future directions in early intervention for children with Down's syndrome. In J. Rondal, J. Perrera, L. Nadel and A. Comblain (eds.), *Down's Syndrome Psychological, Psychobiological and Socio-Educational Perspectives.* London: Whurr Publishers, pp.147-162, p. 148; Dunst, C. (1990), pp. 183-224.

The motor skills of students who have Down syndrome are consistently reported to be below their age-matched peers and in many cases below other children with intellectual disabilities.[76] Research has also documented specific difficulties in aspects of movement such as timing, balance and co-ordination as well as physiological aspects such as muscle tone and strength.[77]

The fitness level in children, adolescents and adults who have Down syndrome is low. It is believed that both physiological and motivational factors contribute to this. Syndrome-specific conditions, such as heart and respiratory problems, thyroid function abnormalities, and orthopaedic problems, may contribute to low activity levels and non-participation in activities of a vigorous nature.[78] There also seems to be a lack of expectation in their educational programmes. Furthermore, opportunities to participate in regular exercise may be restricted. Children and young people often do not have the skill level necessary to participate. There may also be a certain lack of spontaneity because many of the activities of children and adolescents who have Down syndrome are structured by adults and not by peers.[79]

There are cognitive elements in physical activities. Wall suggests a knowledge-based approach to motor skill acquisition for students with

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[76] Burns, Y. and Gunn, P. (1993). *Down Syndrome: Moving Through Life*. London: Chapman and Hall.

[77] Jobling, A. (1994). Physical education for the person with Down syndrome: more than playing games? *Down's Syndrome Research and Practice*, vol . 1, no. 2, pp.31-35, p.32.

[78] Pitetti, K., Climstein, M., Campbell, K., Barrett, P. and Jackson, J. (1992). The cardiovascular capacities of adults with Down syndrome: a comparative study. *Medicine and Science in Sports and Exercise*, vol. 24, pp. 13-19.

[79] Buckley, S. and Sacks, B. (1987), pp. 76-79.

developmental delays.[80] The affective domain should also be considered. Enjoyment can be seen as a prime motivator in a person's continued involvement in an activity. Jobling suggests that "young people who have Down syndrome need opportunities to learn to cherish activities, gain enjoyment form them and thus to remain active throughout their lives." To do so they need they need to feel "good about themselves, to gain from their personal achievements and to have fun times with family and friends".[81]

Personal development

There are strong ties between the acquisition of cognitive and social abilities.[82] Guralnick has highlighted the importance of peer relationships. Successful peer relationships have important long-term developmental implications. Peer relationships encourage cognitive, communicative and pro-social development, and are important to the child's emerging sense of self. It may be important to focus on promoting a young person's social competence, especially competence with peers.[83]

Falvey has asserted that there has been an untested assumption, underlying many of the educational decisions regarding children and young people who have disabilities that a child with a disability would not have reciprocal

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[80] Wall, A. (1990). Skill acquisition research with persons with developmental disabilities: research design considerations. In G. Reid (ed.), *Problems in Movement Control.* Amsterdam: Elsevier, pp. 31-63.

[81] Jobling, A. (1994), pp. 32-34.

[82] Dunst, C. (1990), pp. 221-223.

[83] Guralnick, M. (1996), p. 154-156.

friendships with non-disabled peers.[84] She has found very little research to either reject or support this belief. However, there is a body of research into friendships between children in general. The common thread of the findings is that the prime requisites for building friendships are proximity and opportunity.[85]

Three Irish studies, carried out over a period of fifteen years, have investigated attitudes of peers towards students who have disabilities. The first of these, reported in 1983, found that only one-quarter of the secondary school students surveyed had ever interacted with a person who had learning disabilities and only one half had ever been in their company. This study found that there were no significant differences on any of the opinion statements among the students who had varying degrees of prior contact with people who had learning disabilities.[86]

A second study, reported in 1995, found that primary school girls who attended schools that included students who had learning disabilities were more pro-social towards the students who had disabilities than girls who did not have that experience. Also, the girls in the integrated schools used more

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[84] Falvey, M. and Rosenberg, R. (1995). Developing and fostering friendships. In M. Falvey (ed.), *Inclusive and Heterogeneous Schooling: Assessment, Curriculum and Instruction.* London: Paul H. Brookes, pp. 267-284, p. 268.

[85] Falvey, M. and Rosenberg, R. (1995), pp. 268-269.

[86] McConkey, R., McCormack, B. and Naughton, M. (1983). A national survey of young people's perceptions of mental handicap. *Journal of Mental Deficiency Research*, vol. 27, pp.171-183.

positive and fewer negative terms in their descriptions of a student who had learning disabilities compared with the girls in the unintegrated schools.[87]

A third study, reported in 1998, found that students in schools that included students who had physical disabilities were significantly more positive than those of students who had no such contact. [88]

Some other aspects of learning and development

Before leaving a consideration of the research on learning and development, the literature on three topics particularly relevant to students who have Down syndrome should be considered. These are behaviour, sensory perception and memory.

- ***Behaviour***

Wishart and Duffy found instability of learning to be characteristic of children who have Down syndrome. They suggested that these outcomes could be the result of poor motivation, or basic instability in the learning process itself, or could be due to an interaction of these two factors.[89] Wishart suggests that children who have Down syndrome avoid opportunities for learning new skills, make poor use of skills that are acquired, and fail to consolidate skills into their repertoires. She concluded that "given the unfavourable failure:success

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[87] Gash, H. and Coffey, D. (1995). Influences on attitudes towards children with mental handicap. *European Journal of Special Needs Education*, vol. 10, no. 1, pp.1-16, p.12.

[88] McConkey, A. and James, T. (1998). Secondary school children's attitudes to disability: a comparison in integrated and non-integrated schools. *Reach: Journal of Special Needs Education in Ireland*, vol.12, no.1, pp. 35-44, p.39.

[89] Wishart, J. and Duffy, L. (1990), p. 20.

ratio that DS children inevitably encounter in their attempts at learning, it is perhaps not surprising that they become increasingly reluctant learners."[90]

Wishart suggests that the variable performance often observed in children who have Down syndrome must inevitably lead to an underestimation of their competence. "Children who have Down syndrome are seldom given the benefit of the doubt that when they do not perform on a given task that it may be a case of 'won't do' rather than 'can't do'."[91]

However, it may be the asynchrony of their language skills and neither avoidance behaviour nor *misuse* of social skills which might explain their performance. Learning in persons who have Down syndrome can be unstable. Neurological factors may be implicated in this instability.[92]

Students who have Down syndrome experience feelings of failure. Failure may have an effect on motivation, and motivation an effect on performance. Galloway *et al.* identified three styles of motivation that can be seen in learning situations. *Mastery orientation* is characterised by a focus upon learning and not upon outcome. Students who are mastery motivated perceive learning as intrinsically worth while, failure is seen as an opportunity to learn. *Learned helplessness* follows failure experiences and is

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[90] Wishart, J. (1993). The development of learning difficulties in children with Down's syndrome. *Journal of Intellectual Disability Research*, vol. 37, pp. 389-403.

[91] Wishart, J. (1995), p. 83.

[92] Nadel, L. and Moscovitch, M. (1997). Memory consolidation, retrograde amnesia and the hippocampal complex. *Current Opinion in Neurobiology*, vol. 7, no. 2, pp. 217-227; Nadel, L. (1997). Learning and memory in Down syndrome. Paper read at 6th World Congress on Down Syndrome, Madrid, 1997. Unpublished; Nadel, L. (1996). Learning, memory and neural function. In J. Rondal, J. Perrera, L. Nadel and A. Comblain (eds.), *Down's Syndrome Psychological, Psychobiological and Socio-Educational Perspectives.* London: Whurr Publishers, pp. 21-42, p. 35.

characterised by avoidance of challenge as well as deterioration in performance. Students who exhibit learned helplessness assume not only that failure is inevitable but also that it is beyond their own control. *Self-worth* motivated students, retain a belief that they have, at least potentially, the ability to succeed on a task. In order to avoid negative judgements of performance they might avoid challenge completely. They attribute failure to a lack of effort rather than a lack of ability. Galloway *et al.* found that the maladaptive motivational styles of learned helplessness and self worth were significantly more likely in students with intellectual disabilities. [93]

Maladaptive motivational styles can develop from a context which fails to promote learning and adaptive strategies in response to failure.[94] Students deemed to have special educational needs are often perceived to lack motivation, to hold low self-perceptions of ability, and consequently to pose a range of problems to their teachers and schools. Bultler and Orion found that teacher feedback was a critical feature in helping students with special educational needs to overcome learning difficulties. Teacher feedback which helps students gain control over their own learning processes is more likely to help them to develop mastery control. [95]

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[93] Galloway, D., Leo, E., Rogers, C. and Armstrong, D. (1995). Motivational styles in English and mathematics among children identified as having special educational needs. *British Journal of Educational Psychology*, vol. 65, pp. 477-487.

[94] Galloway, D., *et al.* (1995), p. 486.

[95] Butler, R. and Orion, R. (1990). When students do not understand the determinants of their success and failure in school: relations between internal, teacher and unknown perceptions of control and school achievement. *British Journal of Educational Psychology*, vol. 60, pp. 63-75.

- ***Sensory perception***

Attention to the diagnosis and treatment of underlying organic impairment is a first consideration. Ocular disorders are observed at a higher than usual rate in people who have Down syndrome. Also, numerous reports in the literature attest to the high frequency of structural abnormalities, infectious processes and other functional abnormalities within the otological system, resulting in significant hearing impairment.[96]

Few studies have reported on visual perception in individuals who have Down syndrome. Nakamura, and Miranda and Franz reported relatively strong visual motor skills in persons who have Down syndrome. [97] Freeman and Hoddap also noted relative strength in visual perception. [98]

There have been a greater number of studies of auditory perception.[99] Persons who have Down syndrome are prone to auditory processing difficulties in a variety of audiological, short-term memory, and language

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[96] Pueschel, S. and Sustrova, M. (1996). Visual and auditory perception in children with Down syndrome. In J. Rondal, J. Perrera, L. Nadel and A. Comblain (eds.), *Down's Syndrome Psychological, Psychobiological and Socio-Educational Perspectives.* London: Whurr Publishers, pp. 53-63, pp. 53-55.

[97] Nakamura, H. (1965). An inquiry into systematic differences in the abilities of institutionalized adult mongoloids. *American Journal of Mental Deficiency*, vol. 69, pp. 661-665; Miranda, S. and Franz, R. (1973). Visual preferences of Down's syndrome and normal infants. *Child Development*, vol. 44, pp. 555-561.

[98] Freeman, S. and Hoddap, R. (2000) Educating children with Down syndrome: linking behavioral characteristics to promising intervention strategies. *Down Syndrome Quarterly*, vol. 5., no. 1, pp. 1-9, p. 6.

[99] Bird, E. and Chapman, R. (1994). Sequential recall in individuals with Down syndrome. *Journal of Speech and Hearing Research*, vol. 3, no. 6, pp. 1369-1380; Marcell, M. (1995). Relationships between hearing and auditory cognition in Down's syndrome. *Down's Syndrome Research and Practice*, vol. 3, no. 3, pp. 75-92.

tasks.[100] Poor auditory short-term memory for verbal information may be syndrome specific and not caused by a special susceptibility of individuals who have Down syndrome to attentional distractors.[101]

Pueschel found that students who have Down syndrome performed significantly less well on tests which relied on auditory-vocal and auditory-motor channels compared with their performance on tests which employed visual-vocal and visual-motor channels of communication.[102] A subsequent study suggested that teaching strategies should capitalise on the children's strengths, and should focus on visual-vocal and visual-motor processing modalities, when presenting learning tasks to students who have Down syndrome.[103]

Verbal language can be made visible through sign and pictorial language systems, and through the printed word. Miller reported the value of teaching signs to young children to reduce the negative effects of productive delay, to keep up the rate of vocabulary comprehension and to develop the ability to communicate in a symbolic way. Sign is not a substitute for speech, but a

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[100] Marcell, M., Ridgeway, M., Sewell, D. and Whelan, M., (1995). Sentence imitation by adolescents with Down syndrome and other intellectual disabilities. *Journal of Intellectual Disability Research*, vol. 39, pp. 215-232.

[101] Marcell, M., Harvey, C. and Cothran, L. (1988). An attempt to improve auditory short-term memory in Down's syndrome individuals through reducing distractions. *Research in Developmental Disability*, vol. 9, no. 4, pp. 405-417.

[102] Pueschel, S. (1988). Visual and auditory processing children with Down syndrome. In L. Nadel (ed.), *The Psychobiology of Down Syndrome.* Cambridge, Mass: MIT Press, pp. 199-216, p. 207

[103] Pueschel, S. and Sustrova, M. (1996), p. 61.

means to augment speech for a short time. Sign use will diminish as speech becomes more successful in meeting the child's communication needs.[104]

Print also is a tool for language teaching. Reading has been found to support speech.[105] Students who have Down syndrome can be taught to read, and through reading, understand and practice grammatically and syntactically correct utterances.[106] The visual representation of language also offers a way to overcome auditory processing and memory difficulties.[107] There is some evidence that reading *itself* promotes the development of memory.[108]

- ***Memory***

The ability to hold information in memory for brief periods of time has been shown to be related to a wide range of cognitive abilities. It has been frequently reported that individuals who have Down syndrome experience specific memory deficits, involving both storage and retrieval.[109] They have particular difficulty in organising verbal material according to its categorical structure, and in actively retrieving information stored in long-term memory

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[104] Miller, J. (1992), p. 50.

[105] Buckley, S. (1993a). Language development in children with Down's syndrome: reasons for optimism. *Down's Syndrome Research and Practice*, vol. 1, no. 1, pp. 3-9.

[106] Buckley, S., Bird, G. and Byrne, A. (1996). The practical and theoretical significance of teaching literacy skills to children with Down's syndrome. In J. Rondal, J. Perrera, L. Nadel and A. Comblain (eds.), *Down's Syndrome Psychological, Psychobiological and Socio-Educational Perspectives.* London: Whurr Publishers, pp. 119-128.

[107] Laws, G., Buckley, S., Bird, G., MacDonald, J. and Broadley, I. (1995). The influence of reading instruction on language and memory development in children with Down's syndrome. *Down's Syndrome Research and Practice*, vol. 3, no. 2, pp. 59-64.

[108] Laws, G. *et al.* (1995), p. 63.

[109] Mackensie, S. and Hulme, C. (1987). Memory span development in Down's syndrome, severely subnormal and normal subjects. *Cognitive Neuropsychology*, vol. 4, pp. 303-319; Marcell, M. and Weeks, S. (1988). Short-term memory difficulties and Down's syndrome. *Journal of Mental Deficiency Research*, vol. 32, no. 2, pp. 153-162; Mervis, C. (1990), p. 293;

compared with typically developing children of the same mental age and children with learning disabilities of non-specific aetiology.[110]

Children, adolescents and adults who have Down syndrome may benefit from memory training programmes.[111] The effect of memory training interventions may depend on continued use of the intervention techniques. It is suggested that programmes which incorporated memory techniques into the daily lives of the children and adults are more likely to succeed than programmes that are extraneous to daily activities.

Summary

This review of the literature on the cognitive development of persons who have Down syndrome demonstrates the multiple domains of learning, memory and relationships. They experience impairments in some, but not all, forms of learning. The level of impairment varies and may lead to asynchronous development. Language development may present specific difficulties and this may impinge on other cognitive skills. However, the evidence presented supports the contention that, within each domain of learning, growth, although delayed, is characterised by expected patterns.

Bower, A. and Hayes, A. (1994). Short-term memory deficits and Down's syndrome: a comparative study. *Down's Syndrome Research and Practice*, vol. 2, no. 2, pp. 47-50.

[110] Carlesimo, G., Marotta, L. and Vicari, S. (1997). Long-term memory in mental retardation: evidence for a specific impairment in subjects with Down's syndrome. *Neuropsychologia*, vol. 35, no. 1, pp. 71-79; Vicari, S. *et al.* (1995), pp. 532-537.

[111] Comblain, A. (1994). Working memory in Down's syndrome: training the rehearsal strategy. *Down's Syndrome Research and Practice*, vol. 2, no. 3, pp. 123-126; Laws, G., MacDonald, J., Buckley, S. and Broadley, I. (1995). Long-term maintenance of memory skills taught to children with Down's syndrome. *Down's Syndrome Research and Practice*, vol. 3, no. 3, pp. 103-109; Broadly, I., MacDonald, J. and Buckley, S. (1994). Are children with Down's syndrome able to maintain skills learned from a short-term memory training programme? *Down's Syndrome Research and Practice*, vol. 2, no. 3, pp. 116-122.

Although selective impairments are observed and appear to be syndrome specific, persons who have Down syndrome vary greatly in their abilities and preferences. Many forms of learning are intact, and the literature has also shown that some learning deficits are caused by sensory, attentional, instructional, environmental and expectational factors, and not solely by deficits in learning and memory.

Chapter 2: Comparison of International Patterns of School Placement

International data

The Report, *Integrating Students with Special Needs into Mainstream Schools*, was published by the Organisation for Economic Co-operation and Development (OECD) in 1995. It indicates great variation between its member countries in terms of definition of categories of special educational need, the patterns of special educational provision, and the extent to which students who have disabilities are included in general education.[1] The Report did not define the categories of disability, but used the terms as defined by member countries.[2] The variations between the twenty-one OECD countries in allocation of students to special schools and special classes, and the proportion of students outside the education system, are reported in Appendix 1.[3]

The Report indicates that there was strong emphasis on the integration of students with special educational needs in Canada,[4] Iceland, Italy and Norway. Special classes within or attached to mainstream schools existed in almost all countries, and were particularly prevalent in France, Greece and

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[1] Organisation for Economic Co-operation and Development. (1995). *Integrating Students with Special Needs into Mainstream Schools.* Paris: OECD, pp. 23-58.

[2] OECD (1995), p. 41.

[3] Appendix 1. Reported proportion of students identified by OECD member states as having special education needs, and the proportion for whom provision was made in special schools and classes, and the proportion outside the education system.

[4] The study only reported on New Brunswick, Canada.

Switzerland. Austria, Belgium, Germany and the Netherlands relied extensively on systems of separate special schools.[5]

France and Ireland had the highest proportion of students outside the education system. In France, education for most of these students was in establishments provided by the Ministry of Social Security. However, some of these students received their education in mainstream schools. In Ireland, those reported to be outside education were students who had severe disabilities. Traditionally, their education had been the responsibility of the Department of Health. However, since the ruling in the O'Donoghue case in 1993,[6] and the settlement of the appeal against that decision in 1997, new initiatives have been made by the Department of Education.

Categories of students who have learning disabilities

Two systems of identifying students who have learning disabilities are currently in use. The system most frequently used describes students according to a set of categories of handicap or disability. This model, derived from medical terminology, is the conceptual framework of the World Health Organisation's *International Classification of Impairments, Disabilities and Handicaps.*[7] This model emphasises education as *treatment* and divides learning disabilities into three categories. The OECD Report considered the following terms to be broadly equivalent: 1) mild learning difficulties, learning

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[5] OECD (1995), pp.28-29.

[6] O'Hanlon, J. (1993). High Court Decision. Paul O'Donoghue, a minor suing by his mother, vs. the Minister for Health, the Minister for Education, Ireland and the Attorney General.

[7] World Health Organisation (1980). *International Classification of Impairments, Disabilities, and Handicaps.* Geneva: WHO.

disabilities, specific learning disabilities, subject related disabilities; 2) moderate learning difficulties, educable mentally retarded, educable mental handicap, general learning disabilities, moderate mental handicap; 3) severe learning difficulties, severe mental retardation, severe mental handicap, trainable mental handicap, profound mental handicap.[8]

The alternative form of categorisation, based on the concept of *individual educational need*, recognises that medically-based categories are often inadequate. This system is based on the premise that students with learning disabilities may have individual educational needs, which are not necessarily met in special provision determined by medically-based classification. Furthermore, a system based on the educational needs of individual students recognises that educational outcomes are dependent on the interaction between the child, the education provided in school, and the influences of the home and community. The teaching and education offered in any particular school may have a crucial impact on whether a student is identified as being in need of special provision. The same pupil might be a candidate for special education in one school, but not in another.[9]

In practice, many countries use a combination of the two conceptual frameworks when identifying the special needs of students who have disabilities.

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[8] OECD (1995), p.35, p.45.

[9] OECD (1995), p.34.

Proportions of students who have learning disabilities

Recognising the inherent inconsistencies, but to provide basic comparative data, the OECD Report identified students by the three WHO categories of learning disability. The proportion of students with learning disabilities ranged from 3.99% of the school population in the United States to 0.34% of the school population in Turkey. Ireland reported 0.96% as the total in the three categories. The large differences reported can not be attributed to inherent differences in the populations, but to differences of definition and schooling systems. The data reported by the OECD is given in Appendix 2.[10]

In comparing educational systems, it is important to recognise the different interpretations of *disability* and *special educational need*, and to take account of the differences among educational systems compared. Because of these ambiguities, this data on international patterns of school placement for students with intellectual disabilities should be interpreted with caution.

One further comparison of international data is relevant to this study. The OECD Report detailed the number of students categorised as having *mental handicap / mental retardation* placed in ordinary classes, special classes and in special schools for only five countries: Australia, Finland, Ireland, Spain and Sweden. A summary of this data is presented in table 2.1.

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[10] Appendix 2. OECD reported proportion of school population with special needs by country, and proportion of students in the three categories of learning disability. The Report did not include data for Australia, Canada (New Brunswick), Denmark, Italy, Norway or the United Kingdom as these countries were reported not to use these classifications. In England the schools are designated MLD (*mild* learning difficulties) and SLD (*severe learning difficulties*). However, it is policy not to attach the category to the child. MLD is similar to the Irish special school designated for pupils with mild learning disabilities. SLD is the equivalent to the Irish

Table 2.1. The number of students identified has having mental handicap/mental retardation and the proportion of those students in ordinary classes, special classes, special schools in Australia, Ireland, Spain, Sweden, and Finland.[11]

Country	total having a mental handicap	ordinary class	special class	Special school
Australia	40,700	27.52%	40.57%	30.47%
Finland	10,458	8.15%	91.85%	
Ireland	8,170	Not given	23.13%	76.87%
Spain	22,452	39.98%	11.96%	48.06%
Sweden	9,910	19.16%	81.84%	

The data presented for Ireland indicates that most students considered to be *mentally handicapped* were educated in special schools and special classes.[12]

Patterns of school enrolment

Students who have Down syndrome have a wide range of intellectual abilities and academic difficulties.[13] There are also wide variations in their school placement. Existing data regarding the school placement of students who have Down syndrome is limited. Furthermore, differences in research design between studies make comparison difficult. A brief review of available research provides evidence of patterns and introduces questions to be examined in this study.

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special school designated for pupils with moderate learning disabilities. The categories and criteria for placement, however, are not identical.

[11] OECD (1995), pp. 91, 99, 109, 118, 120.

[12] *Report of the Special Education Review Committee (SERC Report)*, Dublin: Stationery Office, p. 261. The SERC Report estimated that 1% of students considered to be moderately mentally handicapped, 7% of students who were mildly mentally handicapped, and 10% of those who were *borderline* mentally handicapped were in ordinary classes in primary schools. Estimates of students in secondary schools were not given.

[13] Rynders, J. and Horrobin, J. (1990). Always Trainable? Never Educable? Updating educational expectations concerning children with Down syndrome. *American Journal of Mental Retardation*, vol. 95, no. 1 pp. 77-83.

- ***England***

Patterns of school placement in England for students who have Down syndrome have been reported. In a study of 117 students aged between six and fourteen years who had Down syndrome and who lived within twenty-five miles of Manchester, Sloper *et al.* found eleven percent in mainstream schools, seven percent in special classes in mainstream schools, fifteen percent in MLD schools, and sixty-four percent in SLD schools.[14] A further study by Sloper and Cunningham of sixty students aged five to nine years, drawn from the same cohort, found a similar pattern: ten percent in ordinary classrooms, eight percent in special classes or units in mainstream schools, thirteen percent in MLD schools and, sixty-eight percent in SLD schools.[15]

Moorcroft-Cuckle found that for students who have Down syndrome, identified on eleven special needs registers, there had been a rising trend for those between the ages of five to eleven years to attend mainstream schools.[16] Using each age group as a unit, Moorcroft-Cuckle calculated the proportion of child-years spent in different types of educational placement. Students entering school in 1985 had spent fifteen percent of their time in mainstream education. Students entering school in 1990 had spent thirty-nine percent of their time in mainstream education.

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[14] Sloper, P., Cunningham, C., Turner, S. and Knussen, C. (1990). Factors related to the academic attainments of children with Down's syndrome. *British Journal of Educational Psychology,* vol. 60, pp. 284-298. Although not equivalent, MLD schools (mild learning difficulties) are closest to Irish special schools designated for pupils with mild learning disabilities; SLD schools (severe learning difficulties) are most similar to Irish special schools designated for pupils with moderate learning disabilities.

[15] Sloper, P. and Cunningham, C. (1991). The nature and extent of home-school links for children with Down's syndrome: mothers' views. *Educational Research,* vol. 33, no. 1, pp. 42-54, p. 45.

In a study of one Local Education Authority in the North of England, Lorenz found an increase in the number of students who have Down syndrome attending mainstream school.[17] Prior to 1981, no child who had Down syndrome attended a mainstream primary school in this area. In 1985 an integration strategy came into effect. That year, fifty-nine percent of five-year-olds who had Down syndrome were enrolled in local schools, and enrolment rose to eighty percent over the next seven years. From 1985 to 1992 a qualified nursery nurse had supported most students who had Down syndrome throughout their primary education. In 1992, the policy changed. Schools were then allowed to employ a nursery nurse only for children under eight years of age. Older pupils became the responsibility of the teacher, supported by an unqualified special needs assistant.

Lorenz notes that, while in some cases this change was implemented without difficulty, in others it substantially affected the school's perception of their ability to cope. At the beginning of the school year 1992-93 there was an increased transfer of students to special education and fewer children reaching the age of five were enrolled in mainstream schools. Lorenz argues that the way the policy change had been implemented may have contributed to this reaction. Given more notice and support, the fears of the schools might have been alleviated, and suitable special needs assistants selected and trained. Although by 1994-95 the proportion of five-year-olds who had Down syndrome entering local schools had again risen to eighty percent, there was

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[16] Moorcroft-Cuckle, P. (1993). Type of school attended by children with Down's syndrome. *Educational Research,* vol. 35, pp. 267-269.

a reduction in the proportion of pupils who had Down syndrome in the older age groups in mainstream schools. Lorenz notes the lack of on-going training and support for the schools educating pupils with special educational needs and suggests that improved advice and support might increase the number of successful placements.

- ***Wales***

Shepperdson compared the initial and final school placements of two cohorts of students who had Down syndrome born approximately ten years apart.[18] It was found that the younger students were less likely to be placed in SLD schools and more likely to be in MLD schools. In both groups, the majority of pupils were not in mainstream schools. Although a higher percentage of the younger group initially enrolled in mainstream schools, initial enrolment did not ensure continuation in the mainstream system. Forty-three percent of the younger group had started in ordinary classes, or in special classes in mainstream schools. At the time of the study only twelve percent remained in either of these two types of placements.

- ***Combined study of England and Wales***

Cuckle collected data for 3,389 students who had Down syndrome in ninety-four areas of England and Wales.[19] This data represents over 13,000 years of school attendance, and reveals that, between 1983 and 1996, there was an

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[17] Lorenz, S. (1995). The placement of pupils with Down's syndrome: a survey of one northern LEA, *British Journal of Special Education,* vol. 22, no. 1, pp. 16-19.

[18] Shepperdson, B. (1995). Changes in the school placements of pupils with Down's syndrome, *Research in Education*, vol. 19, no 53 pp. 1-10. The older group were born between 1965 and 1966. The younger group between 1973 and 1975.

increase in the number of students who had Down syndrome in mainstream schools and a similar decrease in those who attended special schools. In 1996, combining all ages, special school placements accounted for fifty-eight percent and mainstream placements for thirty-two percent.[20] Local variations in school placement practice existed and were attributed to three main reasons: variations in policy; the attitudes of individual schools; and the role of local services and groups in encouraging parents to seek mainstream enrolment.

Cuckle reported a disproportionate number of boys (71%) compared with girls (59%) in special schools. The author comments that there was no "obvious explanation for the gender difference, although one possible explanation may concern the behaviour, or perceived behaviour, of boys".[21]

- ***Northern Ireland***

The Northern Ireland Branch of the Down Syndrome Association carried out a postal survey in 1993.[22] Two hundred and three (55%) of parent-members of the Association with school-aged sons/daughters who have Down syndrome, responded. More than eighty percent of them had children under the age of twelve. Variations between the five Education and Library Boards of Northern Ireland were reported. For the purpose of this study only the overall figures for the province will be considered.

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[19] Cuckle, P. (1997). School placement of pupils with Down's syndrome in England and Wales. *British Journal of Special Education,* vol. 24, no. 4. pp. 175-179.

[20] The placement of the other 10% was not given.

[21] Cuckle, P. (1997), p. 179.

[22] Northern Ireland Down's Syndrome Association (1993). Education survey. Unpublished.

When parents of children under four years were asked what type of school they wished their son/daughter to attend, seventy-nine percent wanted their child to be educated in a mainstream school, either in an ordinary class or in a special class. Twelve percent were undecided. Nine percent favoured a special school.

The survey reported that of the students aged four to eleven years, forty-two percent were in SLD schools, twenty-three percent in MLD schools, nine percent in special classes and twenty-six percent in ordinary classes. For those aged twelve to nineteen years, sixty-one percent were in SLD schools, twenty-seven percent in MLD schools, three percent in special classes, and six percent in ordinary classes.[23] From the data presented, it is not possible to determine whether the different proportions indicate a change in placement policy, or whether they reflect transfers during a student's educational career, or both.

- ***The Netherlands***

Scheepstra *et al.* report that, during the period 1985-1995, an increasing number of Dutch students who had Down syndrome were enrolled in mainstream education.[24] The proportion rose to twenty-two percent, with thirty-two percent of five-year-olds in mainstream schools.

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[23] The remaining were not in schools.

[24] Scheepstra, A., Pijl, S. and Nakken H. (1996). 'Knocking on the school door': pupils in the Netherlands with Down's syndrome enter regular education. *British Journal of Special Education,* vol. 23, no. 3, pp. 134-138, p. 134.

- ***New Zealand***

Irwin interviewed a small group of children who had Down syndrome, aged nine years, living in Auckland.[25] She found that one child (5%) was in a regular classroom; five (24%) were in special classes; ten (48%) were in satellite classes of special schools and five (24%) were in special schools on separate sites.

- ***Australia***

A study by the Down Syndrome Association of New South Wales based on 122 parent responses to a postal questionnaire, reported school placement patterns for students who have Down syndrome.[26] The majority of those responding (77%) were parents of children in year six of primary school or younger. Eighteen percent of the students were in Catholic or independent schools. Eighty-two percent were in state schools: twenty-four percent in mainstream classes; forty percent in special classes in mainstream schools, and eighteen percent in special schools. One child was home educated.

In Western Australia, Leonard carried out a study of 211 school-aged students who had Down syndrome, representing approximately eighty percent of all identified students in the state.[27] This study found that half the students who had Down syndrome in Western Australia spent time in a mainstream

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[25] Irwin, K. (1989). The school achievement of children with Down's syndrome, *New Zealand Medical Journal,* vol. 102, pt. 860, pp. 11-13.

[26] Down Syndrome Association of NSW (1994). *Children with Down Syndrome: At School in 1994,* North Parramatta: Down Syndrome Association of NSW. Unpublished.

[27] Leonard, S. (1997). A Western Australian Down Syndrome Study: an analysis of the survival of cases of Down syndrome from conception and birth, 1980-1996 and a parental perspective into the medical problems; social issues; educational, medical and therapy

classroom, either for the full day or in combination with a support unit, centre or special school. Younger children were more likely to be in a mainstream class. The trend towards integration was found to be most evident in rural areas with nearly half of the students in full-time mainstream placement compared with less than one-quarter of those in urban areas. This was possibly due to the absence of specialised education facilities in rural areas. The study also found that students from higher income groups were more likely to be full-time in a mainstream classroom. Leonard suggests this might indicate that "their parents may be better equipped to advocate for the necessary support facilities".[28]

- ***United States of America***

The US National Down Syndrome Society sent a postal questionnaire to 320 parent members of affiliated organisations.[29] One hundred and twenty-five parents (39%) responded. Of these, eighty-eight percent reported that their son/daughter attended their local neighbourhood school. From the information available, it is impossible to determine whether this figure accurately reflects patterns of school placement in the United States.

- ***Ireland***

The *Report of the Special Education Review Committee* (SERC Report) estimated that "about 50% of pupils in schools and classes for pupils with

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services; and daily functioning of school-aged children with Down syndrome. University of Western Australia: Department of Anatomy and Human Biology, BSc thesis. Unpublished.

[28] Leonard, S. (1997), p. 85.

[29] Wolpert, G.(1996). *The Educational Challenges Inclusion Study.* New York: NDDS.

moderate mental handicap have Down's Syndrome".[30] On this estimate, over 1,100 pupils, or the majority of students who have Down syndrome, were in special schools or classes designated for students with *moderate mental handicap*. The SERC Report did not estimate how many students who have Down syndrome were in mainstream classes.[31] It stated that the Committee "strongly favour(ed) special schools or designated mainstream schools for pupils with significant disabilities and learning difficulties".[32]

In a study of 144 Irish students, based on parents' responses to a postal questionnaire, Egan found that most (63%) reported that their son/daughter who had Down syndrome attended a special school. A quarter (26%) were reported to attend mainstream schools.[33] Four percent were in special classes; three percent in a combination of special and mainstream schools; and four percent were in other types of school. There was a marked trend towards mainstream placement for those born between 1979 and 1982. This trend decreased and then remained constant for the subsequent age groups. This study also found that a disproportionate number of girls (46%) attended mainstream schools compared with boys (13%).

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[30] *Report of the Special Education Review Committee,* 124.

[31] *Report of the Special Education Review Committee*, p. 281. The *SERC Report* did estimate that there were 101 students with *moderate mental handicap* attending mainstream classes. It also estimated that there were 699 students with *mild mental handicap* attending mainstream classes. It is not known what percentage of these were students who have Down syndrome.

[32] *Report of the Special Education Review Committee* (1993), p. 178.

[33] Egan, M. (1995). *Getting to Know You: An introduction to some Irish children and adults with Down syndrome and their families.* Dublin: DSAI, pp. 15-16.

The effect of the type of school placement

As the studies referred to indicate, since the mid-1970s, students with learning disabilities have increasingly received their education in ordinary educational settings. This has been based on philosophical, pedagogical and legal considerations. It has also been the result of the reorganisation in school systems, especially with regard to special education policy. This move towards inclusive education may not have been applied similarly to all students with disabilities. Casey *et al.* note that the "willingness to be flexible and to experiment with placements seems to have been more noticeable in cases of children of near average ability with sensory or physical handicaps than for those with moderate or severe learning difficulties".[34]

The research of, among others, Ludlow and Allen,[35] Rynders *et al.*,[36] Cunningham,[37] Pieterese and Center,[38] and Buckley[39] demonstrated that students who had Down syndrome had a wide range of cognitive abilities and were capable of much greater academic achievement than had been

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[34] Casey, W, Jones, D, Kugler, B. and Watkins, B. (1988). Integration of Down's syndrome children in the primary school: a longitudinal study of cognitive development and academic attainments. *British Journal of Educational Psychology*, vol. 58, pp. 279-286, p. 279.

[35] Ludlow, J. and Allen L. (1979). The effect of early intervention and pre-school stimulus on the development of the Down's syndrome child. *Journal of Mental Deficiency Research*, vol. 23, pp. 29-44.

[36] Rydners, J., Spiker, D., and Horrobin, J. (1978). Underestimating the educability of Down's syndrome children: Examination of methodological problems in recent literature, *American Journal of Mental Deficiency*, vol. 82, pp. 440-448.

[37] Cunningham, C. (1996). *Understanding Down Sydrome: An Introduction for Parents.* (3rd ed.). Cambridge, Mass: Brookline Books.

[38] Pieterese, M., and Center, Y. (1984). The integration of eight Down's syndrome children into regular schools. *Australia and New Zealand Journal of Developmental Disabilities*, vol. 10, pp. 11-20.

[39] Buckley, S. (1985). Attaining basic education skills: reading, writing and numbers. In D. Lane, and B. Stratford (eds.), *Current Approaches to Down's Syndrome.* London: Holt, Rinehart and Winston. pp. 315-343.

previously believed. This gave support to the belief that, with necessary supports and services, at least some students who had Down syndrome, could be educated in the ordinary education system and that such placement would be beneficial for them.[40]

There is not a large body of research on the effect of type of school placement for students who have Down syndrome. Differences in research questions, designs and populations do not allow for easy comparison.

- ***England (1988)***

Casey *et al.* monitored and evaluated the cognitive development and academic attainments of a small group of students who had Down syndrome.[41] They inquired whether students in mainstream schools made as much progress as those attending special schools. The study was based on thirty-six students, eighteen in mainstream and eighteen in special schools. The children ranged in age from three to ten years. There were an equal number of boys and girls in each type of school placement. The students attended twelve special schools and seventeen mainstream schools across eleven local authorities.

The authors reported that type of school placement for this group of students depended to a large extent on the policy of the local education authority.[42] The analysis of the variance of mental age scores obtained at the outset of

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[40] Rynders, J. and Horrobin, M. (1990), pp. 77-83.

[41] Casey, W. *et al.* (1988), pp. 279-286.

[42] Casey, W. *et al.* (1988), p. 280.

the study showed no differences between the groups placed in mainstream and MLD schools. A two-way analysis of variance on gains in mental age over the two years of the study showed a significantly greater gain for children in mainstream than for children in MLD placement. The former increased by an average of 19.0 months, the latter by an average of 14.2 months.[43]

This study found two other differences related to school placement. Students attending mainstream schools demonstrated greater improvement in numeracy and language comprehension. The authors do not explain this difference, but observe that other studies have also found that mainstream schools seem to facilitate the development of numeracy skills to a greater extent than special schools.[44] They suggest that the higher language comprehension scores for students in mainstream schools "may reflect their wider exposure to verbal interaction with a linguistically more able peer group".[45]

Although twice as many mainstream children were reading at the beginning of the study, this difference had decreased by the end of the first year and by the end of the second year there was only a slight difference in favour of the students in mainstream schools. The students in mainstream schools, performed better on reading comprehension than those in MLD schools.

Casey, *et al.* comment that it is surprising that special schools "with curricula specifically designed for children with special educational needs do not

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[43] Casey, W. *et al.* (1988), p. 284.

[44] The studies referred to were based on students with intellectual disabilities of mixed aetiologies.

necessarily facilitate better improvements in general cognitive ability than did the ordinary primary schools." They concluded that at least some children who have Down syndrome are "capable of having their special educational needs met within the mainstream curriculum and the environment of the mainstream primary school".[46]

- ***New Zealand (1989)***

Irwin investigated the school achievement of twenty-one children who have Down syndrome living in Auckland.[47] The children were approximately ten years old at the time of assessment. Irwin found that some of the children were more successful academically than others, and that, in this cohort, there was a relationship between academic attainments and school placement. However, because placement was often dependent on achievement level, it was not possible to conclude whether or not integration contributed to academic success of these students. Dilemmas, such as those noted by Irwin, are inherent in the evaluation of the effect of school placement and indicate the caution with which factors need to be identified and analysed.

- ***Australia (1990)***

Ward and Center carried out a study designed to evaluate the effectiveness of the policy of integrating intellectually disabled students into regular classrooms. They also sought to identify factors associated with child, classroom and school which might relate to the success or failure of such

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[45] Casey, W. *et al.* (1988), p. 285.

[46] Casey, W. *et al.* (1988), pp. 285-286.

[47] Irwin, K, (1989), pp. 11-13.

placements.[48] *Child factors* included: type of disability, cognitive level, and social adjustment. *Classroom factors* included: instructional style, time management, and classroom climate. *School factors* included: school ethos, support services, and staff attitude. Twelve students took part in this study. Four of the five students who had Down syndrome were in the *extremely well integrated* category. The fifth was considered to be *marginally well* integrated.

The study found that successful mainstream placement was not age or grade dependent. Nor was it associated with severity of disability. Successful mainstream school placement was found to be related to appropriateness of resource support, teacher's instructional style and total school commitment to integration. A greater degree of appropriate support had been provided to the students who were successfully included in the regular classrooms. Ward and Center observe that:

> ... if teachers feel they have the skills needed to integrate lower ability children either intrinsically or through appropriate resource support, then the success of the placement is likely to be assured. However, if a de-emphasis of academic skills is part of the ethos of a strongly committed school, integration can still be successful, even with less effective support.[49]

This study concludes that all children with intellectual disabilities present challenges in that they will need some modification to the classroom programme. With appropriate in-class support, these modifications can be satisfactorily accomplished and the students' needs met. However, if

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[48] Ward, J. and Center, Y. (1990). The integration of children with intellectual disability into regular schools: results from a naturalistic study. In W. Fraser (ed.), *Key Issues in Mental Retardation. Proceedings of the 8th Congress IASSMD.* London: Routledge, pp. 354-365.

[49] Ward, J. and Center, Y. (1990), pp. 359-360.

> ... teachers without the necessary instructional skills do not receive effective resource support from qualified staff, the integration of children with intellectual disabilities will suffer as the anxiety levels of staff members increase. Teacher aides are seen to be a valuable support to regular teachers, but to be effective they must be supervised by trained personnel i.e., either qualified resource teachers or regular classroom teachers versed in appropriate instructional technology. The aim must always be to integrate the child's program with the class program and to increase both academic and social independence.[50]

- ***Second English study (1990)***

In the study by Sloper *et al.,* academic achievement was assessed by teacher questionnaires containing three checklists relating to the academic abilities of reading and use of written information, number skills and writing skills.[51] These questionnaires, constructed for the study, were based on those previously devised by Lorenz.[52] By means of these questionnaires, *Academic Attainment Index* scores were obtained for all participants in the study.[53]

Even after allowing for the difference of the mental ages of the children in the different types of schools, children in mainstream schools were likely to have the highest academic attainment scores. This was followed by those in special classes in mainstream schools, then by those in MLD schools and then by those in SLD schools.[54]

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[50] Ward, J. and Center, Y. (1990), p. 361.

[51] Sloper *et al.* (1990), p. 286.

[52] Lorenz, S. (1985). Long term effects of early intervetion in infants with Down's Syndrome. University of Manchester. Unpublished PhD. thesis.

[53] The authors computed stepwise regression analysis using the *Academic Attainments Index* score as the dependent variable and entering all variables significantly associated with these scores at the univariate level with the criterion for entry set at P=0.05.

[54] Sloper, P. *et al.* (1990), pp. 291-292.

Sloper *et al.* argue that the greater amount of academic progress of those in mainstream schools may be due to differences in emphasis on teaching particular skills in the different types of schools. They cite Robson and Freeman who suggested that teachers in mainstream schools are more likely to stress academic skills, while those in special schools are more likely to emphasise self-help, socialisation and language skills.[55] Lorenz *et al.* also argue that students in special schools may have lower academic achievement due to the differing importance placed on those subjects by the schools.[56] However, Sloper *et al.* found that the "lesser emphasis on self-help and socialisation in mainstream schools did not have any disadvantageous effects" on the students who were in mainstream placement.[57]

The relationship between academic achievement and chronological age, even after controlling for mental age, suggested to the research team that children over time gain in ability. They proposed that this relationship may also be due to the age at which different types of schools introduced children to reading, writing and arithmetic. Thus, they argued, "their apparent delay in attaining academic skills may result from curriculum issues in the schools rather than to child or family factors".[58]

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[55] Robson, C. and Freeman, A. (1985). Teachers' views on the relative importance of different curriculum areas for children with severe learning difficulties. *Research in Education*, vol. 33, pp. 57-62.

[56] Lorenz, S., Sloper, P. and Cunningham, C. (1985). Reading and Down's syndrome. *British Journal of Special Education*, vol. 12, no. 2, pp. 65-67.

[57] Sloper, P. *et al.* (1990), p. 293.

[58] Sloper, P. *et al.* (1990), p. 294.

- ***St Michael's House Project, Dublin (1990)***

A study was undertaken of a small group of Irish students who have Down syndrome and attended community primary schools.[59] The students were between six and eleven years. All the students had attended mainstream preschools and had entered primary school at an average age of six years. Resource teacher support for the students was provided and there was some support from a psychologist. The study reported that in reading, writing and arithmetic, all the children were achieving at a level commensurate with their cognitive ability and that some at a higher level than would have been expected in English and Irish. The report noted that more help in the areas of writing and mathematics would be beneficial to the students.[60]

The study also found that the students' participation in community activities and their network of relationships was "at a higher level than would have been expected". It also found that the students' level of independence was high.[61] This would be in keeping with the finding of Sloper and Cunningham[62] and Juvonen and Bear[63] that children in mainstream settings were likely to have more contacts out of school and opportunities for friendships than those in special schools.

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[59] Halliday, A. (1990). Integration Project in Dublin. St. Michael's House, unpublished.

[60] Halliday, A. (1990), p. 36.

[61] Halliday, A. (1990), p. 36.

[62] Sloper, P. and Cunningham, C. (1991), pp. 42-54, p. 50.

[63] Juvonen, J and Bear G.(1992). Social adjustment of children with and without learning disabilities in integrated classrooms. *Journal of Educational Psychology*, vol. 84, pp. 322-330, p. 330.

The study also identified areas which required further research. Among the issues were: the amount of support students who have Down syndrome require in mainstream school placement; and the differences, if any, in expectations and demands between special and ordinary educational placement.

- ***The Netherlands (1999)***

Scheepstra *et al.* found that the pupils who had Down syndrome had less contact with their classmates in the first year of primary school than the other pupils in the class and more contact with their teachers.[64] Teachers were positive about the contacts they had with their classmates. Some of their classmates were more caring and helpful than others and at times were considered to *mother* the pupil who had Down syndrome. The authors suggest that while the students had fewer peer contacts than their classmates, it does not mean that these contacts are not of great value to the individual student involved, and that there was more interaction with typically developing peers than if the students had attended special schools.[65]

- ***Review study (1998)***

Cunningham *et al.* reviewed studies which had been undertaken during the past thirty-five years of the effect of type of school placement on students who

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[64] Scheepstra, A., Nakken, H. and Pijl, S. (1999). Contact with classmates: the social position of pupils with Down's syndrome in Dutch mainstream education, *European Journal of Special Needs Education*, vol. 14, no. 3, pp. 212-220. p. 217.

[65] Scheepstra, A. *et al.* (1999), p. 219.

had Down syndrome.[66] They cited only one US study by Fewell and Oelwein which had found that students who spent longer in segregated special units had significantly higher scores on expressive language. However, the students attending the special units in the cited study had received unusually intensive special language training. Cunningham *et al.* suggest that intensive special language training would be just as effective if it were delivered within a mainstream setting. This review study found few other reported positive differences for the students in special placement.

Summary

This review of recent research on the patterns of school placement for students who have Down syndrome illustrates the heterogeneity of the studies and the caution that must be observed when generalising from the findings. Some studies report placement for a group of students at a specific time.[67] One study considers two groups of students, each at two different times.[68] Two studies use total child years in the different school placements as the basis for analysis.[69] In addition, study populations differ. Two include large entire populations.[70] Others look at entire populations of smaller areas.[71] Four of the studies, carried out by Down syndrome associations, are based on

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[66] Cunningham, C. Glenn, S., Lorenz, S, Cuckle, P. and Shepperdson, B. (1998). Trends and outcomes for children with Down syndrome. *European Journal of Special Needs Education*, vol. 13, pp. 225-237.

[67] Sloper, P. *et al.,* (1990); Sloper, P. and Cunningham, C. (1991); Lorenz, S. (1995); Leonard, S. (1997).

[68] Shepperdson, B. (1995).

[69] Moorcroft-Cuckle P. (1993); Cuckle P. (1997).

[70] Cuckle, P. (1997); Leonard, S.(1997).

[71] Sloper, P. *et al.* (1990); Sloper, P. and Cunningham, C. (1991); Shepperdson, B. (1995).

self-selecting respondents.[72] The categories of school placement also differ between the studies. In some cases, mainstream placement includes placement in a special class, special unit or resource room in a mainstream school. In others it does not. The distinct categories of special schools also vary.

Despite these differences, several trends emerge from this review. There is an increasing number of students who have Down syndrome placed in mainstream schools in ordinary classrooms, special classrooms or combinations of the two. There is a reported increase in the number at entry to school, and an increase in those remaining in the general education system. However, there is evidence that entry does not guarantee continued placement in mainstream settings. There is little or no evidence of movement from special to ordinary education. Changes in placement, usually to a more restrictive educational placement, may occur at transition stages — at the end of the infant cycle and at the end of the primary cycle.

Evidence of the effects of type of school attended is sparse and inconsistent. In terms of academic attainment and self-sufficiency, there is little evidence that special school placement is more beneficial than mainstream enrolment. Available evidence suggests that there may be more progress in mainstream settings.[73]

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[72] NDSA (1993); NSWDSA (1994); Egan, M. (1995); Wolpert, G. (1996).

[73] Cunningham, C. *et al.* (1998), p.235.

Chapter 3: Learning Disability in Irish Policy Documents

Key institutions in Irish society, the education and health systems, have expressed in their policy documents varying definitions of the meaning of learning disability, and beliefs about the nature and needs of persons who experience such difficulties. An analysis of these documents gives insight into the assumptions and beliefs which have determined policy direction and implementation. Because of the restrictions inherent in a review of policy documents, priority is given to those aspects which relate to issues investigated by this study.[1]

Commission of Inquiry on Mental Handicap (1965)

In Ireland, the State did not involve itself in the provision of education for students who had learning disabilities until the mid-twentieth century.[2] In 1961 a Commission of Inquiry on Mental Handicap was established to examine existing provision and make recommendations for "the treatment, care, training and education of mentally handicapped persons".[3]

Archive records indicate that prior to the appointment of the Commission, the terms *mentally deficient* and *mental defectives*, further divided into *feeble-minded, imbeciles* and *idiots*, were the designations used in policy documents.[4] The Commission's decision to employ the term *mental handicap*, and to use *mentally handicapped* to describe the group of persons covered by

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[1] References to the full document are given.

[2] Coolahan, J. (1981). *Irish Education: Its History and Structure.* Dublin: Institute of Public Administration, pp 185-187.

[3] Commission of Inquiry on Mental Handicap (1965). *Report.* Dublin: Stationery Office, p. xxvi.

its terms of reference, was based on its judgement that these were the terms then "preferred and most constantly used by those interested in the problem in Ireland". Furthermore, "their use [had] the advantage of bringing the mentally handicapped into the general class of handicapped persons".[5]

This desire to include persons with learning disabilities in the "general class of handicapped persons" should be seen in the context that, at the time, many children and adults were inmates in District Mental Hospitals and County Homes.[6] The terminology represented a more gentle approach towards persons who had learning disabilities, and a growing awareness of society's responsibility to provide them with care, education and training.

For the Commission, the three essential features of *mental handicap* were "arrested or incomplete development of mind; a marked lack of intelligence, and inadequate adaptation to the environment".[7] The Commission stated that, while there was no known cure, many "with education, care and training under favourable conditions, may overcome their inadequacies to such an extent that they become tolerably well adapted to their environment".[8]

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[4] National Archives, Department of Health, L50/24; H39/25. Department of the Taoiseach, S6667A/B; S14129A.

[5] Commission of Inquiry on Mental Handicap (1965), p.17.

[6] National Archives, Department of the Taoiseach, S16812, Draft White Paper on Mental Deficiency, March 8, 1960. In 1960, there were 2,620 beds available in fourteen institutions "conducted specifically for the care of mental defectives". At the same time, there were 2,000 patients, including children, in mental hospitals and 450 persons, including children, in County Homes who were described as *mentally defective*.

[7] Commission of Inquiry on Mental Handicap (1965), p. 18.

[8] Commission of Inquiry on Mental Handicap (1965), p. 18.

The Commission stated that it was "customary to classify the different grades [of disability] in terms of I.Q. or intelligence quotient", which, while not "in itself, a test of mental handicap [was] a very important factor in its diagnosis."[9] The Commission admitted that the "mentally handicapped do not fall readily into clearly definable categories". Nevertheless, it felt that, for administrative purposes, persons so categorised should be divided into discrete grades of disability. It turned to the World Health Organisation's (1948) tripartite division of mental handicap, identifying persons by I.Q. as *mildly, moderately* and *severely mentally handicapped.* It was felt that these were the terms "most commonly used and understood in this country".[10]

The Commission acknowledged that it would be difficult to "decide the appropriate grade for a mentally handicapped person" and that there was wide variation within each category.

The Commission based its recommendations on concepts which centred on the difference of persons who had learning disabilities, and on a perception that they were permanently unable to benefit adequately from instruction in the ordinary school curriculum. It recommended that separate educational provision be made for them.[11] Because of its belief in the differences between persons of varying degrees of disability, they recommended that each group of students so assessed should be educated in provision that was entirely separate from that provided for those in other categories. Furthermore, the

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[9] Commission of Inquiry on Mental Handicap (1965), p. 19.

[10] Commission of Inquiry on Mental Handicap (1965), pp. 19-20.

[11] Commission of Inquiry on Mental Handicap (1965), Chapter 8, Care during School Age, pp. 66-94. and Recommendations 18, 20, 26 and 44, pp. xv - xvi.

Commission believed that there was "a change around I.Q. 35". Those who had assessed I.Q. scores below this level were considered unable to benefit from the education provided in special schools designated for pupils with moderate mental handicap and should receive a special form of care and training in care units outside the education system.[12] This belief became the basis of the effective exclusion of those who were assessed as having an I.Q. of 35 or less from the education system for many years to come.

Curaclam na Bunscoile - Primary School Curriculum (1971)

Within six years of the 1965 Commission's Report, three fundamental changes occurred in Irish education. In 1967, a *free* education scheme for post-primary schools was introduced, and the compulsory Primary Certificate Examination abolished. In 1971, a new Primary School Curriculum was introduced.[13]

The Introduction to the *Primary School Curriculum* (1971) stated:

> All children are complex human beings with physical, emotional intellectual and spiritual needs and potentialities;
>
> Because each child is an individual, he deserves to be valued for himself and to be provided with the kind and variety of opportunities towards stimulation and fulfilment which will enable him to develop his natural powers at his own rate to his fullest capacity.[14]

The expression of, and general acceptance of these statements of the individuality of all children, the inherent value of each child and the ensuing universal right to educational opportunity as values commonly held at all

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[12] Commission of Enquiry on Mental Handicap (1965), pp. 90-92 and Recommendations 25 and 33, p.xvi.

[13] Coolahan, J. (1981), pp. 139-140.

levels of the primary school system, have had profound implications for children with disabilities.[15]

White Paper on Educational Development (1980)

The *White Paper* did not attempt re-definition but referred to "children who are handicapped by serious disabilities".[16] The diversity of children's abilities and needs that had been the cornerstone of the 1971 *Primary School Curriculum* was again recognised:

> ... the revised curriculum is based on the assumption that the quality and rate of learning are dependent on the ability of the learner and that educational programmes must be organised to take account of the wide range of differences between children.[17]

Reduction in pupil-teacher ratio and increased provision of special remedial programmes were also cited in the *White Paper* as reasons for an increased "capacity of ordinary schools to provide an appropriate educational service for children with learning disabilities".[18] This indicates a shift from a firm belief that some students were *incapable* of benefiting from ordinary education, to a less dogmatic position that "it is no longer as daunting" to consider providing suitable education in ordinary schools for a wider range of abilities.[19]

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[14] Department of Education (1971) (4th ed., 1987). *Curaclam na Bunscoile.* Dublin: Stationery Office, Part I, p. 13.

[15] Lynch, P. (1993). Ireland. In C. O'Hanlon (ed.), *Special Education Integration in Europe.* London: David Fulton, pp. 78-88, p. 81.

[16] Department of Education (1980). *White Paper on Educational Development.* Dublin: Stationery Office, p. 29.

[17] Department of Education (1980), p. 29.

[18] Department of Education (1980), p. 29.

[19] Department of Education (1980), p. 29.

Education of Physically Handicapped Children (1982)

The Committee on the Education of Physically Handicapped Children interpreted its terms of reference to include "children disabled as a result of accidents or illness; and children who have significant intellectual handicap in addition to a physical disability".[20]

The Report stated that in Ireland, as in other countries, special educational provision over the past quarter century had been "based on the conviction that certain groups of children had identifiable educational needs which could not be adequately met within the resources of the conventional system". The authors state that an informed awareness of the nature and degree to which the educational needs of students who had disabilities differed from those of the general population had initially been necessary for the development of special services. "However, as services became more widespread, and professionals more skilful at identifying their individual needs, it became increasingly apparent that within each category of handicapped children there was a wide range of individual difference."[21]

The Committee referred to the experience of teachers, who for the previous ten years had been teaching typically developing children using the new *Primary School Curriculum*, and who had come to a similar conclusion "in

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[20] *Education of Physically Handicapped Children*: Report of a Committee Appointed by John Bruton TD, Parliamentary Secretary to the Minister for Education (1982). Dublin: Stationery Office, p. 2. "Physically disabled pupils who are also either severely or profoundly mentally handicapped" were considered not to come under the Committee's terms of reference. Another working group was examining the needs of this group at the same time. Its report, *The Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983) is considered later in this section.

[21] *Education of Physically Handicapped Children* (1982), p. 5.

regard to individual differences in normal children".[22] The Committee stated that:

> Many educators are now coming to the view that, in highlighting differences, they neglected the many important and fundamental respects in which the needs of all children are the same. Therefore, we recommend to all who are involved in the education of the handicapped the acceptance of the principle that the basic physical, psychological and social needs of all children are the same.[23]

Report of the Pupil Transfer Committee (1981)

The *Report of the Pupil Transfer Committee* considered the percentage of pupils transferring to second level education who would require special educational provision and was cautious about stating exact proportions: "Human beings elude such groupings, the dimensions of which must ultimately depend on the premises on which they are based."[24]

However, the Committee felt that it was likely that the number of children who would require additional support would be "one in six children at any time, and up to one in five at some time during their school career who will require some form of special educational provision".[25]

The Transfer Committee stated that students who had disabilities, "whether their disability be mental or physical, [would] require specialised care and education throughout their school career" and that their transfer "should be preceded by careful preparation and followed up by attention to adjustment".[26]

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[22] *Education of Physically Handicapped Children* (1982), p. 5.

[23] *Education of Physically Handicapped Children* (1982), p. 5.

[24] *Report of the Pupil Transfer Committee* (1982). Dublin: Stationery Office, p. 17.

[25] *Report of the Pupil Transfer Committee* (1982), p. 17-18.

[26] *Report of the Pupil Transfer Committee* (1982), p. 18.

While it did not see its function as advising on their education, it assumed that at least some students who had physical and intellectual disabilities would be educated in non-special post-primary schools.[27]

The White Paper on Educational Development (1980), the Report of the Committee on the Education of Physically Handicapped Children (1981), and Report of the Pupil Transfer Committee (1981) were published a few years after the 1978 Report of the Committee of Enquiry into the Education of Handicapped Children and Young People (Warnock Report). The Warnock Report had changed the emphasis of English pedagogical thought and educational focus from being centred on the student's deficits or difficulties to the student's educational need.[28] The resulting Education Act 1981 in England, identified all children as a single population, some of whom needed additional help. Additional support was to be based on individual assessment of student need. The Act assumed that all children should be educated in mainstream schools, unless their needs could not be met in that context.[29]

Taken together, these three Irish policy documents would indicate that, in the early eighties, some sections of Irish education were moving away from the rigid definition and categorisation of children according to specific disability, and that there was a change of emphasis from their deficits to their educational needs. Regardless of their disabilities, at least some were

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[27] *Report of the Pupil Transfer Committee* (1982), p. 20.

[28] United Kingdom: Department of Education and Science (1978). *Report of the Committee of Enquiry into the Education of Handicapped Children and Young People* (*Warnock Report*). London: HMSO.

[29] Tilstone, C. (ed.) (1991). *Teaching Pupils with Severe Learning Difficulties: Practical Approaches*. London: David Fulton, p. 14.

considered to be part of the general school community. It was believed that within that community, provision should be made for their needs to be met.

Education and Training of Severely and Profoundly Mentally Handicapped Children (1983)

The Working Party on the Education and Training of Severely and Profoundly Mentally Handicapped Children re-iterated the belief of the 1965 Commission that there was "a change, around I.Q. 35, in the educational needs of the moderately handicapped".[30]

The 1965 tri-partite division of mental handicap had resulted in administrative problems in the group whose assessed I.Q. range spanned 25-50. Those who were assessed to have an I.Q. below 35 were considered to have educational needs more similar to those in the upper end of the severely handicapped grouping. Thus services, in so far as they existed, for the severely handicapped had included persons categorised as moderately mentally handicapped but whose I.Q. fell roughly between 25 and 35. These persons were thus outside the responsibility of the Department of Education and educated in the broadest sense of the word in care units funded by the Department of Health. Because of this anomaly, the 1983 Report recommended that a quadripartite classification of mental handicap be adopted. The four categories were identified as mild, moderate, severe and profound mental handicap.[31]

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[30] *The Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland:* Report of a Working Party to the Minister for Education and the Minister for Health and Social Welfare (1983). Dublin: Stationery Office, pp.11-12.

[31] *Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983), pp. 20-21.

The Committee stated that their concern was "with those severely mentally handicapped children who are excluded from school, and all profoundly handicapped children".[32] Persons with severe and profound learning disability according to the 1983 quadripartite division are described as follows:

> Children with severe and profound mental handicap share few common characteristics. Indeed the literature from all countries would suggest that heterogeneity is their most common characteristic. It has been traditional in describing them to lay most stress on those areas where they deviate from normality.[33]

However, in keeping with the emerging awareness of the common needs of all children, the 1983 Report stated that:

> Children with severe and profound mental handicap have the same general needs as all other children. They need to have security, acceptance, care and attention, to love and be loved in order to develop to their full potential.[34]

The Report's recommendation "that each child should have access to an education and training programme designed with his particular learning needs in mind" signalled a significant change of attitude towards children and young people categorised as being severely and profoundly mentally handicapped.[35]

Guidelines on Remedial Education (1987)

Guidelines on Remedial Education made reference to students who had learning disabilities and were enrolled in ordinary schools.

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[32] *Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983), p. 21.

[33] *Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983), pp. 22-23.

[34] *Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983), p. 26.

[35] *Education and Training of Severely and Profoundly Mentally Handicapped Children in Ireland* (1983), p. 31.

> In larger schools, special classes have been established for children with mental handicap. Where it is not feasible to establish such classes, it is not unusual to find individual children with mild mental handicap attending ordinary classes.... It is likely that this trend for pupils with handicaps to attend ordinary schools will continue and probably intensify during the next decade or two. The presence of such children with a wide range of special needs in ordinary classes has implications for the organisation of remedial education in schools.[36]

The *Guidelines* did not challenge existing definitions and concepts. They implied that children with mild learning disability were in ordinary classes by default. The fact that many of them would require learning support throughout their education was seen to be beyond the scope of remedial education. Significantly, they maintained that it was "arguable that if the remedial withdrawal programme in a school is to do anything significant for a pupil with learning problems it should have made its contribution after two or three years".[37]

Report of the Review Body on the Primary Curriculum (1990)

The 1990 Review Body did not categorise learning abilities of students. Curriculum was the focus of its attention. It cited, as the second principle of the existing primary school curriculum, "due allowance for individual differences."[38]

The Review Body referred to a survey carried out by the Department of Education in 1987 which had found that "teachers and inspectors thought that the needs of pupils with learning difficulties were being reasonably well

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[36] Department of Education (1987). *Guidelines on Remedial Education.* Dublin: Stationery Office, p. 2.

[37] Department of Education (1987), p.26.

catered for particularly in regard to literacy".[39] The Review Body did not refer to the existence of a separate, parallel system catering for most students who had learning disabilities. The espoused principle of "due allowance for individual differences" may have referred only to pupils within a restricted spread of ability levels.

Report of the Primary Education Review Body (1990)

The Primary Education Review Body stated that "in Ireland, as in may other countries, a separate educational provision has evolved" for students who have disabilities.[40] They reported that "numerically, children with mild or moderate mental handicap form the largest single category of handicap", and that "the development of education for this group of children derives mainly from recommendations in the *Report of the Commission of Inquiry on Mental Handicap* (1965)".[41] The 1990 Primary Education Review Body did not define its terms, but relied on existing diagnostic and assessment procedures as criteria for placement in special provision. The Review Body stated that a "review of services for the mentally handicapped, currently under way in the Department of Health, seems to indicate that mild mental handicap should not come within the ambit of mental handicap at all, but rather should be considered as part of the general problem of learning disability". They noted

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[38] *Report of the Review Body on the Primary Curriculum* (1990). Dublin: Stationery Office, p.14.

[39] *Report of the Review Body on the Primary Curriculum* (1990), p. 15.

[40] *Report of the Primary Education Review Body* (1990) .Dublin: Stationery Office, p. 60. The categories of special provision listed were: mild mental handicap, moderate mental handicap, severe and profound mental handicap, emotional disturbance, physical handicap, visual impairment, hearing impairment, language disorders and specific reading disabilities.

[41] *Report of the Primary Education Review Body* (1990), p. 58.

that "such a policy, of course, would have considerable implications for the Department of Education".[42]

The Report referred to a commitment made by European Ministers of Education to pursue a policy of integration of students who had disabilities in ordinary systems of education.[43] However, the Report stated that there were "limits to the degree of integration" possible and that partial integration might be the "only feasible option". They warned that there were "considerable financial implication in the implementation of integration whether full or partial".[44]

The 1990 Education Review Body felt that "a detailed analysis of the multiplicity of issues relating to handicapped children" would be "a time-consuming undertaking requiring the co-operation of a wide range of persons with special knowledge of the different categories of handicap".[45] Therefore, it recommended the establishment of a committee "to examine the entire problem".[46] Again the language of the Report indicates that its authors conceptualised pupils with disabilities as a *problem* outside the usual scope of education policy.

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[42] *Report of the Primary Education Review Body* (1990), p. 60.

[43] Resolution of the Council and the Ministers of Education meeting within the Council of 31 May 1990 concerning integration of children and young people with disabilities in ordinary systems of education. (90/C 162/02)

[44] *Report of the Primary Education Review Body* (1990), p. 60.

[45] *Report of the Primary Education Review Body* (1990), p. 60.

[46] *Report of the Primary Education Review Body* (1990), p. 60.

Needs and Abilities: A Policy for the Intellectually Disabled (1990)

Needs and Abilities was the Report of the Review Group reporting to the Department of Health that was referred to by the Review Body on Primary Curriculum. This Report suggested that use of the term *mental handicap* should be re-examined, and recommended that "debate be initiated among the interests concerned with a view to arriving at a consensus of the most appropriate terminology".[47] Meanwhile, and for the purposes of their Report, they suggested that the term *mild mental handicap* be replaced by *general learning difficulties,* and the designation *moderate, severe or profound mental handicap* by *moderate, severe or profound degree of intellectual disability.*[48]

The Review Group concluded that the majority of children and young persons categorised as mentally handicapped were, in most cases, children who had schooling rather than health concerns. It was the responsibility of the Department of Education to respond to their needs.[49]

As predicted by the *Report of the Primary Education Review Body,* this re-conceptualisation of *mild mental handicap* had considerable implications for the Department of Education whose response to this re-appraisal was seen in some of the language and approaches of the *Green Paper, Education for a Changing World.*[50]

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[47] *Needs and Abilities: A Policy for the Intellectually Disabled* (1990), Dublin: Stationery Office, p. 13.

[48] *Needs and Abilities* (1990), p. 14.

[49] *Needs and Abilities* (1990), pp. 13-15.

[50] Department of Education (1992). *Education for a Changing World: Green Paper on Education.* Dublin: Stationery Office.

Education for a Changing World: Green Paper on Education (1992)

The *Green Paper* adopted the terminology *children with special educational needs* and stated that they were a "particular concern throughout the educational system".[51] More significantly, their consideration of provision for the special needs of some students was approached in the context of equality and access.

> In translating equality of access to full equality of participation, the priority must be to tackle barriers to participation which militate against those from disadvantaged backgrounds, or those suffering from particular difficulties or handicaps.[52]

However, students considered to have special educational needs were again defined as those "whose disabilities or circumstances prevent or hinder them from benefiting fully from the education which is provided in ordinary schools *at present* for children of the same age".[53] This concept that some students, because of their *disabilities and circumstances*, were incapable of benefiting from the education provided in ordinary schools, was a re-statement of the beliefs of the 1965 Commission. The student was thus defined by his/her *non-ability* to benefit from an existing system.

The *Green Paper* considered that within the group of students who had special educational needs there was a *great majority* who could "benefit from enrolment in the ordinary school provided there is some additional support". They were identified as "those in need of remedial help, as well as those with

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[51] Department of Education (1992), p. 46.

[52] Department of Education (1992), p. 45.

[53] Department of Education (1992), pp. 60-61.

lesser educational needs". At that time, the stated policy was that a remedial programme "should have made its contribution after two or three years".[54] It appears that the group identified as able to benefit from enrolment in ordinary schools, if given additional help, represented a selected group of students who experience learning disabilities.

The *Green Paper* asserted that a *continuum of provision* was required. Some students could be assisted by additional support within the school; others who "requiring more specialised attention than the ordinary school can be expected to provide," would remain in special schools.[55]

Report of the Special Education Review Committee (1993)

The *Special Education Review Committee Report* (SERC Report) stated that "all children, including those with special educational needs, have a right to an appropriate education".[56]

The term, *pupils with special education needs*, was again used as meaning "all those whose disabilities and/or circumstances prevent or hinder them from benefiting adequately from the education which is normally provided for pupils of the same age, or for whom the education which can generally be provided in the ordinary classroom is not sufficiently challenging".[57] The proviso, *at present*, no longer featured.

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[54] Department of Education (1987), p. 26.

[55] Department of Education (1992), p. 61, p.64.

[56] *Report of the Special Education Review Committee* (1993), Dublin: Stationery Office, pp. 18-19.

[57] *Report of the Special Education Review Committee* (1993), p. 18.

Under the heading *pupils with learning difficulties and disorders,* the SERC Report identified two groups of students: pupils in need of remedial teaching, and pupils with specific learning disabilities.

These terms do not include those previously considered to be *mildly mentally handicapped* and indicates that the SERC Committee was using the term *learning difficulties* to mean something different from the Department of Health's recommendation. A definition of students, considered to be *mildly mentally handicapped,* was given:

> Pupils with Mild Mental Handicap (1993): Nature of the Disability
>
> Pupils with mild mental handicap have significantly below-average intellectual functioning, associated with impairment in adaptive behaviour. This may be reflected in a slow rate of maturation, reduced learning capacity and inadequate social adjustment. In school, they have general learning difficulties which prevent or hinder them from benefiting adequately from the education which is normally provided in ordinary classes for pupils of the same age. Their limited intellectual ability may be manifest in delayed conceptual development, slow speech and language development, limited ability to abstract and generalise, limited attention-span and poor retention ability. Some may display poor adaptive behaviour, inappropriate or immature personal behaviour, low self-esteem, emotional disturbance, general clumsiness and lack of co-ordination and of gross and fine motor skills. A minority may also have varying degrees of hearing or visual impairment. Insofar as an Intelligence Quotient may be used as an indicator of mild mental handicap, such pupils would lie within the I.Q. range 50-70.[58]

The definitions of *mild mental handicap* as expressed in the 1965 and 1993 Reports are compared in Appendix 3.[59] Allowing for stylistic differences, they are remarkably consistent.

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[58] *Report of the Special Education Review Committee* (1993), p. 118.

[59] Appendix 3. Comparison of definitions of learning disability, 1965-1993.

Likewise, the 1993 SERC Report was the first re-statement, since 1965, of the concept of *moderate mental handicap*.

> Pupils with Moderate Mental Handicap (1993): Nature of the Disability
>
> The World Health Organisation defines a person with moderate mental handicap as being within the I.Q. range 35-50, insofar as an Intelligence Quotient may be used as an indicator of mental disability. In general, the person is likely to display: a) significant delay in reaching developmental milestones; b) serious deficits in language development; c) a severe degree of apathy rather than a curiosity in relation to his/her surroundings; and d) as an adult, inability to live an independent life. Pupils with moderate mental handicap form a heterogeneous population. Many will have accompanying disabilities such as physical, hearing or visual impairment, autistic tendencies and emotional or communication disorders. It has been estimated that about 50% of the pupils in special schools and classes for pupils with moderate mental handicap have Down's Syndrome.[60]

When compared with the 1965 statement, there is considerable consistency. There are minor differences of terminology and emphasis but there is fundamental agreement. The 1993 SERC Report does not emphasise the need for educational provision to be *entirely separate* from that provided for students categorised as mildly mentally handicapped to the extent that the 1965 Commission believed necessary.[61] The two definitions are compared in Appendix 3.

The SERC Report included in their definition of moderate mental handicap the statement that it was "estimated that about 50% of pupils in special schools and classes for pupils with moderate mental handicap have Down's Syndrome".[62] No mention of pupils who have Down syndrome was made in the discussion of other categories of learning disability.

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[60] *Report of the Special Education Review Committee* (1993), p. 124.

[61] Commission of Inquiry on Mental Handicap (1965). p. 87.

[62] *Report of the Special Education Review Committee* (1993), p.124.

The definition in the SERC Report of students who have severe or profound learning disabilities is similar to that was used by the 1983 Report. As some students who have Down syndrome are assessed to be in this ability range, the definition is included.

> Pupils with Severe/Profound Mental Handicap (1993): Nature of the Disability
>
> In general, persons with severe / profound mental handicap display: a) very significant delay in reaching developmental milestones; b) very serious deficits in language development; c) a severe degree of apathy relative to environment; d) dependence on others to satisfy basic needs, e.g. feeding; and e) inability to live without support and supervision at any stage of life. Pupils with severe / profound mental handicap form a most heterogeneous population. Most will have other disabilities such as physical impairment, hearing impairment, visual impairment, autistic tendency, emotional disturbance, challenging behaviour, epilepsy and little or no communication skills.[63]

The complete definition is reported and compared with the 1983 version in Appendix 3.[64]

The definitions used by the authors of the SERC Report emphasise the students' disabilities and differences. This view of the students may have contributed to their pronouncement that the "Review Committee is strongly of the view that it is highly undesirable and inefficient to attempt to provide for the special educational needs of individual pupils with serious disabilities and learning difficulties in ordinary classes in individual schools scattered over a wide area".[65] They recommended special schools be improved and that a

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[63] *Report of the Special Education Review Committee* (1993), p.128.

[64] Appendix 3: Comparison of definitions of learning disability 1965-1993.

[65] *Report of the Special Education Review Committee* (1993), p.59, p.178.

network of designated ordinary schools with specialist facilities, staffing and support services be developed.[66]

Charting Our Education Future: White Paper on Education (1995)

One of the main objectives of the 1995 *White Paper* was to recommend a legislative framework for key aspects of educational provision.[67] The *White Paper* began its consideration of education for students with special educational needs by re-stating the SERC Report definition of *mental handicap.* Students with special educational needs were described as those "whose disabilities and/or circumstances prevent or hinder them from benefiting adequately from the education which is normally provided for pupils of the same age".[68] The *White Paper* however, addressed the right of all students to have access to and participate in education.

> All students, regardless of their personal circumstances, have a right of access to and participation in the education system, according to their potential and ability. The achievement of full equality of access, participation and benefit for all students will entail positive interventions at all levels in favour of those minorities who experience particular difficulties.[69]

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[66] *Report of the Special Education Review Committee* (1993), p.59.

[67] At that time there was a significant lack of legislation regarding education. The Irish Constitution declares that all citizens are equal before the law (Art. 40.1). It gives primacy to the rights of parents in relation to the education of their children (Art. 42). Furthermore, the Constitution asserts that the State "shall not oblige parents in violation of their conscience and lawful preference to send children to ... any particular type of school designated by the State" (Art. 42.3.1.). The only legislation relating to primary and second level education were the School Attendance Act, 1926 and the Vocational Education Act, 1930. These Acts placed the responsibility on parents to oblige sons and daughters to attend school unless there was a reasonable excuse for not doing so. They deemed a student to belong to the school attendance area in which he (or she) was ordinarily resident. Neither Act stated criteria by which a student might be prevented from enrolment in a school.

[68] Department of Education (1995). *Charting our Education Future: White Paper on Education.* Dublin: Stationery Office, p. 24.

[69] Department of Education (1995), p. 24.

A Strategy for Equality: Report of the Commission on the Status of People with Disabilities (1996)

The Report of the Commission on the Status of People with Disabilities to the Minister for Equality and Law Reform espoused principles regarding the education of citizens who have disabilities, and asserted that those principles "should be incorporated in all education policy and should be enshrined in any legislation". [70] The Commission held that "every child is *educable*" and that all have an equal right to "free and appropriate education in the least restrictive environment". Furthermore, they asserted that it was the responsibility of the State to provide sufficient resources to ensure that students of all ages, who have disabilities, have an education "appropriate to their needs in the best possible environment". [71]

The Commission stated that the "legal rights, roles and responsibilities of parents must be clearly outlined in relation to any assessment or decision-making process and should reflect the constitutional rights of parents in the matter of their child's education".[72]

The Commission maintained that the Department of Education should be the "accountable authority in relation to all educational matters of concern to people with disabilities and their families".[73] They recommended that the Department of Education provide preschool services to children who have

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[70] Commission on the Status of People with Disabilities (1996). *A Strategy for Equality: Report of the Commission on the Status of People with Disabilities.* Dublin: Stationery Office, p. 33.

[71] Commission on the Status of People with Disabilities (1996), p. 33, p.326.

[72] Commission on the Status of People with Disabilities (1996), p.175.

[73] Commission on the Status of People with Disabilities (1996), p. 33.

disabilities and every encouragement and practical support, including financial support, be given to playgroups and preschools who include children with disabilities.[74]

The Commission also proposed a series of actions to remove the duality of the special and mainstream systems including:

- closer curriculum linkages with joint planning between specialist and mainstream schools;
- bridging the gulf between teachers in the separate systems;
- practical supports for closer linkages;
- a systematic plan to develop a clear specialist role for special schools.[75]

The Report of the Commission on the Status of People with Disabilities was to have significant effect on the provisions of the Education Act, 1998.[76] Of particular relevance to this study are those regarding the right of all citizens to education[77]; the responsibility of the Department of Education and Science for all educational matters concerning people with disabilities[78]; the constitutional rights of parents in educational decisions[79]; the need for liaison and consultation between schools, health boards and agencies which provide

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[74] Commission on the Status of People with Disabilities (1996), p. 39.

[75] Commission on the Status of People with Disabilities (1996), pp.180-184.

[76] Department of Justice, Equality and Law Reform (1999). *Towards Equal Citizenship: Progress on the Implementation of the Recommendations of the Commission on the Status of People with Disabilities.* Dublin: Stationery Office, Chapter 11, pp.131-154.

[77] Department of Justice, Equality and Law Reform (1999), p. 132

[78] Department of Justice, Equality and Law Reform (1999), pp. 132-133.

[79] Department of Justice, Equality and Law Reform (1999), p. 135.

special education[80]; and the obligation of schools to provide an education to students which is appropriate to their needs and abilities[81].

Before considering the provisions of the Act, two other documents concerning early childhood education will be reviewed: The *Report on the National Forum on Early Childhood Education* (1998) and *Ready to Learn: White Paper on Early Childhood Education* (1999). Both documents considered provision of early childhood education for children who experience disabilities and developmental delays.

The Report on the National Forum on Early Childhood Education (1998)

The *Report on the National Forum on Early Childhood Education* stated that the "research literature is unequivocal in stressing the importance of the early years for children with biological impairment".[82] The Report noted the lack of legislation regarding provision of early childhood education and commented that "children with special educational needs would be more likely to obtain appropriate provision if their right to such provision was enshrined in legislation".[83] The Forum participants endorsed proposals that:

- early services teams should be multidisciplinary, comprising parents and professionals representing Health and Education;
- the teams should design and implement an Individualised Education Plan (IEP) for each child identified as having special needs;

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[80] Department of Justice, Equality and Law Reform (1999), p. 134.

[81] Department of Justice, Equality and Law Reform (1999), p. 135.

[82] National Forum Secretariat, J. Coolahan (ed.) (1998). *Report on the National Forum for Early Childhood Education.* Dublin: Stationery Office, p. 93

[83] National Forum Secretariat (1998), p. 95.

- an IEP should identify the child's needs, state the provision necessary to meet those needs, the appropriate setting and the required funding;
- the multidisciplinary teams should provide on-going monitoring and review of the child's provision.[84]

The Report stated that "early identification (of special educational need) does not guarantee early intervention, nor does intervention ensure appropriate provision".[85] It noted the lack of services in some areas and insufficient liaison and co-operation between agencies. It suggested that difficulties arose from the fact that preschool identification of disability was through the Health agencies, whereas the responsibility for the provision of intervention belonged to the Department of Education and Science. The Forum recommended a central role for the Department of Education and Science in the design and provision of early intervention programmes. [86]

The Forum recommended that children be educated with their non-disabled peers to "the maximum extent appropriate".[87] It cited research which confirmed the benefits of integrated settings and stated that "positive outcomes are manifest in more constructive social interaction with peers, more complex play behaviours and richer communicative competence."[88]

However, access to an integrated preschool setting was not seen in itself to guarantee beneficial effects. Adequate provision would depend on highly skilled teachers with expertise in educating young children who had special

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[84] National Forum Secretariat (1998), p. 97.

[85] National Forum Secretariat (1998), p. 99.

[86] National Forum Secretariat (1998), pp. 99-100.

[87] National Forum Secretariat (1998), p. 100.

educational needs.[89] Careful and planned manipulation of the children's social groups, structuring of the curriculum, and planned, systematic teaching were necessary to achieve positive outcomes for the young children with disabilities. [90]

The Forum proposed that a special task force be established to formulate policy on early childhood education for children with special needs. This task force should include parents and relevant professionals and should work in close association with the proposed Early Years Development Unit and the NCCA Committee on Curriculum for Children with Special Needs.[91]

Ready to Learn: White Paper on Early Childhood Education (1999)

The core objective of the White Paper was to "support the development and education achievement of children through high quality early education, with particular focus on the target groups of the disadvantaged and those with special educational needs".[92] The White Paper's position regarding the role of the Department of Education and Science in providing for the early childhood education of students who have developmental delays and disabilities is ambiguous. It proposed that diagnosis and identification of disability remain

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[88] National Forum Secretariat (1998), p. 101.

[89] National Forum Secretariat (1998), p. 98.

[90] National Forum Secretariat (1998), p. 101.

[91] National Forum Secretariat (1998), p. 102.

[92] Department of Education and Science (1999). *Ready to Learn: White Paper on Early Childhood Education.* Dublin: Stationery Office, p. 41.

the responsibility of the Health Boards, but that "teachers with expertise in special needs be members of teams planning for early education".[93]

The White Paper identified shortcomings in present provision including:

- restricted composition of multidisciplinary teams, and particularly the absence on the teams of teachers with expertise in special education;
- the shortage in the supply of key professionals (psychologists, speech therapists, physiotherapists);
- the lack of liaison by these teams with preschools and schools which children with disabilities attend.[94]

The White Paper proposed that parents of all preschool children with diagnosed disabilities have access to an early education expert, as an advisor and disseminator of models of best teaching approaches. The expert may teach the children for short periods and, when the children are in preschool, extend advice to those who are working with them.[95] The existing Visiting Teacher service to students with visual and hearing disabilities was mentioned, but it was not stated whether this model of service would be extended to students who have learning or other disabilities.[96]

The White Paper indicated that a range of induction and post-graduate courses would be made available and that teachers already working with young children would have access to training in special education.[97] It also

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[93] Department of Education and Science (1999), pp. 84-85.

[94] Department of Education and Science (1999), p. 85.

[95] Department of Education and Science (1999), p.90.

[96] Department of Education and Science (1999), p.90.

[97] Department of Education and Science (1999), pp.90-91.

stated that appropriate curriculum guidelines and a range of professional services to support the children would be provided. [98]

The White Paper proposed that multidisciplinary teams, representing professionals from Education and Health, should be chaired by an educationalist and recommends that these teams should consult and advise parents of the best options and make decisions with parents with regard to the form and location of the provision. These teams should draft outlines of education plans to be carried out by those involved in the education of the children. [99]

Compared with the clear policy statements found in the *Report of the Forum for Early Childhood*, the policies outlined in the *White Paper on Early Childhood* are ambivalent and ambiguous. The White Paper fails to define adequately the responsibilities and role of the Department of Education in providing early childhood education to children who have special educational needs. While the White Paper promises improved teacher education programmes, the other important issues of the funding of early childhood education and the amelioration of the lack of key personnel are not addressed.

Moreover, the Forum participants stated their belief that young children with special educational needs were more likely to obtain adequate early education if their right to it were enshrined in legislation. It is important to note that in the Education Act 1998, which followed the publication of the Forum's

[98] Department of Education and Science (1999), p. 91.

Report, the one reference to early childhood education is with reference to young children with special educational needs. The Education Act 1998 requires that the Minister for Education and Science shall "ensure that there is made available to each person resident in the State, including a person with a disability or who has other special education needs, support services". *Support services* are defined to include "provision for early childhood...education to students with special needs otherwise than in schools...."[100] Regrettably, the White Paper makes no reference to the Minister's obligations under these sections of the legislation.

Education Act, 1998

On 23 December 1998, an Act "to make provision for the education of every person in the state including any person with a disability or who has other special educational needs" was signed into law.[101] In the Act, *special educational needs* are defined as "the educational needs of students who have a disability and the educational needs of exceptionally able students". *Disability* is described in terms of an impairment or condition rather than in terms of a student's ability to benefit from any particular type of education. [102]

Section 7 of the Act requires the Minister for Education and Science to "ensure that there is made available to each person resident in the State, including a person with a disability or who has other special educational

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[99] Department of Education and Science (1999), p. 92.

[100] *Education Act, 1998.* No 51 in public statues of the Oireachtas (Sec 7.1 and Sec 2)

[101] *Education Act, 1998.*

[102] Appendix 4. Summary of the Education Act, 1998 highlighting sections that have particular relevance to students who have special educational needs.

needs, support services and a level and quality of education appropriate to meeting the needs and abilities of that person".

Section 9 of the Act requires that schools provide education which is appropriate to students' abilities and needs, and ensure that the educational needs of all students, including those with a disability or other special educational needs, are identified and addressed.

Section 15 of the Act requires that Boards of Management publish the policy of the school concerning admission to and participation in the school, including the policy of admission to and participation by students with disabilities or who have other special educational needs; and ensure that policy principles of equality and the right of parents to send their children to a school of the parents' choice are respected.

The Education Act, 1998 was the culmination of a long consultative process. While many aspects of the Act are permissive rather than prescriptive, it provides legal entitlement to full participation in education for students who have disabilities.

Summary

This Section examined how Irish educational documents over the past thirty-five years have defined the child or young person who has learning disabilities. In 1965, the basis for special educational placement was the child's incapacity to adapt to the demands of the ordinary classroom. It was believed that the classroom environment could adapt to the various needs of students only to a limited degree. In the recent past, the concept of special educational needs has been framed in terms rights and equality of

participation in education by the Green Paper on Education (1992); the White Paper on Education (1995); the Commission on the Status of People with Disabilities (1996), and the Forum for Early Childhood Education.[103] All-encompassing labels such as *the mentally handicapped* may no longer be appropriate categories for educational reference.[104]

The Education Act, 1998 has provided students who have disabilities a legal entitlement to equality of access to and participation in education, and to the means necessary to benefit from the education provided. How this will be implemented will depend to a great extent on the concept of learning disability that is held by the community.

Soon after the passage of the Education Act, 1998, the interviews that formed the basis for the present study took place. It was a period that marked a point of transition between the special system established by the 1965 Commission of Inquiry on Mental Handicap and entitlements under the Education Act, 1998.

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[103] Department of Education (1992), p. 45; Department of Education (1995), p.24; Commission on the Status of People with Disabilities (1996), pp. 173-174.

[104] Drudy, S. and Lynch, K. (1993). *Schools and Society in Ireland.* Dublin: Gill and Macmillan, p. 241.

Chapter 4: Methodology

Objectives of the study

There were five objectives to this study. First, it sought to identify present patterns of school placement for Irish students who have Down syndrome. Second, it attempted to explore the basis for placement decisions and to identify factors, including early childhood and preschool experiences, which influenced decisions regarding their education. Third, it undertook to report and quantify the educational supports and services received by students in the different types of school placement. Fourth, it aimed to elicit and analyse parents' evaluation of the students' educational experiences. Fifth, it endeavoured, on the basis of the findings of the study, to identify implications for educational policy.

Parents as study informants

It was decided to base this study on information obtained from parent interviews. Parents have a central role in school placement decisions.[1] Parents have unique and valuable information. Parents have knowledge of their child's experience from birth to the present. Parents observe and interact with their sons and daughters in many different contexts. Although the body of research is limited, Miller *et al.* and other researchers[2] have found parents of

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[1] The Irish Education Act, 1988 Part 1, Sec 6a. states that it is an object of the Act "to promote the right of parents to send their children to a school of the parents' choice having regard to the rights of patrons and the effective and efficient use of resources".

[2] Miller, J., Sedey, A. and Miolo, G. (1995). Validity of parent report measures of vocabulary development for children with Down syndrome. *Journal of Speech and Hearing Research,* vol. 38, pp.1037-1044; Cunningham, C. and Sloper P. (1984). The relationship between maternal

children who have Down syndrome to be valid reporters of their child's performance.

Teachers and other professionals may be able to provide an accurate and perceptive report of a particular period. They know a student at one time and in a particular context. However, they do not have knowledge of the series of events and decisions that have influenced the present position. Usually, they do not have the opportunity to know a student in naturalistic situations.

Parental perspectives reflect divergent social phenomenon. Byrne *et al.*[3] have argued that families of children who have Down syndrome vary as much as do all families. They also belong to other groups of families: single-parent families, families in poverty, families with both parents employed, families with health problems. Parents of students who have Down syndrome share the experiences and concerns of these other groups of parents. Families of students who have Down syndrome do not exist in isolation. They are influenced by and exert influence upon the wider systems of which the families are a part, such as social networks, political contexts and cultural regimes.

It is primarily the student whose life-chances are affected by the education that he/she receives. But parents of students with learning disabilities also will live with the consequences of how well the system meets the educational

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ratings of first word vocabulary and Reynell language scores. *British Journal of Educational Psychology*, vol. 54, pp.160-167; Dale, P. (1991). The validity of a parent report measure of vocabulary and syntax at 24 months. *Journal of Speech and Hearing Research,* vol. 34, pp. 565-571.

[3] Byrne, E., Cunningham, C. and Sloper, P. (1988). *Families and their Children with Down's Syndrome: One Feature in Common.* London and New York: Routledge, pp.1-8.

needs of their sons and daughters. Their assessment and concerns should be part of the dialogue on how we can best meet the challenges of educating students who have special educational needs.

Study sampling frame

A range of parents of students who have Down syndrome needed to be identified in order that the interviews could be undertaken. Ideally, a representative sample would have been selected. However, no comprehensive sampling frame existed for the population. Three potential sources of a population for this study were considered: the Department of Health National Intellectual Disability Database, The European Register of Congenital Anomalies and Twins (EUROCAT), and the Down Syndrome Ireland (DSI) database.

The Health Research Board of the Department of Health and Children maintains a database of "every individual known to have an intellectual disability or known to be availing of intellectual disability services".[4] The database contains the following information regarding persons registered on the database: their date of birth, their sex, the responsible Health Board, the degree of intellectual disability, the types of principal allowances received by the individual, the present service provided and an estimate of the services which will be required in the next five years. It does not identify the aetiology of the intellectual disability. Therefore, it could not be used as a source from which to identify a study population.

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[4] *National Intellectual Disability Database: Annual Report of the National Intellectual Disability*

EUROCAT maintains a register of all children born with Down syndrome in the counties served by the Eastern Health Board Region [now the Eastern Regional Health Authority][5] and County Galway. This register records the address at the time of birth only, and does not maintain contact with the families. Some of the babies recorded may not have survived. Families may have moved out of the area or within the area; other families may have moved into these two areas. EUROCAT does not record births of children with Down syndrome born in other areas of the country. By focusing only on the Eastern Health Board region and Galway, important regional differences might be overlooked.

Data protection legislation does not allow information regarding individuals, maintained on either of these databases, to be disclosed. However, general information from these databases can be used in order to make population estimates.

Down Syndrome Ireland (DSI), an association of parents, relatives and friends of persons who have Down syndrome, has developed a database of its members. The organisation, founded twenty-five years ago, has increased its membership over the years. DSI has a present membership of nearly 2,000. Members of the association live in all parts of the Republic of Ireland. The parents have a wealth of knowledge and experience about the abilities and needs of their sons and daughters. They are acutely aware of what is required from schools and service providers. The organisation believes that if this

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Database Committee, 1996. Dublin: The Health Research Board, p. 2.

[5] The Eastern Health Board includes the counties of Dublin, Kildare and Wicklow.

information can be gathered and shared among parents and professionals, it might be acted upon to promote good, helpful practices. Such information can be used to advocate for better services and educational opportunities.

Because of these beliefs, Down Syndrome Ireland was willing to co-operate with this study and to obtain the consent of selected parents so that their names and addresses could be released.[6]

The DSI database

The accessibility and perceived goodwill of members of the DSI organisation to co-operate with the study were important factors in considering this database as a source from which to draw the study population. The limitations of this database were also considered. Membership in the organisation varied considerably from county to county. Not all the information on the database was complete. In some cases, birth dates and/or addresses were missing. The accuracy of the information held on the database had not been tested.

More importantly, as not all parents of persons who have Down syndrome were members, there might be significant differences between those who were members and those who were not. Some examples of the possible differences might be: members may be *joiners*, those who take part in group activities; non-members may be more self-directed. Membership may be biased towards those who live in relatively populous areas; those who live in more isolated areas may find it more difficult to take part. Members may be more affluent and may have higher levels of education than non-members.

Members may agree with the policies and programmes of the organisation; non-members may have a different perspective.

An important DSI policy that may have influenced the findings of this study was that the organisation has actively supported parents who chose to have their son/daughter educated in regular education. It is possible that, by using the DSI database, this study found a higher proportion of students in mainstream settings than was actually the case. The actual differences between members and non-members were not known. There was no research to refer to.

In spite of the limitations, the DSI database was the best source of a study population that was available. It is recognised that the sample selected from this database was precluded from being categorically representative from the outset. With this in mind, the selection of the sample was aimed towards optimising the extrapolative capacity of the research. Towards this aim, theoretically significant variables of age, sex and location were incorporated into the sampling design — *purposive sampling.* Nevertheless, findings need to be interpreted cautiously with the limitations of the population in mind.

A previous chapter reviewed the literature regarding school placement patterns in other countries for students who have Down syndrome and noted the lack of Irish research on the subject. This was an explorative study. While the information gleaned was limited by what was possible, it will contribute to the knowledge base.

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[6]Appendix 5. Letters to parents from DSI and researcher, and refusal form.

Estimate of the number of students with Down syndrome in Ireland

In order to determine how complete the DSI database was, it was necessary to estimate the total number of students, born 1982-1990, who have Down syndrome. An estimate was made by combining existing data.

- *Factor 1: The total number of students born 1982-1990*

School attendance is compulsory in Ireland between the ages of six and sixteen. Therefore, school enrolment data for students of compulsory school age should give a valid estimate of the total number of students, of those ages, who live in Ireland. At the time of the sample selection, the latest statistics from the Department of Education and Science were for the school year 1997-1998. They were based on the age the students were on January 1, 1998. The Department of Education and Science reported that there were 543,807 students in education who were born between 1982 and 1990.[7]

- *Factor 2: Prevalence and survival rates for children with Down syndrome*

Johnson *et al.*[8] investigated the prevalence of Down syndrome in four counties of Ireland between 1981 and 1990. The counties studied were Dublin, Kildare, Wicklow and Galway. (These areas include about one-third of the national population.) This team found an overall birth prevalence rate was

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[7] Department of Education and Science (1999). *Annual Statistical Report 1997-1998.* Table 1.4. Number Of Persons Receiving Full-Time Education and Estimated Participation Rates by Age. Figures include all students in primary (including all special schools) and secondary schools that are aided by the Department of Education and Science, and also those in non-aided schools. The Department estimates that these figures include 99.8% of total population who were born 1990-1983 and 97.2% of those born in 1982.

[8] Johnson, Z., Lillis, D., Delany, V., Hayes, C. and Dack, P. (1996). The epidemiology of Down syndrome in four counties in Ireland 1981-1990. *Journal of Public Health Medicine,* vol.

18.3/10,000 for live births. Wicklow had the lowest rate of 16.5/10,000 and Galway 23.5/10,000. This study also found that the male-female ratio for these counties was 1:1.[9]

Hayes *et al.*[10] determined that the survival rate for children with Down syndrome, living in the Eastern Health Board region was 88% at one year and 82% at ten years. This study also found that there were approximately equal numbers of males and females who had survived for ten years.[11]

- *Estimate arrived at by combining factors*

The prevalence and survival rates combined with the reported number of 543,807 Irish students born between 1982 and 1990,[12] gives an estimated 816 students, born during that period, with Down syndrome. A near equal number of males and females would be expected.

- *Proportion of possible cases which appear on DSI data base*

The DSI database identified 392 members whose sons/daughters were born during the period 1982-1990. This would represent forty-eight percent of the estimated 816 students with Down syndrome born those years. Table 4.1 combines this information by year.

18, no. 1, pp. 78-86, p. 82.

[9] Johnson, Z. *et al.* (1996), p. 82.

[10] Hayes, C., Johnson, Z., Thornton, L., Fogarty, J., Lyons, R., O'Connor, M., Delany, V. and Buckley, K. (1997). Ten-year survival of Down syndrome births. *International Journal of Epidemiology,* vol. 26, no. 4, pp. 822-829, p. 826.

[11] Hayes, C. *et al.* (1997), p. 827.

[12] Department of Education and Science (1999). Table 1.4. The figures relate to the school year 1997/1998.

Table 4.1. The total number of Irish students 1982-1990 and the estimated number of students born those years who have Down syndrome, and the number of students on the DSI database.

Year of birth	Total number of students in Ireland*	Expected number of students with DS	Number of students on DSI database	% of expected students with DS on DSI database
1982	66,676	100	33	*33.0%*
1983	65,077	98	43	*43.8%*
1984	63,204	95	34	*35.8%*
1985	61,076	92	41	*44.6%*
1986	61,121	92	43	*47.8 %*
1987	59,255	89	48	*53.9%*
1988	56,367	85	40	*47.1%*
1989	54,958	82	56	*68.3%*
1990	56,073	84	54	*64.3%*
Total	543,807	816	392	*48.0%*

*Source: Department Of Education and Science (1999) *Annual Statistical Report 1997-1998.* Table 1.4 Number Of Persons Receiving Full-time Education and Estimated Participation Rates by Age.

Age groups selected

Three age groups were selected from the DSI database: those born in 1982, 1986 and 1990. At the time the population was selected, these students were sixteen, twelve and eight years respectively. The rationale for selecting these groups was as follows. Sixteen-year-olds would be in the second stage of their education. Their parents would be considering further education, training or employment in the near future. Twelve-year-olds would be well into the first stage of their education and their parents would be considering the second stage. Eight-year-olds would have begun their formal education and their parents would have had sufficient time to have formed judgements of their experience. In addition, by choosing three age groups, whose ages spanned eight years, it would be possible to evaluate whether there have been changes in the patterns of education and improvements in support services

over that period. Table 4.2 gives the estimated number of students born those years who have DS and the number of students on DSI database.

Table 4.2. The total number of students born 1982, 1986 and 1990 and the estimated number of students born those years who have Down syndrome and the number of students on the DSI database

Year born	Total number of students in Ireland	Expected number of students with DS	Number of students on DSI data base	% of expected students with DS on DSI data base
1982	66,676	100	33	*33.0%*
1986	61,121	92	44	*47.8%*
1990	56,073	84	54	*64.3%*
Total	183,870	276	131	*47.4%*

*Source: Dept Of Education and Science (1999) *Annual Statistical Report 1997-1998.* Table 1.4 Number Of Persons Receiving Full-Time Education and Estimated Participation Rates by Age.

One hundred and thirty-one students were identified on the DSI membership list who had been born in the chosen years. Table 4.3 gives the number and percent of males and females in the different age groups.

Table 4.3 The number and percent of males and females on the DSI membership database who were born in 1982,1986 and 1990.

Year born	Male	%	Female	%	total	% total
1982	19	*14.5%*	14	*10.7%*	33	*25.2%*
1986	24	*18.3%*	20	*15.3%*	44	*33.6%*
1990	29	*22.1%*	25	*19.1%*	54	*41.2%*
Total	72	*54.9%*	59	*45.1%*	131	*100.0%*

Source: DSI database (1998)

The difference between males and females, while not large for this size group, may have been a reflection of membership trends or incomplete information on the database. The increased number of students in the younger categories

reflected an increase in the membership of the organisation and did not indicate an increase in the incidence of Down syndrome.[13]

Geographical distribution

In choosing the study population, several locational factors were considered to be theoretically important. The population should have families who live in urban and rural areas. In urban areas, where a variety of schools were available, there may have been more educational options for parents. Also, in urban areas, with a greater concentration of pupils, there may have been greater access to specialist services and resource teachers.

The families should live in different health board regions. Health boards, directly or through their agents, provide many of the specialist services which students with Down syndrome need: physiotherapy, speech therapy and psychological assessment. This may be especially true for the provision of early services, but some responsibilities of the health boards continue through the school years. There may have been differences in the degree and manner in which the various health boards have provided these services.

The families in the study should receive services from different service providers (non-statutory agencies). Service providers receive some of their funding through health boards and raise funds through voluntary contributions and other sources of funding. Service providers may have closer contact with families than the health boards, may serve as advocates for their clients, and

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[13] Johnson, Z. *et al.* (1996) reported that "there was a fall in the total number of DS births over the decade" [1981-1990].

are often patrons or managers of special schools. Some service providers are under the auspices of religious organisations; others are non-denominational organisations of parents and friends. There may have been differences in the structure, philosophy, programmes and personnel among the various service providers and differences in the amount of contact parents had with them.

It was hypothesised that these locational variables may have been consequential factors that influenced the quality of education that students who have Down syndrome receive. Therefore, it was considered important that this study reflect the locational differences that exist in Ireland.

The families of the 131 students, who were born in the designated years and listed on the DSI database, lived in twenty-four of the twenty-six counties of the Republic. Only the counties of Carlow and Laois were not represented. The absence of students in these two counties may have been an artefact of the relative activity of the different branches. Local branches of DSI existed in all parts of the Irish Republic.[14] However, as a voluntary parent support organisation, local branches differed in their activities and membership for a variety of reasons. Some of these reasons may have been: leadership of branch officers; distances between families; the specific projects undertaken by local branches.

[14] Appendix 6. Distribution by County of students born 1982, 1986 and 1990 who were listed on DSI database.

Sampling method

In designing this research study, an important factor was a realistic appraisal of the resources available. A relatively large sample was necessary in order to include a statistically significant number of cases that would represent the variables that have been outlined. A postal survey would therefore have seemed to be the most efficient method of data collection. However, it was considered essential that questionnaires be interviewer-administered in order to obtain a high rate of response and valuable qualitative data. Interviewing all the parents identified on the DSI database would have been beyond the possible resources of this study.

When a population is large and widely dispersed, as this one was, *cluster sampling* is a technique that may be used.[15] "The choice of clusters depends on the research objectives and the resources available to the study."[16] Cluster sampling involves first selecting larger groupings (in this case, all born in the years 1982, 1986 and 1990) and then selecting sampling units from the clusters. A researcher may make a selection from within the clusters using either *simple* or *stratified* sampling procedures.[17] The underlying idea of stratified sampling is to use available information on the population to create a set of samples based on the variables that one is interested in studying.[18] Therefore, in this study, a stratified sample should be evenly divided between

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[15] Cohen, L. and Mannion, L. (1994). *Research Methods in Education* (4th ed). London: Routledge, pp. 86-88.

[16] Nachmias, C. and Nachmias, D. (1997). *Research Methods in the Social Sciences.* London: Arnold, p. 191.

[17] Nachmias, C. and Nachmias, D. (1997), p. 190.

[18] Nachmias, C. and Nachmias, D. (1997), p. 188.

males and females; should contain in each age group a proportion similar to the proportion of that age group on the DSI database; should reflect the variety of locational variables that have been described.

Consideration of resources

In order to reduce the amount of travel necessary to interview all parents and the costs that would incur, clusters where the larger number of students lived were identified. The counties where more than seven students lived, who were born in the designated years, were selected. The counties thus selected were Dublin, Cork, Limerick, Meath, Galway, Kerry and Kildare. It was considered that the inclusion of clusters below this density would negate the benefits of using cluster sampling. Ninety-three (71%) of the 131 families lived in these counties. It was decided that the additional travel, time and expense that would be necessary to interview the families in the remaining areas would be beyond possible resources.

It was next considered whether these stratified samples met the additional criteria which had been looked for: a balance between male and female; proportional representation of the three age groups; mixture of urban and rural, different availability of educational options; different health boards; different patterns of non-statutory service providers.

Sex and age representation

Ninety-three students were identified on the database in the selected areas. In this group there were forty-seven males and forty-six females. Twenty-one students (23%) were born in 1982; thirty-three students (35%) were born in

1986, and thirty-nine students (42%) were born in 1990. This distribution closely mirrors that of the entire group. Table 4.4 gives the number of students by county, year of birth and distribution of males and females in each group. This group represents fifty-seven percent of the expected number of students who had Down syndrome, of those three ages, in the selected counties (Appendix 6).[19]

Table 4.4. The clusters of students selected from the DSI database, their year of birth and sex

County	1982	M	F	1986	M	F	1990	M	F	Total	M	F
Dublin	7	4	3	14	7	7	15	7	8	36	18	18
Cork	3	2	1	6	4	2	10	6	4	19	12	7
Limerick	3	1	2	3	1	2	3	2	1	9	4	5
Meath	2	1	1	4	0	4	2	1	1	8	2	6
Galway	1	1	0	0	0	0	6	3	3	7	4	3
Kerry	4	1	3	3	2	1	0	0	0	7	3	4
Kildare	1	1	0	3	2	1	3	0	3	7	3	4
total	21	12	9	33	16	17	39	19	20	93	47	46
%	*22.6%*			*35.5%*			*41.9%*			*100%*		

Source: DSI database (1998)

Urban-rural mixture, educational options

At the point of selecting the sample, addresses of the families were not available. Nevertheless, it was reasonable to predict that, in these seven counties, families would live in both urban and rural settings. In the selected counties there were differences in the educational options available to parents. Table 4.5 shows the number of special classes and the number of

[19] Appendix 6. The total population born in the years 1982, 1986 and 1990 living in the selected counties, the expected number of students with Down syndrome in that population, the number born in those years listed on the DSI database, and the percent of the expected number that were listed.

special schools in the selected counties in 1993 and 1999. The large majority of special classes and most special schools were in cities or the larger towns.

Table 4.5. The distribution of special classes and special schools in the selected counties.

County	No of special classes for pupils with Mild MH		No of special classes for pupils with Moderate MH		No of special schools for pupils with Mild MH		No of special schools for pupils with Moderate MH	
	1993*	1999**	1993*	1999**	1993*	1999***	1993*	1999***
Dublin	82	163	0	1	5	5	7	7
Cork	8	21	3	4	3	3	3	3
Limerick	6	9	0	0	1	1	1	1
Meath	0	0	0	0	1	1	1	1
Galway	5	13	1	1	1	1	1	1
Kerry	1	4	0	0	1	1	2	2
Kildare	5	6	0	0	1	1	2	2
total	107	216	4	6	13	13	17	17

Source: Department of Education. *Report of the Special Education Review Committee* (1993) pp 301-304. Terminology is that used by the Department of Education. **Personal communication Department of Education and Science provisional figures 1998-1999. *** Department of Education and Science. List of Special Schools 1998.

The above table indicates that, in the selected counties, the growth of special classes during the period 1993-1999 had mostly been for students who have mild intellectual disability. The majority of these classes were in the Dublin area. Only two new special classes for students with moderate intellectual disability had been sanctioned during this period. There had been no increase in the number of special schools in either category.

Health Boards and service providers

Five of the eight Health Boards were represented in the sample clusters: Eastern Health Board (Dublin and Kildare); Mid-Western Health Board (Limerick); North-Eastern Health Board (Meath); Southern Health Board (Cork and Kerry); and Western Health Board (Galway).

The seven selected areas had different patterns of service provision. To give an indication of the variety, the principal service providers are listed. In Dublin there were: St Michael's House; Cheeverstown House; Daughters of Charity Services; Hospitaller Order of St. John of God; Stewart's Hospital; the Central Remedial Clinic; and, the Rehabilitation Institute. Meath had none. KARE, the Sisters of Charity and the Hospitaller Order of St John of God were in Kildare. Galway had two: the Galway County Association for Mentally Handicapped Children and the Brothers of Charity Services. In Cork there were the Brothers of Charity Services, the COPE Foundation, Charleville and District Association for the Handicapped, and Co-Action. The Brothers of Charity Services and the Daughters of Charity were in Limerick. Kerry had two: St Mary of the Angels and the Kerry Parents and Friends of the Mentally Handicapped.[20]

Interview schedule and Interview method

The focus and conceptual framework of the interview

The process of developing an interview schedule and method of interview needed to be focused on the purpose of the study and to reflect the conceptual framework of the investigation. The focus of this study was to identify the pattern of school placement for students who have Down syndrome; the educational supports and services they have received; and, their parents' evaluation of that educational experience. The conceptual framework for this investigation was based on the *ecological systems* model

[20] National Association for the Mentally Handicapped of Ireland (1999). *Directory of Services.*

conceptualised by Bronfenbrenner.[21] This model describes a "progressive mutual accommodation between an active, growing human being and the changing properties of the immediate setting in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded".[22]

The ecological systems model recognises the multiple interrelations between cultural contexts and the individuals who inhabit those contexts. It perceives individual development as a set of process in which the individual interacts over time with his/her changing environments. Thus, the "characteristics of the person at a given time in his or her life are a joint function of the characteristics of the person and of the environment over the course of that person's life up to that time."[23]

The complexity of the relationship of the individual student who, among other characteristics has Down syndrome, and his/her changing environments were explored in this study. Family variables of size of family, location of residence, parental education and occupation were considered to be factors which might have influenced educational decisions and access to services and supports.[24] Child characteristics of age, sex and health concerns may have been

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Dublin: NAMHI.

[21] Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge Mass: Harvard University Press; Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (ed.), *Six Theories of Child Development: Revised formulations and Current Issues.* London: Jessica Kingsley, pp.187-249.

[22] Bronfenbrenner, U. (1979), p. 21

[23] Bronfenbrenner, U. (1992), p. 190.

[24] Turner, S., Sloper, P., Knussen, C. and Cunningham, C. (1991). Socio-economic factors: their relationship with child and family functioning for children with Down's syndrome. *Mental Handicap Research,* vol. 4, no. 1, pp. 80-100; Scheepstra, A., Pijl, S. and Nakken, H. (1996).

variables which influenced contact with service providers, educational opportunities and school placement decisions.[25] Psychological assessment, early services and pre-school may have been experiences which influenced subsequent choices and opportunities.[26] The choice of schools in the proximate environment, the learning support resources available to the schools, parental beliefs and expectations might also have influenced school placement decisions.[27] The presence/absence of students with learning disabilities in a particular school may have determined the allocation of learning support resources.[28] The culture of the school attended might have influenced the student's academic attainment and social inclusion.[29] It was the

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'Knocking on the school door': pupils in the Netherlands with Down's syndrome enter regular education. *British Journal of Special Education,* vol. 23, no. 3, pp. 134-138.

[25] Bibby, P., Lamb, S., Leyden, G., and Wood, D. (1996). Season of birth and gender effects in children attending moderate learning difficulty schools. *British Journal of Educational Psychology,* vol. 66, pp. 159-168; Egan, M. (1995). *Getting to Know You: An Introduction to some Irish Children and Adults with Down Syndrome and their Families.* Dublin: DSAI.

[26] Pieterse, M. and Center, Y. (1984). The integration of eight Down's syndrome children into regular schools. *Australia and New Zealand Journal of Developmental Disabilities,* vol. 10, no. 1, pp. 11-20; Mehan, S. (1992). Parents of Special Needs Children: Perceptions of Integrated Education. Unpublished MEd thesis, University College Cork; Guralnick, M. (1994). Mothers' perceptions of the benefits and drawbacks of early childhood mainstreaming. *Journal of Early Intervention,* Vol. 18, no. 2, pp. 168-183; Englebrecht, P., Eloff, I., and Newmark, R. (1997). Support in inclusive education: the Down's syndrome projects. *South African Journal of Education,* vol. 17, no. 2, pp. 81-84.

[27] Cunningham, C., Glenn, S., Lorenz, S., Chuckle, P. and Shepperdson, B. (1998). Trends and outcomes in educational placements for children with Down syndrome. *European Journal of Special Needs Education,* vol. 13, no. 3, pp. 225-237; Croll, P. and Moss, D. (1998). Pragmatism, ideology and educational change: The case of special educational needs. *British Journal of Educational Studies,* vol. 46, no. 1, pp.11-25; Lynch, P. (1995). Integration in Ireland: Policy and practice. In C. O'Hanlon, C. (ed.) *Inclusive Education in Europe.* London: David Fulton, pp. 59-74; Hocutt, A. (1996). Effectiveness of special education: is placement the critical factor? *The Future of Children,* vol. 6, no. 1, pp. 77-102.

[28] Lorenz, S. (1995). The placement of pupils with Down's syndrome: a study of one northern LEA. *British Journal of Special Education,* vol. 22, no. 1, pp. 16-19; Department of Education and Science (1998). Press Release from the Minister for Education and Science, Micheál Martin TD: Major Initiative in Special Education Services, November 5, 1998

[29] Sloper, P., Cunningham, C., Turner S. and Knussen, C. (1990). Factors related to the academic attainments of children with Down's syndrome. *British Journal of Educational Psychology,* vol. 60, pp. 284-298; Casey, W., Jones, D., Kugler, B. and Watkins, B., (1988). Integration of Down's syndrome children in the primary school: a longitudinal study of cognitive development and academic attainments. *British Journal of Educational Psychology,*

task of this study to elicit information which might further an understanding of the inter-play of these factors in the developmental processes of students who have developmental delays and learning disabilities.

Construction of the interview schedule

The projected number of study participants and the width of issues to be explored dictated that a structured interview schedule be constructed.[30] It was essential to formulate a schedule which would facilitate consistent data collection and coherent analysis.[31] Questionnaires and interview schedules used by other studies were reviewed in order to identify sets of indicators that had been used by other researchers with success. Four parent-based studies were reviewed: *The Educational Challenges Inclusion Study;*[32] Children with Down Syndrome: At school in 1994;[33] A Western Australian Down Syndrome Study,[34] and Parental Perceptions of the Experience of Mainstream Education for a Group of Children with Down Syndrome.[35]

Vol. 60, pp. 284-298; Putnam, J., Markovchich, K., Johnson, D. and Johnson R. (1996). Cooperative learning and peer acceptance of students with learning disabilities. *Journal of Social Psychology,* vol. 136, no. 6, pp. 741-752; Vlachou, A. (1997). *Struggles for Inclusive Education.* Buckingham: Open University Press.

[30] Appendix 7. Interview Schedule.

[31] Kane, E. (1987). *Doing Your Own Research.* London: Marion Boyars, pp. 62-63.

[32] Wolpert, G. (1996). *The Educational Challenges Inclusion Study.* New York: National Down Syndrome Society.

[33] Down Syndrome Association of New South Wales (1994). Children with Down Syndrome: At school in 1994. North Parramatta: Down Syndrome Association of NSW. Unpublished.

[34] Leonard, S. (1997). A Western Australian Down Syndrome Study: A parental perspective into the medical problems; social issues; educational, medical and therapy services; and daily functioning of school-aged children with Down syndrome. Unpublished BSc thesis, University of Western Australia.

[35] Hayden, A.M.B. (1993). Parental Perceptions of the Experience of Mainstream Education for a group of Children with Down Syndrome. Unpublished MEd thesis, NUI Maynooth.

The *Educational Challenges Inclusion Study* used parent and teacher surveys to inquire into the way that school systems in the United States provided services to students with Down syndrome who were in regular education. It did not examine the services provided to students who attended special education. The questionnaire consisted primarily of open-ended inquiries. Neither the orientation of the study nor the method of questioning could be directly applied to the present study. A review of the questions asked was beneficial in identifying issues that might be explored.

Parents in New South Wales were surveyed in Children with Down Syndrome: At school in 1994. These students were in a variety of school placements. This study employed a grid for recording the students' school placement and number of hours of specialised support over the students' academic careers. This method of recording school placement variations over time was adapted and used. This study also stated that "many parents reported that their children had had little or no therapy at school, but whether or not they actually needed it to be provided was not asked".[36] This observation highlighted the requirement that questions regarding support services should inquire not only into what was provided, but also consider parental evaluation of what was required.

The Western Australian Down Syndrome Study extensively investigated the health of students with Down syndrome. The health concerns it identified were considered to be those frequently mentioned in the literature[37] and concerns

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[36] Down Syndrome Association of New South Wales (1994), p.14

[37] Pueschel, S. and Pueschel, J., (eds.) (1992) *Biomedical concerns in Persons with Down*

which might have valid implications for educational placement and academic attainment. A simplified version of the health section of the Western Australian study was adopted.

Hayden surveyed parents of Irish students who had Down syndrome. This study inquired into the school characteristics, the type and amount of teaching support, the process of enrolment, the curriculum and the social implications of placement in regular education. It also investigated the students' progress in self-help skills, communication, behaviour, personal presentation and motivation. The study did not include parents whose sons/daughters were in special education.

As the present study was parent-report based, neither ability measures obtained by psychological testing nor school-based achievement scores were available. In the absence of a parent-report based study of the academic attainment of students with Down syndrome to refer to, a study by Sloper *et al.* was considered, in which teachers completed an academic attainment checklist for reading, mathematics and writing.[38] Subsequently Nye *et al.* used the mathematics checklist and found that it was a useful means for teachers and classroom assistants to assess a student who might not perform to his/her best ability in a formal test situation.[39] While not graded scales, the items included on the three checklists were of progressive difficulty, were

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Syndrome. Baltimore: Paul H. Brookes; Lott, I. and McCoy E. (eds.) (1992). *Down Syndrome: Advances in Medical Care.* New York: Wiley-Liss.

[38] Sloper, P. *et al.* (1990), pp. 297-298.

[39] Nye, J., Clibbens, J. and Bird, G. (1995). Numerical ability, general ability and language in children with Down's syndrome. *Down's Syndrome Research and Practice,* vol. 3, no. 3. pp. 92-101, p. 101.

clearly stated, and were of sufficient range that would include the probable attainments of the students in the present study. The items were described in a manner that parents were likely to understand, and parents were deemed competent to judge whether their son/daughter was able to perform the described academic tasks.[40] Because of these factors, the academic checklists were considered to be a useful indicator of academic attainments that could be used in this study.

Having examined the research instruments used in these cited studies, it was determined that, to obtain the desired information, four different types of questions needed to be constructed to elicit both quantitative and qualitative information*: fill in the response*, *fixed alternatives*, *scales* and *open-ended* questions. [41]

As this was an exploratory study, baseline factual data needed to be collected. Some quantitative data could be best obtained through closed questions. A *fill in the response* mode was used to obtain factual information such as age, siblings, location, health board, parental education and occupation. This information could be post-coded for analysis. *Fixed alternative* questions were constructed where it was considered that all probable alternatives could be identified. An option of *unsure* or *other* to fixed alternative questions was usually given. This type of question was also employed as an introduction to qualitative exploration. These introductory

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[40] Miller, J. *et al.* (1995); Cunningham, C. *et al.* (1984); and Dale, P. (1991). Miller found that parents were reliable reporters especially when reporting *present* performance. The academic checklists inquire into *present* performance.

[41] Cohen, L. and Manion, L. (1994). pp. 271-286.

questions were usually followed by an open-ended question. *Scales* for single and multiple item questions were developed and were pre-coded. In addition to factual information, it was also important that the interview schedule would allow for the variety of experiences of the different families and elicit their opinions and beliefs. To that end *open-ended* questions were included in most sections. Responses to these questions were post-coded. The method used in the analysis of open-ended questions was based on the theory, procedures and techniques of Strauss and Corbin.[42]

Pre-test of interview schedule

The purpose of the pre-test of the interview schedule was to determine whether the questions asked were intelligible to interviewees; to ascertain whether the interviewees would find any of the questions asked unacceptably intrusive; to identify and remedy interview schedule inadequacies, inconsistencies, redundancies and ambiguities; to verify that the choices given would fit most of the probable answers.

In order to pre-test the interview schedule, parents of twelve students (six male and six female) who had Down syndrome were asked to participate. The author was acquainted with all the parents prior to the interviews. All students were of ages that had not been selected to be the study population. Most of the group lived in County Kildare, but one family lived in County Wicklow and one in County Louth. Six of the families lived in large towns and six of the families lived in rural areas. The pre-test group was chosen not because they

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[42] Strauss, A. and Corbin, J. (1990). *Basics of Qualitative Research: Grounded Theory*

proportionally reflected the population as a whole, but in order to test the competence of the interview schedule to meet the variety of school experiences expected.[43]

The interview schedule changed over the pre-test period. When difficulties were identified the interview schedule was amended before the next interview. Mechanical deficiencies such as inadequate space for recording responses were corrected. Ambiguous wording of questions was revised. Some questions were re-grouped to minimise repetitive questions. After each pre-test interview, the parent was asked whether there had been any question which they had found objectionable or any suggestions they wished to make.

Initial contact with study population

Down Syndrome Ireland membership lists for the selected age groups and counties were reviewed by the relevant branch secretaries and verified. It was noted that branch secretaries did not, in all cases, know the people listed on the database and that some of those listed were members of the national association but had no contact with the local branch. One inaccuracy was identified at this stage and corrected.[44]

Procedures and Techniques. Newbury Park: Sage Publications.

[43] At the time of the pre-test one student had attended special residential school; three were attending a special school designated for students with moderate mental handicap; one student though school-aged was not in school; four were attending mainstream primary schools; two were attending mainstream secondary schools; one student was part-time in a special school and part-time in a mainstream secondary school.

[44] Sisters, born ten years apart, both of whom had DS, had been thought to be twins.

The families who had been identified as possible study participants, were individually contacted by letter from the President of DSI.[45] In his letter, the President introduced the researcher and urged parents to take part in the study. Accompanying this was a letter from the researcher explaining the purpose of the research and the method that would be followed. There was also an enclosed refusal form. Any parent who did not wish to take part could return the refusal form to the DSI main office and their name was not disclosed to the researcher.[46] Two parents refused at the initial letter stage.

Although the selection process had limited the study group, the time required to contact parents and arrange and conduct interviews was recognised. A long delay between initial letter and telephone contact might result in parents either forgetting about the contact or thinking that the study had been cancelled. Because of this, it was decided that parents would be contacted sequentially by county or group of counties. Initial letters were sent on January 13, February 17, March 3, and April 14, 1999.

Parents who did not return the refusal form were contacted by telephone by the researcher.[47] This gave those who were not willing to take part another opportunity to refuse with minimal intrusion. Three parents refused at this stage, and an interview was not arranged. At the telephone stage, it was established that two birth dates were incorrect and did not fall within the age range for this study.

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[45] In April, 1999, there was a change in the president of DSI. The incoming president agreed to contact the remaining parents.

[46] Appendix 5. Letter from DSI and researcher, and refusal form.

A number of parents in Dublin (9) and Cork (2) could not be reached at the telephone number listed on the DSI database. Second letters were sent to these parents explaining the difficulty and asking them to return the enclosed stamped addressed letter giving their current telephone number. Five parents, Dublin (4) and Cork (1), did not respond. Two Dublin parents refused at this stage. Four others, Dublin (3) and Cork (1), responded and an interview was arranged. Interviews with the seventy-eight parents willing to take part in the study were arranged at a time and place that was convenient to them.

From an initial proposed population of ninety-three families, eighty-five were located for whom there was correct information. Seven of these chose not to take part. Three did not give a reason, two were unable to take part because of family obligations and two were unable to take part because of work commitments. Seventy-eight families agreed to take part in the study — a response rate of ninety-two per cent of those for whom there was correct information. Appendix 8 gives a summary of the initial contact with parents.[48]

Interviews took place between February 10, 1999 and May 28, 1999. The distance travelled to accomplish the interviews was approximately 2,950 miles justifying the limiting of the study population to the seven designated counties.

Interview method

In the initial letter of contact with the parents it was stated that interviews would be conducted in their home or other convenient place of the parents'

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[47] In Ireland, telephone numbers follow a geographic pattern. By sorting families by telephone number a logical sequence of interviews was organised.

choice. Seventy-four interviews (95%) were in the family home. In two cases mothers, who were employed, chose to be interviewed at their work place. Two other mothers because of delivery/collection of children to/from school chose coffee shops located near schools.

As time and place for the interview was the parents' choice, most parents chose daytime hours when only the mother was available. Sixty-six interviews (85%) were conducted with the mother only;[49] three (4%) were with father only; nine (11%) were with both parents present.

A time of one hour per interview was considered to be possible and optimum. The actual length of interviews did vary depending on whether one or both parents took part, the personality of the parent, intervening occurrences that happened because the interview was conducted in the family home, and the complexity of the situation. Actual interview time ranged from forty-five minutes to two hours. Usually the time required was an hour and fifteen minutes.

Interviews were consistently administered by the researcher reading the schedule and recording the responses. Before each group of questions a short statement was read indicating the topic of the section and the purpose of the questions that would be asked.

During the pre-test period decisions regarding interview procedure evolved. Because of the length and complexity of the schedule it was decided that

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[48] Appendix 8. Initial contacts with parents.

[49] This includes two foster mothers.

parents should be given a copy of the schedule. Reading along with the interviewer allowed for more active participation of the parent and also diminished the need to repeat response choices.

A method of accurately recording responses to open-ended questions also developed. During the pre-test, audio recording of the interview was attempted. Parents were not comfortable with the procedure and felt that other parents would also have difficulty with it. The responses to open-ended questions were often long. Issues of confidentiality were also involved. It was decided that the interviewer would actively listen and summarise the parents' statements keeping the wording as close to that of the parents' as possible but deleting names and other identifying information. The written response was then read back to the parent who could revise, expand or approve what had been recorded. By using this method, the parent had a chance to review his/her response and to verify that it had been essentially, accurately recorded.

Data analysis

The parent interviews yielded both quantitative and qualitative data. The quantitative data obtained was entered into SPSS data files. For the purpose of this study a significance level of p. < or = .05 was selected for all statistical tests.[50] In cases where the probability did not reach this level, differences may be reported, but the statistical significance will not be stated.

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[50] Hinton, P. (1995). *Statistics Explained: A Guide for Social Science Students.* London: Routledge, pp. 39-40.

As SPSS does not have the capacity to analyse qualitative data, open-ended responses were entered in Excel worksheets. By using these two software packages, variables such as age, sex, date of birth, school placement, could be transferred from SPSS to Excel and coded data from Excel transferred to SPSS.

Analysis of qualitative information was accomplished by coding and grouping responses. It was recognised that this process of categorisation involved subjective decisions. In order to increase the validity of these judgements the assistance of two other informed professionals was enlisted. One was a teacher, the other a counsellor. Both were parents of sons who had Down syndrome. Three-way inter-rater consensus was obtained for all coding of qualitative data.

Starting with the section on Early Services and continuing throughout the remainder of the study's findings, quantitative data will be interspersed with parents' responses and statements. The purpose of doing so was to interlace factual data with the nuances of the parents' experiences, beliefs and judgements. Not all parents comments are reported. Those that were representative or typical and also those that were unique were quoted.

Summary

This study was based on information obtained from parent interviews. The database of Down Syndrome Ireland (DSI) was the source of the study sample. It was estimated that in Ireland 816 students, born between the years 1982 and 1990, have Down syndrome. Forty-eight percent of them were identified on the DSI database. It was recognised that a sample selected from

the DSI database was precluded from being categorically representative from the outset. With this in mind, purposive sampling was employed in order to optimise the extrapolative capacity of the research.

Three age groups were selected: those born in 1982, 1986 and 1990 aged sixteen, twelve and eight years respectively. It was considered that the sixteen-year-olds would be in the second stage of their education; the twelve-year-olds would be well into the first stage of their education and their parents would be considering the second stage; the eight-year-olds would have begun formal education and their parents would have had sufficient time to form judgements of their experience.

It was considered essential that the research instrument be interviewer-administered in order to obtain a high rate of response and valuable qualitative data. Interviewing all the parents of students, born in the selected years and listed on the DSI database, would have been beyond the possible resources of the study. As the population was large and widely dispersed, stratified cluster sampling procedures were employed. Counties with more than seven students, born in the designated years, were selected. These clusters included seventy-one percent of those recorded on the DSI database and fifty-seven percent of the expected number of students who had Down syndrome in the selected counties. The sample also met the other criteria which had been sought: a balance between male and female; a mixture of urban and rural; different educational options, and different patterns of non-statutory service providers.

The President of DSI made the initial contact with the selected parents by letter. Parents who did not wish to take part in the study returned a refusal form. The names and addresses of the other parents were made available to the researcher who contacted them by telephone. Of the initial ninety-three families, five were not located, the information regarding three was incorrect, and seven chose not to take part. Interviews with the seventy-eight parents willing to take part in the study were arranged at a time and place convenient to the families. This was a response rate of ninety-two percent of those located for whom the information was correct. Interviews took place between February 10, 1999 and May 28, 1999.

An interview schedule had been constructed, pre-tested and revised. Interviews were consistently administered by the researcher reading the schedule and recording the responses. For the purpose of this study a significance level of p. < or = .05 was selected for all statistical tests. The data obtained was analysed using SPSS and EXCEL software.

Due to the lack of a comprehensive sampling frame, the sample upon which this study was based could not have been truly randomly chosen. However, it is considered that the use of purposive sampling and the high response rate have maximised the potential for theoretical inferences to be made on the basis of the study's findings.

Chapter 5: The Students and their Families

Each person who has Down syndrome is an individual with a unique appearance, personality and set of abilities. People who have Down syndrome do have features in common, but they also closely resemble their parents and their families.[1]

Approximately ninety-five percent of all cases of Down syndrome are caused by a meiotic non-disjunction of autosomal chromosomes pair-21 resulting in the triplication of the chromosome.[2] There are two other relatively rare cytogenic subtypes. Translocation trisomy occurs in approximately four percent of cases when part of a chromosome breaks off during meiosis and attaches to another chromosome. Mosaic trisomy occurs in approximately one percent of the cases and is when not all the cells contain the trisomy. The effect of the different type of trisomy is not understood completely.[3] Those with translocation trisomy "usually have the same characteristics of those with non-disjunction trisomy 21".[4] In the case of mosaic trisomy, how the child is

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[1] Byrne, E., Cunningham, C. and Sloper P. (1988). *Families and Their Children with Down's Syndrome: One Feature in Common.* London: Routledge. p. 20; Booth, T. (1985). Labels and their consequences. In D. Lane, and B.Stratford, (eds.), *Current Approaches to Down's Syndrome*, pp. 3-24, p. 9.

[2] In this study parents were not asked what form of trisomy was present in their sons/daughters. It was considered that the size of the study sample would not allow for adequate comparisons by type of trisomy.

[3] Korenberg, J., Pulst, S. and Gerwehr, S. (1992). Advances in understanding chromosome 21 and Down syndrome. In I. Lott, and E. McCoy (eds.), *Down Syndrome: Advances in Medical Care,* pp. 3-12

[4] Stray-Gundersen, K. (ed.) (1995). *Babies with Down Syndrome: A New Parent's Guide.* Bethesda, Maryland: Woodbine House, p. 11. (See also pp 3-15.)

affected will depend not only on the number of cells affected, but on where those cells are in the body.[5]

Student age, sex and health; family size and composition; parents' level of education and employment status; and family place of residence, were considered to be variables that might influence educational decisions and school placements. These variables are explored in this section.

The students

Seventy-eight students aged sixteen, twelve and eight years were the focus of this study. They lived in seven counties: Dublin, Meath, Kildare, Limerick, Galway, Cork and Kerry. Forty of them were male and thirty-eight were female. They all had Down syndrome.

Age, sex of students and county of residence

The method of selecting the study population has been described in the previous chapter. The composition of the study group by age and sex of student, and by county of residence, is related in table 5.1. While the groups who lived in Dublin and Cork were large enough to include both males and females in each age group, the numbers in the other five counties were not sufficient to allow for this. However, there is a balance of males and females in each of the three age groups.

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[5] Stray-Gundersen, K. (ed.) (1995), p. 13. Stray-Gundersen suggests that those with mosaic trisomy "may have fewer of the usual physical features as well as higher intellectual abilities". However, Lorenz suggests that "there is no evidence to suggest that the majority of children with mosaic Down's syndrome are significantly different from those with full trisomy 21." Lorenz, S. (1998). *Children with Down's Syndrome: A Guide for Teachers and Learning*

Table 5.1. Age and sex of students in study group by county of family residence.								
	1982		1986		1990		Total	
County of residence	M	F	M	F	M	F	M	F
Dublin	5	2	6	6	5	6	16	14
Meath	2	-	-	3	1	1	3	4
Kildare	1	-	2	1	-	2	3	3
Limerick	-	3	1	2	1	1	2	6
Galway	1	-	-	-	1	3	2	3
Cork	2	1	3	1	6	3	11	5
Kerry	1	2	2	1	-	-	3	3
Total	12	8	14	14	14	16	40	38

Health Concerns

Five specific areas of health were chosen for study because of their possible influence on schooling. Other health concerns are also taken into account. In subsequent chapters the degree to which these health concerns influenced educational participation will be explored. Table 5.2 gives an overview of the health concerns of the study group as reported by their parents.

Table 5.2. Parent reported health concerns of students by age of student.				
	1982 N=20	1986 N=28	1990 N=30	Total N=78
*Does your son/daughter **presently** have serious health concerns?*				
Present serious health concern	9 *45.0%*	13 *46.4%*	17 *56.7%*	39 *50.0%*
*Has your son/daughter **ever** been diagnosed with:*				
Heart condition	12 *60.0%*	13 *46.4%*	17 *56.7%*	42 *53.8%*
Hearing/ear condition	11 *55.0%*	13 *46.4%*	15 *50.0%*	39 *50.0%*
Vision/eye condition	17 *85.0%*	18 *64.3%*	17 *56.7%*	52 *66.7%*
Thyroid condition	0 *0.0%*	2 *7.1%*	1 *3.3%*	3 *3.8%*
Bowel/bladder condition	4 *20.0%*	5 *17.9%*	6 *20.0%*	15 *19.2%*
Other health concerns	6 *30.0%*	7 *25.0%*	15 *50.0%*	28 *35.9%*
Does your son/daughter have				
Mobility problems	6 *30.0%*	5 *17.9%*	6 *20.0%*	17 *21.8%*

Support Assistants in Mainstream Primary and Secondary Schools. London: David Fulton, pp1-3.

- ***Heart condition***

Parents of forty-two students (54%) reported that their son/daughter had been diagnosed with a heart condition. In nineteen cases this was reported to be a murmur. None of these nineteen students were reported to have current heart problems or receiving current treatment. Twenty-three had more serious congenital heart defects. Two had *atrial septal defect*, eight *atrio-ventricular canal defect*, one *Eisenmenger complex*, one *patent ductus arteriosus*, one *pulmonary hypertension* and had experienced a cardiac arrest, two *ventricular septal defect*, one *tetralogy of Fallot*, and seven a non-specified defect.[6]

Six students, three boys and three girls, had undergone surgery to correct congenital heart defects. Surgery had occurred at one, two, three and seven years of age. Three had *atrial septal defect*, one *patent ductus arteriosus* and two *ventricular septal defect*.

Of the forty-two children who had ever been diagnosed with heart conditions, fifteen reported *current* heart problem or treatment, twenty-seven did not.[7] The most commonly noted form of treatment was regular consultation with a cardiologist. Three of the girls in the study used oxygen to assist breathing.

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[6] Differences in the proportion with heart conditions by age and sex of student were not statistically significant.

[7] The occurrence of on-going problems did not differ statistically across age groups. Similar proportions of males and females had on-going problems: 7 males, 8 females.

- ***Hearing / ear condition***

Thirty-nine students (50%) had been diagnosed with a hearing/ear problem.[8] Sixteen students (20%) had current hearing problems. Six were using hearing aids. Six others, who did not wear hearing aids, had hearing losses.

- ***Vision / eye condition***

Fifty-two (67%) of study group had been diagnosed with eye/vision conditions. A higher proportion (85%) of the sixteen-year-olds had diagnosed eye problems compared to twelve-year-olds (64%) or eight-year-olds (57%).[9]

Forty-six (59%) of the students wore glasses. More girls wore glasses (66%) than boys (52%). Seventy percent of the sixteen-year-olds; sixty percent of the twelve-year-olds; fifty percent of the eight-year-olds wore glasses. The younger students had been prescribed glasses at earlier ages. None of the oldest group had worn glasses before the age of three. Nine of the younger groups had. Twenty-five percent of the sixteen-year olds; thirty-six percent of the twelve-year-olds; forty-seven percent of the eight-year-olds wore glasses before the age of eight.

Seventeen of the students had other eye problems. The more serious problems included: *bilateral congenital cataracts*; *glaucoma*, and *detached retina*. Less serious but irritating conditions were blocked tear ducts and inverted eyelids. Four parents reported that their son/daughter had *strabismus*; corrective surgery had been performed on three of these children.

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[8] Differences by age and sex of students for hearing problems were not statistically significant.

- ***Thyroid***

Three parents (3.8%) reported that their sons had been diagnosed with a thyroid condition. No female in the study had been diagnosed as having a thyroid problem. Three parents reported that their son/daughter had been tested recently, but had not yet been informed of the result. [10]

- ***Bowel or bladder conditions***

Fifteen students (19%) had bowel or bladder conditions. Eleven males (27%) compared with four females (10%) experienced bowel or bladder difficulties.[11] Seven had chronic constipation; two of whom had *Hirschsprung* disease. Two had *duodenal atresia* for which they had undergone surgery as infants. Two had *coeliac* disease. Two twelve-year-olds had night-time incontinence. One sixteen-year-old male was doubly incontinent. One condition was unspecified.

- ***Other health concerns***

Twenty-eight (36%) of the parents reported that their son/daughter had *other* health problems. A higher proportion of males than females, and more of the youngest age group were reported to have other health concerns.[12] Recurring chest infections were reported for thirty-seven percent of the youngest group, fourteen percent of the middle-aged group, and ten percent for the eldest

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[9] Differences by age and sex of student for vision and eye problems were not statistically significant.

[10] This low incidence of reported thyroid condition raises the question of whether thyroid conditions are being under-diagnosed. See Pueschel, S. and Blaymore Bier, J. (1992). Endocrinologic Aspects. In S. Pueschel, and J. Pueschel (eds.) *Biomedical Concerns in Persons with Down Syndrome.* Baltimore: Paul H. Brookes, pp. 259-272.

[11] The difference between the age groups for bowel or bladder conditions was not statistically significant.

[12] Differences by age and sex of student for other health concerns were not statistically significant.

group. Older students may have developed greater immunity to infection. Other health concerns reported were asthma, eczema and skin problems, alopecia, autism, diabetes, hernias, and infantile seizures.

- ***Mobility problems***

The effect of health problems on mobility was considered. Seventeen (22%) of the students, seven males and ten females, had health problems which were reported to limit their mobility. Three had *atlanto-axis instability*; four had heart conditions; four had limited use of their left side; three had difficulties with ligaments in their knees; two had problems with balance; two had flat feet; and one had severely limited sight.

- ***Comparison with other studies***

The reported health of the students in this study group was compared with the findings of a Western Australian (1997) study.[13] (Table 5.3) A higher proportion of heart conditions and lower proportion of thyroid conditions were reported in the present study than in the Australian study. This may be due to differences in diagnosis and assessment procedures between the two countries. Comparison with an on-going study at the Department of

[13] Leonard, S. (1997). A Western Australian Down Syndrome Study: An analysis of the survival of cases of Down syndrome from conception and birth, 1980-1996 and a parental perspective into the medical problems; social issues; educational, medical and therapy services, and daily functioning of school-aged children with Down syndrome. University of Western Australia. Unpublished BSc. thesis, pp. 59-62. The study included eighty percent of school-aged students who had Down syndrome living in Western Australia. It was also a parent-based study. A modified version of the questions used in the Australian study was used in the present study. The Australian study was by questionnaire. The present study was based on parent interviews.

Paediatrics, National Children's Hospital, Tallaght, must await publication of their results.[14]

Table 5.3. Comparison of health concerns reported in the present study and those reported in the Western Australian study.

	Western Australia study (1997)	Present study (1999)
Number in study	N = 206	N = 78
Heart condition	*40.1%*	*53.8%*
Hearing/ear condition	*54.4%*	*50.0%*
Vision/eye condition	*75.7%*	*66.7%*
Thyroid condition	*13.9%*	*3.8%*
Bowel/bladder condition	*21.7%*	*19.2%*
Other health concerns	*35.4%*	*35.9%*

- ***Effect of health problems on education***

Although many of the students in the study experienced health problems, forty-four percent of parents reported that health problems *never* had interfered with the student's education. Fifty-two percent reported that health problems had *sometimes* interfered, and four percent that health problems *always* interfered.[15]

The families

The presence/absence of parents and siblings are consequential factors in the life of all developing persons. Parents and siblings play an extended role in the life of a person who has Down syndrome, providing learning opportunities, facilitating social contacts and ensuring life-long *natural* supports. Natural supports are those which flow from being a member of a

[14] The study is being carried out by the Department of Paediatrics, University of Dublin, Trinity College, in the National Children's Hospital, Tallaght.

[15] Differences by age and sex of student for frequency to which health had interfered with education were not statistically significant.

community, rather than those provided by a government or social agency. Obligations to other family members may be important considerations in the decision-making process regarding a family member who has a disability.[16]

Family size and composition

As with many other Irish students, living with one parent may be a fact of life for some students who have Down syndrome. Sixty-seven (86%) of the students in this study lived with both parents.[17] Eleven lived with one parent and some had contact with the other parent. Three of the mothers had been widowed. The proportion of those living with two parents was slightly higher than that reported (80%) in the 1996 Irish Census.[18]

The families in this study were found to be larger than the Irish norm. Family size ranged from one to ten children. Mean family size was just over four children per family[19] Because of the relatively large family size in the study population, family size may be a factor in education placement decisions.

Irish families in general and the families in this study, may be larger than their English counterparts. The mean family size of the study population was larger than reported in English studies of families of persons who have Down

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[16] Buckley, S. and Sacks, B. (1987). *The Adolescent with Down's Syndrome: Life for the Teenager and for the Family.* Portsmouth: Sue Buckley, Ben Sacks, Portsmouth Polytechnic, pp. 15-23.

[17] Two of the students had foster parents. In the case of children who had been fostered, subsequent data refers to their foster parents.

[18] Central Statistics Office (1997). *Census 96, Volume 3, Household Composition and Family Units.* Dublin: Stationery Office. Table 8: Private households classified by composition and size and by number of persons under 15 years, p. 34.

[19] The difference in mean family size between the three age groups was not statistically significant.

syndrome. However, the most frequently occurring number of children in the study families was three (eighteen families). Data giving comparisons of family size is laid out in table 5.4.

Table 5.4. Family size and comparisons with Irish Census (1996) and English studies.

Children in family	1	2	3	4+
Present Study	*5%*	*18%*	*23%*	*54%*
Irish Census 1996 [20]	*31%*	*32%*	*21%*	*16%*
Manchester Study (DS) [21]	*10%*	*39%*	*30%*	*21%*
Hampshire Study (DS) [22]	*10%*	*33%*	*37%*	*20%*

Siblings

A more personal way of looking at family size is to consider siblings. The Hampshire study found that adolescents with Down syndrome rely heavily on family members for companionship and concluded brothers and sisters were even more important in their lives than they are for ordinary children. The seventy-eight students in this study had 245 siblings in total. Seventy-four students (95%) had at least one sibling. Four (5%) were only children. Eleven (14%) were the eldest in their family. Seventeen (22%) had both older and younger siblings. Forty-six (59%) were the youngest in their family. This pattern is consistent with that from the Manchester and Hampshire studies.

The presence of younger siblings differed between the age groups. Eighty percent of those born in 1982 had no younger siblings. However, forty-six percent of those born in 1986, and thirty-seven percent of those born in 1990,

[20] Central Statistics Office (1997). *Census 96, Volume 3, Household Composition and Family Units.* Dublin: Stationery Office. Table 38 Family units in private households classified by type and size of household and by type and size of family unit, p. 108.

[21] Byrne, E., *et.al.* (1988). p. 20, p. 39.

[22] Buckley, S. and Sacks, B. (1987). pp. 20-21.

had at least one younger sibling. This difference between the age groups was statistically significant. ($p<.05$) This data does not necessarily indicate a trend, but the presence/absence of a younger sibling may be a factor in age group differences.

Sibling age range (the age difference between the eldest and the youngest in the family) varied from one to twenty-nine years. The mean age difference between eldest and youngest siblings was ten years and the median was nine years.

The following graphs depict the students' relative position within their family constellations. The students in the study are grouped by year of birth. Each line represents the age span of siblings within a family. The squares represent the family member who has Down syndrome. The graphs illustrate the preponderance of older siblings. This is especially marked for the group born in 1982. The graphs also illustrate the diversity of families. In some families the eldest child was nearly adult when his/her sibling who had Down syndrome was born. In other families there may have been two or three toddlers, one of whom had Down syndrome. In four cases the student who had Down syndrome had no brothers or sisters. (Figures 1-3).

The effect of a child who has Down syndrome on his brothers and sisters was not directly explored in this study. However, other studies have indicated that there are both positive and negative effects.

Fig.1 Position in family

sixteen-year-olds

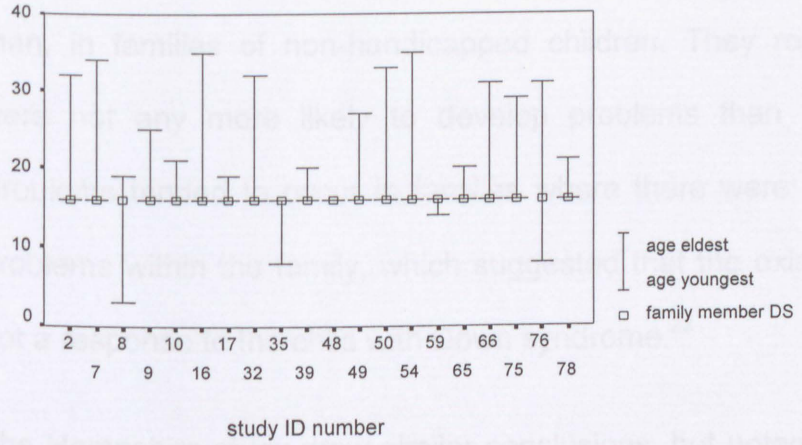


Fig. 2 Position in family

twelve-year-olds

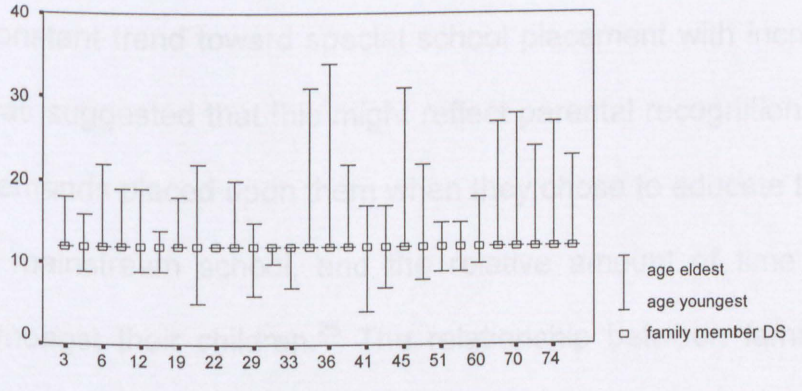
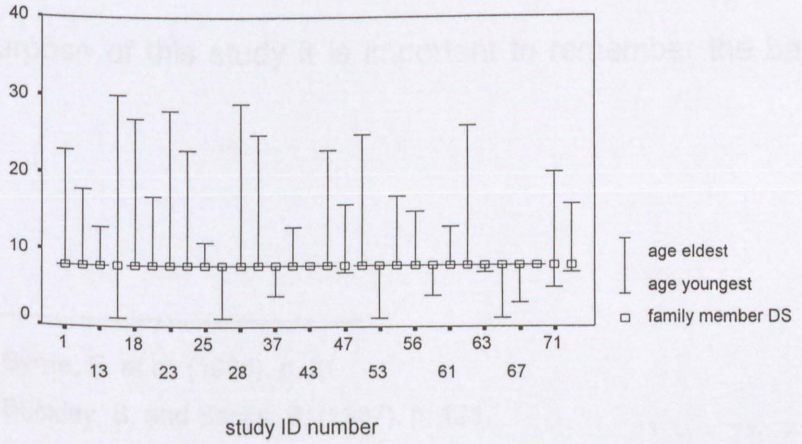


Fig. 3 Position in family

eight-year-olds



The Manchester study found that sibling relationships in families where a member had Down syndrome appeared to be at least as good as, if not better than, in families of non-handicapped children. They reported that siblings were not any more likely to develop problems than any other children. Problems tended to occur in families where there were general relationship problems within the family, which suggested that the existing problems were not a response to the child with Down syndrome.[23]

The Hampshire study drew similar conclusions, but noted that many mothers did feel that they should have given more time and attention to their other children.[24] In keeping with this consideration, an earlier Irish study found a constant trend toward special school placement with increased family size. It was suggested that this might reflect parental recognition of the considerable demands placed upon them when they chose to educate their son/daughter in a mainstream school, and the relative amount of time they had to divide amongst their children.[25] The relationship between family size and type of school placement will be considered in a subsequent chapter.

An in-depth study of the role brothers and sisters play in the life of a person who has Down syndrome would yield important insights. However, for the purpose of this study it is important to remember the basic heterogeneity of

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[23] Byrne, E. *et al.* (1988). p. 21.

[24] Buckley, S. and Sacks, B. (1987). p. 121.

[25] Egan, M. (1995). p. 21.

the families. A family member who has Down syndrome is the "only feature that they all possess in common".[26]

Socio-economic status of the families

The concept of socio-economic status is fraught with philosophical and cultural considerations and inconsistencies.[27] The interpretation of such classification is at least partially determined by research assumptions and may differ from the self-perception of the respondents.[28] Social class *per se* may have limited relevance to the subject being researched.

As nearly all the interviews were carried out in the family home, the researcher had the opportunity to observe family living conditions and frequently met the student and/or other family members.[29] Observed family circumstances ranged from considerable affluence to conditions consistent with limited income. While in some cases it appeared that additional supports and resources would have been beneficial for the development of the student, in no case was obvious physical neglect observed. Such observations, though of relevance, are limited by their superficial and subjective nature. More objective indicators were required.

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[26] Byrne, E. *et al.* (1988). p. 21.

[27] O'Hare, A., Whelan, C. and Commins, P. (1991). The development of an Irish Census-based social class scale. *The Economic and Social Review,* vol. 22, no. 2, pp. 135-156.

[28] MacGréil, M. *Prejudice in Ireland Revisited* (1996). Maynooth: Survey and Research Unit, St Patrick's College, pp. 368-372. MacGréil calculated social class on the basis of educational standard reached and occupational status according to the Hollingshead criteria.

[29] The researcher had been employed as a social worker and had experience in home visitations in order to assess financial need and child protection.

A primary purpose of socio-economic status indicators is to confirm that the study population was representative of the Irish population. To that end, two indicators of socio-economic status were used: parents' level of education and parents' employment. The relationship between these factors and educational placement decisions will be considered at a later stage.

Parents' education

Parental levels of education ranged from primary education only to third level education.[30] Twenty parents (13%) had primary education only; thirty-seven (24%) had some secondary education; fifty-seven (37%) had completed secondary education; forty (26%) had participated in third level education.[31] Table 5.5 indicates the educational levels of the study parents.

Table 5.5. Parents' highest level of education

	Mother's education		*Father's education*	
Level of education	*frequency*	*%*	*frequency*	*%*
Primary	9	*11.5%*	11	*14.1%*
Some secondary	17	*21.8%*	20	*25.6%*
Completed secondary	31	*39.7%*	26	*33.3%*
Third level	20	*25.6%*	20	*25.6%*
Not known	1	*1.3%*	1	*1.3%*
Total	78	*100%*	78	*100%*

The levels of education are classified into two groups: primary/some secondary education (*limited participation*) and completed secondary/third level (*full participation*). Using these criteria, there was a close relationship between the education levels of the pairs of parents ($p<.001$). As usually only one parent was interviewed, this similarity of education level between the two

[30] Educational level of parents was known for 154 or the 156 parents.

[31] Differences in parents' level of education by age of student and county of residence were not statistically significant.

parents increases the probability that the other parent might have given a similar set of responses. Table 5.6 uses these categories and cross-tabulates parents' level of educational participation.

Table 5.6. Cross tabulation of father's education by mother's education

	Father's education					
Mother's Education	Primary / some secondary		Completed secondary/ third level		Total	
Primary / some secondary	20	*26.3%*	6	*7.9%*	26	*34.2%*
Completed secondary / third level	11	*14.5%*	39	*51.3%*	50	*65.8%*
Total	31	*40.8%*	45	*59.2%*	76	*100.0%*

The finding that 51.3% of the pairs of parents had both either completed secondary education or participated in third level education indicates a high level of parental education for the majority of parents in this study.

In order to compare the levels of education of the study population to the general Irish population as a whole, an estimate of parents' age was calculated.[32] The range of study of parents' ages at the time of interview was estimated to be between twenty-nine and fifty-six years. The highest level of education achieved by Irish adults aged twenty-five to forty-nine was obtained from the 1996 Census and was compared with the education levels of the parents in this study.. Table 5.7 gives the comparative data.

[32] The formula used was: 1999 minus the date of birth of eldest child plus twenty. This was considered to be the minimum age that the parents were at time of interview. It is likely that some parents were older than this estimate.

Table 5.7. Comparison of highest level of education completed by Irish population aged 25-49 and the study population.

	Irish Census (1996)		*Present Study*	
Level of education	*Number*	*%*	*Number*	*%*
Primary	202,377	*16.4%*	20	*12.8%*
Some secondary	301,567	*24.5%*	37	*23.7%*
Completed secondary	401,879	*32.7%*	57	*36.5%*
Third level	294,978	*24.0%*	40	*25.6%*
Not known	29,155	*2.4%*	2	*1.3%*
Total fathers and mothers	1,229,956	*100%*	156	*100%*

Source: *Irish Census (1996)*. Table 1A. Persons aged 15 years and over in each age group, classified by highest level of education completed, 1991 and 1996.

Parents' employment

It was considered that a mother's employment outside the home might be an important variable in educational decisions. Differences between part-time and full-time employment may also be important. Information was available on the employment status of seventy-seven of the mothers. Forty-one of the mothers (54.5%) were not employed outside the home. Nine (11.7%) were in part-time employment. Twenty-six (33.8%) were in full-time employment. Appendix 9 details the mothers' employment.

This would be a higher rate of full-time employment than found by Byrne *et al.* (1988). In that study, 38% of the mothers were in part-time employment and 6% were employed full-time.[33] This trend towards mothers working full-time may reflect the increase in full-time employment for all mothers, including mothers of sons/daughters who have Down syndrome. The mothers in this study who had the highest levels of education were more likely to be in

[33] Byrne, E. *et al.* (1988). p. 20.

employment than those who had lower levels of education. (Appendix 9).[34] Table 5.8 tabulates mother's employment status by level of education attained.

Table 5.8. Mother's employment status by highest level of education attained.

	Mother's education and % of educational level in that employment status		
Mother's employment status	Primary / some secondary	Completed secondary / third level	Total
Employed in home	19 *73.1%*	23 *45.1%*	42 *54.5%*
Part-time employment	3 *11.5%*	6 *11.8%%*	9 *11.7%*
Full-time employment	4 15.4%	22 *43.1%%*	26 *33.8%*
Number in educational group	26 *100.0%*	51 *100.0%*	77 *100.0%*

Differences in mothers' employment status by educational level were statistically significant ($p<.05$). Differences in mother's employment status by county of residence, age of son/daughter with Down syndrome, the number of children in the family, the age of the eldest child, the presence of at least one child younger than student with Down syndrome, and both parents living in the home were all found to be not statistically significant.[35]

Sixty-four (85%) of the fathers were in full-time employment. Six (8%) had retired. Five (7%) were in part-time work or unemployed. Information regarding the employment status of five fathers was not obtained. (Appendix 9)[36] The rate of full-time employment for fathers was similar to that found in

[34] Appendix 9. Parents employment status.

[35] As more than half of the mothers were not employed outside the home, social class as defined by occupation-based categories was not possible.

[36] Appendix 9. Parents employment status. Of those whose employment was not known, three had died and two others had no contact with the family.

the Manchester study (88%).[37] Table 5.9 tabulates father's' employment status by level of education attained.

Table 5.9. Father's employment status by highest level of education attained.

	Father's education and % of educational level in that employment status		
Father's employment status	Primary / some secondary	Completed secondary / third level	Total
Employed in home	3 *10.7%*	1 *2.2%*	4 *5.5%*
Retired	2 *7.1%*	4 *8.9%*	6 *8.2%*
Part-time employment	1 *3.6%*	0 *0.0%*	1 *1.4%*
Full-time employment	22 *78.6%*	40 *88.9%*	62 *84.9%*
Number in educational group	28 *100.0%*	45 *100.0%*	73 *100.0%*

As eighty-five percent of the fathers were in full-time employment, differences between employment status and other factors were not explored. The fathers' social class, as defined by the *Irish Census* (1996) occupation-based categories, was identified and compared with that of males in the Irish population. The distribution of father's social class in the study group was similar to that of the national population, the majority being in classes II, III and IV. A slightly higher proportion of the fathers in the study (53%) were in combined classes I, II and III compared with the national proportion in those three classes (42%). This information is reported in table 5.10.[38]

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[37] Byrne, E. *et al.* (1988). p. 20.

[38] Central Statistics Office (1998). *Census 96.* Volume 8, Education Scientific and Technological Qualifications. Dublin: Stationery Office. Appendix 9. Social classes – list of constituent occupations, pp. 125-130; Table 14B, p. 57. Males in each Province, County and County Borough classified by social class. The occupation prior to retirement was used for the fathers who had retired.

Table 5.10. Comparison of social class of Irish males, as defined by the Irish Census (1996) occupation-based categories, and of the study population of fathers.

		Irish Census (1996)		*Present Study*	
Class	*Occupation based category*	*Number of males*	*%*	*Number of fathers*	*%*
I	Professional workers	108,092	*6.0%*	6	*7.7%*
II	Managerial and technical	376,515	*20.9%*	21	*26.9%*
III	Non-manual	278,401	*15.5%*	14	*17.9%*
IV	Skilled manual	437,736	*24.3%*	20	*25.6%*
V	Semi-skilled manual	242,800	*13.5%*	7	*9.0%*
VI	Unskilled	175,397	*9.7%*	1	*1.3%*
VII	Others gainfully employed and unknown.[39]	181,291	*10.1%*	9	*11.5%*
	Total males/fathers	1,800,232	*100.0%*	78	*100.0%*

Father's social class, as defined by occupation, was cross-tabulated with level of education. Because of the size of the study sample it was necessary to combine Classes I, II, III, and classes IV, V, VI. Differences in social class by level of education were statistically significant ($p<.005$). Table 5.11 gives the distribution.

Table 5.11. Father's social class by level of education.

Social class	Primary / some secondary	Completed secondary / third level	Total
I, II, III	9 *36.0%*	32 *72.7%*	41 *59.4%*
IV,V,VI	16 *64.0%*	12 27.3%	28 *40.6%*
Total[40]	25 *100.0%*	44 *100.0%*	69 *100.0%*

[39] Of the nine fathers in this category, five were not part of the family unit and their occupation was not known. The last occupation of the four fathers who were unemployed was also not known.

[40] N=69. The five fathers who were not part of the family units and the four fathers who were unemployed are not included in this analysis.

Family income

Two families (3%) had neither parent employed. Thirty-four families (47%) had only the father employed. Twenty-one families (29%) had both parents employed full-time. In six families (8%) the father was full-time employed and the mother part-time. In the six instances where the father had retired, one mother was in the home, two had part-time employment and three were employed full-time. This would mean that most families in the study had regular earned incomes.

The amount of family income was not sought, as it was considered to be unnecessarily intrusive. It was also considered that the amount of family income itself would have little meaning without extensive investigation. Family financial obligations vary enormously. The ability to manage household budgets, the amount of unpaid extended-family supports, employment expenses, health and education needs of the entire family are some of the variables relevant for a valid interpretation of income. This was beyond the scope of this investigation.

Location of residence

The seventy-eight families in the study lived in seven counties: Dublin (38%), Meath (9%), Kildare (8%), Galway (6%), Limerick (10%), Cork (21%), and Kerry (8%). Thirty-five (45%) lived in a city or a suburb of a city; four (5%) lived in towns; twelve (15%) in villages; and 27 (35%) in rural areas.

The distance to the nearest city or town ranged from zero to thirty miles.[41] The mean distance was 8.09 miles and the median 7.00 miles. The mean distance for those living in suburban areas to the city centre was 6.14 miles; the mean distance for those living in villages to the nearest city or town was 14.00 miles; and the mean distance for those living in rural areas was 10.78 miles. The distance families lived from the nearest city or town is shown on table 5.12.

Table 5.12. Distance from the nearest city or town

Number of miles	Frequency	%
5 miles or less	30	*38.5%*
6 - 10 miles	29	*37.2%*
11 - 15 miles	10	*12.8%*
16 or more miles	9	*11.5%*
Total	78	*100.0%*

There were differences in the mean distance between the seven counties. The families in County Cork lived the shortest mean distance from a city or town. The largest mean distance between home and city/town was found in County Kerry (table 5.13).

Table 5.13. Comparisons of mean distance to nearest city or town by county.

County of residence	Number in study population who lived in the county	Mean distance in miles
Cork	16	*6.38*
Dublin	30	*7.50*
Limerick	8	*7.62*
Kildare	6	*7.83*
Galway	5	*8.00*
Meath	7	*10.14*
Kerry	6	*14.17*
Total	78	*8.09*

[41] Distance in miles was used, as it was believed that parents would be more familiar with measurement in miles. Those who lived in suburban areas were asked the distance to the city centre.

Distance from cities or towns may be an important variable in educational options, school placement decisions and social inclusion. The effect of distance from the family home to schools will be explored.

Health Boards

Five of the eight health board areas were represented in this study. The method of selection of the study population, described in the methodology section, precluded inclusion of all health boards, but those included reflected the differences that may exist among health boards.

Nearly half or the study families lived in the Eastern Health Board region and more than a quarter lived in the Southern Health Board region. These are the two largest Health Board regions. Together they are responsible for 1.8 million people. The Mid-Western, North-Eastern and Western Health Boards are each responsible for more than 300,000 people. Table 5.14 relates the number and percentage of families living in the health board regions represented in the study. The proportion of study families living in each area were approximate to the proportion of the Irish population that were the responsibility of that health board.

Table 5.14. The number and proportion of families living in Health Board regions covered by the study.

Health Board	Number of families	%	Population served by Health Board [42]	% of population in combined health boards areas
Eastern Health Board	36	*46.2%*	1,295,939	*46.0%*
Southern Health Board	22	*28.2%*	546,640	*19.4%*
Mid-Western Health Board	8	*10.3%*	317,069	*11.3%*
North-Eastern Health Board	7	*9.0%*	306,155	*10.9%*
Western Health Board	5	*6.4%*	352,353	*12.5%*
Total	78	*100.0%*	2,818,156	*100.0%*

Service Providers

In Ireland, many services and supports are provided to persons with intellectual disabilities and their families through non-statutory agencies, as agents of the Health Boards. These service providers are funded by the Department of Health and Children. Non-statutory service providers also raise a proportion of their budgets independently. Some are under the auspices of religious orders, others are associations of parents and friends. These agencies are not uniformly distributed throughout the country. In some areas there are none, in other areas they overlap. In some areas they provide support services only to those school-aged children who are attending their special education programme.

In the present study thirteen different non-statutory agencies provided services to sixty-four of the families. Fourteen families received services directly through their health board and were not associated with a non-

[42] Department of Health and Children (1999). *Health Statistics, 1999*. Dublin: Stationery Office Department of Health (1999). Population of each Health Board Area for Census year 1996, p. 5.

statutory agency at the time of interview. Table 5.15 lists the service providers and the number and percent of families associated with them.

Table 5.15. The non-statutory services providers from whom families in the study received support services.

Service provider	Frequency	%
St Michael's House	19	*24.4*
Brothers of Charity	10	*12.8*
Brothers of St John of God	8	*10.3*
Daughters of Charity	7	*9.0*
KARE	5	*6.4*
COPE	5	*6.4*
Galway Association	4	*5.1*
Stewarts Hospital Services	1	*1.3*
Wicklow Association	1	*1.3*
Sisters of Charity of Jesus and Mary	1	*1.3*
Co-Action	1	*1.3*
Charleville Friends	1	*1.3*
Franciscan Sisters, Beaufort	1	*1.3*
Not associated with a service provider	14	*17.9*
Total	78	*100.0%*

Summary

Seventy-eight students aged sixteen, twelve and eight years were the focus of this study. There were forty males and thirty-eight females. They lived in seven counties: Dublin, Meath, Kildare, Limerick, Galway, Cork and Kerry.

The health problems the students experienced were similar to those reported for other young people who have Down syndrome. In the study population, thirty-nine (50%) of the students had current health concerns. Forty-two (54%) of the students had been diagnosed with cardiac conditions. Fifteen (19%) had current heart problems or were currently receiving treatment for a heart condition. Fifty-two (67%) had been diagnosed with vision/eye conditions, thirty-nine (50%) with hearing/ear conditions. The severity of the health concerns varied. The pattern of medical intervention received also varied.

When asked the extent to which health problems had interfered with their son's/daughter's education, the majority of parents responded either *never* (44%) or *infrequently* (18%). Nevertheless, health issues were an important factor in the lives of many of the students.

The characteristics of families in this study were similar in many ways to those of other Irish families. Although the families tended to be larger than the Irish norm, the mean family size was four children. The most commonly occurring number of children was three. The seventy-eight students in this study had a total of 245 siblings. Ninety-five percent of the students had at least one sibling. Forty-six (59%) were the youngest in their families.

The socio-economic measures used in this study were parental levels of education and employment status. Parental levels of education ranged from primary only to third level. There was a significantly similar level of education between the pairs of parents. More than half of the pairs of parents had both either completed secondary education or participated in third level education.

Forty-one of the mothers were not employed outside the home; nine were in part-time employment, and twenty-six were in full-time employment. Differences in mother's employment status by level of education were statistically significant. Sixty-eight of the fathers in the study were in full-time employment or had retired. Differences in father's social class by level of education were also statistically significant. Most of the families in this study had regular earned incomes.

The families lived in seven counties in different parts of the country. The distance from the family home to the nearest city or town ranged from zero to

thirty miles. Five of the eight health board regions were represented. There were thirteen non-statutory agencies providing services to sixty-four of the study families. Fourteen families were not associated with a non-statutory service provider.

The services and supports received by children who have disabilities and their families during the first three years of life may have a long-term influence on their social, physical and intellectual development. The early experiences of the study group, and their parents' evaluation of the services and supports they received, will be considered in the next section.

Chapter 6: Early Services

The *Report on the National Forum for Early Childhood Education* stated that for children with special needs "no coherent early years policy has emerged ...provision continues to be fragmented, inadequate and in many areas, absent altogether."[1] The Department of Education and Science provides a service whereby young children with visual and/or hearing impairment are eligible, from the age of two years, to receive home visits from a qualified primary school teacher.[2] No such service is provided for children with intellectual disabilities. Early services to children with intellectual disabilities are provided by the Department of Health, either directly or through voluntary bodies as their agents. In Ireland, children with intellectual disabilities do not have a legal entitlement to early intervention support services.

This section will describe the support services the students in the study received during their first three years. It will focus on the following issues: the professional teams that had been available; the specialist therapies they received; the parents' evaluation of how well early services helped prepare their son/daughter for preschool. This section will be based on seventy-seven students as one boy was not fostered until he was four years old. Information regarding his early years was not available.

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[1] National Forum Secretariat, J. Coolahan (ed.) (1998). *Report on the National Forum for Early Childhood Education.* Dublin: Stationery Office, p. 95.

[2] National Forum Secretariat, J. Coolahan (ed.) (1998), p. 96.

Beginning with this section, and continuing through the study, quantitative data will be interspersed with parents' opinions and experiences which expand and clarify the issues under consideration.

Early services teams

The Review Group on Mental Handicap Services recommended in its Report, *Needs and Abilities,* that all health boards or voluntary bodies, as agents of the health board, maintain multi-disciplinary specialist early intervention teams. These teams were to develop "appropriate levels of expertise and experience in meeting the specialist needs of infants and young children with developmental delay". The disciplines to be included were: paediatrician, psychologist, social worker, speech therapist, physiotherapist, teacher, and community nurse. It was also recommended that support groups, such as mother and baby groups, be facilitated. The rationale for these recommendations was that "the provision of ongoing support to the family facilitates the integration of the child into the community and is of considerable assistance in maximising the child's development".[3]

This study inquired into who were the professional persons who had been available to parents during their children's first three years. Of the list of personnel recommended by the Review Group in 1990, no category of professional support had been universally available to all parents as part of early services. The person most frequently mentioned was the psychologist.

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[3] *Needs and Abilities: A Policy for the Intellectually Disabled.* The Report of the Review Group on Mental Handicap Services (1990). Dublin: Stationery Office, pp. 20-24.

Table 6.1 lists the number of parents who had contact with the different categories of support persons during their son's/daughter's first three years.

Table 6.1. Number and percent of parents who had access to professional support personnel as part of early services. (n=77)

Professional	Number	%
Psychologist	60	*77.9%*
Physiotherapist	54	*70.1%*
Nurse	44	*57.1%*
Doctor	39	*50.6%*
Speech therapist	35	*45.5%*
Mother and baby group	29	*37.7%*
Social worker	23	*29.9%*
Teacher [4]	22	*28.6%*

The youngest group in this study were born in 1990, the year that *Needs and Abilities* was published. This group did have improved access to early services. Overall, the mean number of early childhood professional support personnel available to parents was four persons; for those born in 1982, it was 2.79; for those born in 1986 it was 4.25; and, for those born in 1990 it was 4.53 ($p < .05$).

While early support services improved between 1982 and 1993, the recommended support teams were generally not available to parents. Only five parents reported that the full complement of support personnel had been available. All five were living in County Dublin during their son's/daughter's first three years.

[4] Twenty-two children had received help from a home teacher as part of early services provided by a voluntary agency. The service was paid for by the agency with funds allocated to them from the Department of Health. At the time they received the service, all the children lived in Dublin. Two others had received home teacher service provided by DSI Meath branch. As this was not part of public early services, they were not included in this figure.

Variations by county in the number of support personnel were significant ($p<.001$). Table 6.2 indicates the mean number of professional personnel available to parents living in the different counties.

Table 6.2. Mean number of early service professional personnel available by county

County of residence	Mean number of professional persons	std deviation	Number of families
Dublin	*5.23*	*1.50*	30
Kildare	*5.00*	*1.10*	6
Galway	*4.00*	*1.00*	5
Meath	*3.67*	*2.66*	7
Cork	*3.19*	*2.07*	16
Limerick	*2.38*	*.92*	8
Kerry	*1.50*	*1.76*	6
Total	*4.00*	*2.05*	78

Many parents were uncertain whether the professional staff they had contact with actually worked together as a *team* or not. For the purposes of this study, three or more professionals available to the parent, provided for by a health board or voluntary body, were considered to be a team. Using this criterion, fifty-nine parents (77%) reported that an early services team had been available to them during their son's/daughter's first three years of life.[5] Although not directly questioned in the interviews, parents did not offer evidence that multi-disciplinary developmental plans had been devised for their children.

[5] Six families had no contact with early services. Six had contact with one professional support person: in two cases a social worker; in two a psychologist; in one a nurse and in one a physiotherapist. Six had contact with two persons: three had contact with a nurse and a physiotherapist; two with a psychologist and a nurse and one with a nurse and a speech therapist.

Specialist therapies

Linguistic and physical development are two important aspects of early childhood. Referring back to the earlier chapter on cognitive development, the evidence is that young children who have Down syndrome frequently require early and intensive speech and physiotherapy. During a child's first three years a speech therapist may evaluate oral motor development, can advise regarding concerns or problems with feeding, can assist the development of early communication skills, may evaluate a baby's responsiveness to sound and identify potential hearing difficulties and may begin to focus on articulation of sounds and words.[6]

A physiotherapist can assist the young child in using muscles effectively and is concerned with muscle tone, reflex development, movement patterns, balance and motor development. Physiotherapy will also assist a child who experiences breathing difficulties. [7]

Early language and physical developmental delays affect immediate learning and have implications for future development. If adequate speech and physiotherapy have not been available during childhood, it is likely that a

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[6] Diefendorf, A.; Bull, M.; Casey-Harvey, D.; Miyamoto, R.; Pope, M.; Renshaw, J.; Schreiner, R. and Wagner-Escobar, M. (1995). Down syndrome: a multidisciplinary perspective. *Journal of the American Academy of Audiologists,* vol. 6, no. 1, pp.39-46; Gillette, Y. (1992) Family-centered early intervention: an opportunity for creative practice in speech-language pathology. *Clinical Communication Disorders,* vol. 2, no. 1, pp. 48-60; Kummin, L. (1994). *Communication Skills in Children with Down Syndrome: A Guide for Parents.* Bethesda, Maryland: Woodbine House, pp 23-78; p 193-216; Diamond, L.. (1995).

[7] Teaching your baby with Down syndrome. In K. Stray-Gundersen (ed.) *Babies with Down Syndrome: A New Parents' Guide.* Bethesda, Maryland: Woodbine House, pp. 187-188. Niman-Reed, C. and Sleight, D. (1988). Gross motor development in young children with Down syndrome. In C. Tingey (ed.) *Down Sydrome: A Resource Handbook.* London: Taylor and Francis, pp. 113-115.

student who has Down syndrome has not been given the opportunity to maximise his/her developmental potential.

Speech therapy - early childhood

The evidence of this study indicated that early services failed to adequately support the development of this group of students, particularly in the area of speech therapy. Moreover, there is little to suggest that there had been a significant improvement for the younger group in this study. Table 6.3 indicates parental evaluation of the speech therapy their sons/daughters received during their first three years.

Table 6.3. Speech therapy received during first three years.

	1982 N=19	1986 N=28	1990 N=30	Total N=77
Did not need speech therapy.	2 *10.5%*	0 *0.0%*	0 *0.0%*	2 *2.6%*
Received adequate speech therapy.	1 *5.3%*	4 *14.2%*	4 *13.3%*	9 *11.7%*
Received some speech therapy needed more. [8]	4 *21.0%*	12 *42.9%*	11 *36.7%*	27 *35.1%*
Needed but did not receive speech therapy.	12 *63.2%*	12 *42.9%*	15 *50.0%*	39 *50.6%*

The parents of seventy-five students (97%) believed that their sons/daughters had needed speech therapy during their first three years.[9] Of those who needed speech therapy, only nine (12%) received what their parents

[8] One parent for whom no early services were available obtained a limited amount of speech therapy privately.

[9] Two parents stated that their child did not need speech therapy during this early period. One mother reported that her son's *speech was always very good.* The researcher spoke with the young man and indeed his speech was excellent with no evidence of difficulty with fluency, articulation, or vocabulary. However, this young man had experienced feeding problems that had continued into his teens. This difficulty might have been ameliorated by a speech therapist in early childhood. The other mother believed that in the early years her daughter had needed help with speech and language, but that speech therapy *per se* was not the only way that it could be accomplished. This comment had been made in the light of the mother's observation of other parents' frustration in obtaining speech therapy for their sons/daughters.

considered to have been adequate.[10] There was no apparent explanation why these few received more speech therapy than others did.[11] Parents characteristically described adequate speech therapy as regular and consistent although the amount received differed considerably.

> *Once a week from one to three years.*
>
> *Once every four to six weeks.*
>
> *I had to go to …* [service provider] *every few months, but they gave me a programme to work on.*

Contrastingly, the twenty-seven parents (35%), whose sons/daughters had received some speech therapy but who had needed more, typically described it as having been infrequent, irregular and disorganised. Even for these who received some speech therapy, several parents said that it had been so infrequent that it had been of little value.

> *At thirteen or fourteen months it started, but it was very irregular. There were many changes in therapists and times when there was no therapy.*
>
> *The major way, the one way children are let down is the lack of speech therapy. It wasn't consistent. There was only infrequent therapy.*
>
> *She needed a lot more. It was so infrequent that I barely knew my way to the clinic.*

Thirty-nine parents (51%) reported that their child had not received any speech therapy during his/her first three years of life. From parents' remarks it was apparent that some of them had actively sought speech therapy.

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[10] Of the eleven students who either did not need or who received adequate speech therapy at this early stage, seven (64%) went on to local school placement. Three were in secondary schools (one in a special class in a secondary school) and four were in regular primary schools.

[11] All three age groups are represented. The group has five males and four females. Two lived in Dublin (but had different service providers); one had lived in Sligo; one in Scotland, one in Meath, one in Galway, one in Limerick and two in Cork.

We were told not to look for speech therapy until A was three years.

One speech therapy session was granted to me, but J was sick and I had to cancel. I was never given another appointment though I phoned many times.

There was none, but we worked with G. There was no choice. We did a good job.

Physiotherapy - early childhood

Compared with speech therapy, parents reported that the physiotherapy needs of the study group had been better provided for. Sixty-nine percent of the overall group either had not needed physiotherapy or had received adequate physiotherapy during their first three years. More children in the study group had not required physiotherapy than had not required speech therapy. In the youngest group, all but one child who needed physiotherapy received at least some during his/her early years.

As with speech therapy, the sex of the young child was not an important variable. Age and county of residence were. All those who needed physiotherapy, and lived in Dublin, Meath, Kildare or Galway received at least some physiotherapy. Approximately one quarter of those living in Limerick and a third of those living in Cork and Kerry needed but did not receive any physiotherapy. Table 6.4 evaluation of the physiotherapy their sons/daughters received during their first three years.

Table 6.4. Physiotherapy received during first three years.

	1982 19	1986 28	1990 30	Total N=77
Did not need physiotherapy.[12]	5 *26.3%*	4 *14.3%*	7 *23.3%*	16 *20.8%*
Received adequate physiotherapy.	8 *42.1%*	15 *53.6%*	14 *46.7%*	37 *48.0%*
Received some physiotherapy needed more.	2 *10.5%*	5 *17.8%*	8 *26.7%*	15 *19.5%*
Needed but did not receive physiotherapy.	4 *21.1%*	4 *14.3%*	1 *3.3%*	9 *11.7%*

In some cases where physiotherapy was considered to have been adequate, intensive physiotherapy had not been required.

> *Once a month from four months to two years when cutbacks ended the service. But, at that stage I was confident I could manage.*

> *She needed only a little, and when she was very young received it once a fortnight.*

In other instances, the children had received adequate physiotherapy to ameliorate a specific health problem.

> *We did physio at home from an early age because of chest infections. We could call on the physiotherapist whenever we needed her.*

> *Once a fortnight and they gave me exercises to go on with to get her to use her right side.*

The physiotherapist, as a positive optimistic person, had been a source of encouragement to some parents.

> *It was perfect for me, very good, about once a week. I got everything I needed from it. It was the person who was important, her approach, her attitude, her encouragement. She was full of optimism. She was talking and counselling at the same time as she was doing therapy.*

[12] Two parents reported that a physiotherapist was available on the early services team, but that their child had not needed physiotherapy.

For the fifteen parents whose children had received some physiotherapy but who needed more, the programmes had either been too non-specific or had not been continuous.

> *For about five minutes once a week during the mother and baby group. We were shown exercises we could do at home, but the children were all very different.*
>
> *Physiotherapy started when R was in the incubator. There could have been more help to relieve me of the pressure and to tell me that I was doing it right. I was never quite sure.*

Again, some of the parents whose children had not received physiotherapy as part of early services had improvised the best they could.

> *I found a physiotherapist privately who showed me how to clear her lungs. I had to search her out.*
>
> *I did some things from my own knowledge (as a nurse).*

Assessment of early services

Parents were asked how helpful the early services they received had been for their son/daughter. Twelve families (16%) had received little or no support services during the first three years. In two of these instances, the services had been available, but the parents had not known about them. Three parents (4%) had found the services offered to be *more trouble than help*. Forty-eight (62%) found the services to have been *helpful* and fourteen (18%) had found them to be *very helpful*. The majority of those who received any early service found the service they had received to have been of value.

In order to focus directly on the effect of early services on subsequent education, parents were asked how well early services had helped prepare their son/daughter for preschool. Many parents did not give a direct reply but

described either what they thought had been missing in early services or mentioned aspects of early services that had been beneficial. Many replies were neither completely negative nor completely positive. In order to obtain an overview, responses were considered by the researcher and the two independent raters as described in the methodology section. Consensus was obtained as to whether parents' replies were negative or positive. While parents' responses were often multi-dimensional, trends emerged which were identified.

Negative assessments of early services

Fifty parents (65%) believed that their sons/daughters could have been better prepared for preschool by early services. Neither the sex of the child nor the year of birth was a determining variable. County of residence was an important factor which determined the amount and type of early services. Children in Dublin were best served.[13] Three negative themes emerged: *absence of services*; *inadequate programmes,* and *programmes which did not meet child's/family's needs.*

- ***Absence of services***

Thirteen parents (17%) who responded negatively did not elaborate. They had received little or no help during this period.

> *We would have found any help useful.*
>
> *I thought they could have been more helpful. Much of what I was told was very negative. They said she might not walk or talk.*

[13] The small numbers in some counties did not allow for statistical analysis of the difference by county.

- ***Inadequate programme***

Twenty-two parents (29%) indicated that the early services programme had been inadequate. Some cited good aspects of the services but felt that it had been incomplete.

> *They really did not prepare her as such. Really there was only health care, assessment and physiotherapy.*
>
> *The specialist nurse introduced me to the Portage Programme. It gave me something to go on with. A mother and baby group would have been very helpful. Just being able to talk it over with others and find out how they were getting on.*
>
> *What was there was helpful. But there was little on offer. A home teacher would have been ideal.*

Lacking adequate early service supports, several of this group spoke of the supports they had received from their extended families.

> *A cousin who was a nurse gave me the Maloney programme soon after E was born. I felt that I was doing something and she seemed to respond well.*
>
> *What there was, was a help, but it was a difficult time. The services were just starting. I went to them once a month. Travelling to them was very difficult. Really most of the time I was on my own. The family gave me the most support.*

Parents commented that early services and preschool were separate entities with little or no continuity. For them, early services programmes had not focused on the skills the children would require for preschool and had not supported the child's move to preschool.

> *Whatever help we got did not relate to preschool. There was no continuous flow of services or transfer when we moved.*
>
> *The home teacher and the physiotherapist were the best part of early services. However, they did not really prepare T for a group learning situation.*

- ***Programme did not meet child's/family's needs***

Fifteen parents (19%) who responded negatively suggested that, while programmes had existed, they had not met the needs of their child or themselves. In some cases it was because the programmes were inflexible and not responsive to the individuals looking to them for support.

> *I find these groups very difficult. You are put together with a group of mothers and sometimes the only thing you have in common is that your baby has problems. And, they keep going over the same thing. I found that his hearing was the biggest problem he had and we had to go elsewhere for specialists.*

> *You had to find your own way for everything. You always had to go and look for it. There was nothing offered. Often you would have to ask several times. Everything was grouped – a package. That was the service on offer. You either took it the way it was or you didn't and it did not bother them much either way. They did not take into consideration the differences in the children or in their families.*

The child's health was also cited as a factor that had sometimes limited participation in existing programmes.

> *He was constantly visiting the hospital because of his heart condition. He received some physiotherapy there for his chest, but it would have been a great help if the physiotherapist had come to the house. The teacher came to the house every two weeks. It was some help. Again, because he was in hospital there often were periods without the teacher.*

Many early service programmes required that parents attend a central clinic or developmental centre in order to obtain services. Employment, economic considerations and obligations to other family members made this difficult or impossible for some families.

> *The mother and baby group was initially helpful, but it was difficult to get there on the buses and I found that I could spend the time more valuably at home. There were other problems also. My husband had just lost his job. When I decided to stop going the social worker phoned to ask why. I told her but she was not very nice. She wanted to know if I was pretending that my son was not handicapped.*

The home teacher was helpful, but he needed more. Going to the clinics with a family of young children was very difficult especially when one has to rely on public transport.

Participation was also influenced by other family circumstances that were sometimes not taken into consideration by the programme providers. A young child who had Down syndrome was not the only serious concern some mothers had.

It would have been helpful if the services had been better. I felt E could have been stretched more. I was a nurse and had some understanding, but I had lost my husband six months before E was born. I had no real family supports. I could have used a lot more help and encouragement. The loneliness was enormous.

I had just split up with L's dad. It was a very bad time for me. I did not know what was available. The baby nurse put me in touch with ... [service provider] *just before L was three.*

Positive assessments of early services

Twenty-seven families (35%) responded that early services had been positive in preparing their son/daughter for preschool.[14] Patterns of good practice can be identified from the parents' assessments. The diversity of positive responses underscores the reality that a flexible approach to supporting families of young children who have Down syndrome is necessary to meet their needs. Three themes of parents' positive responses were identified: *information and support from other parents and professionals*; *developmental educational programmes*; *transition to preschool*.

[14] Two of these families had lived in Scotland during their child's first three years. Both parents had found the services there to have been very supportive.

- ***Information and support from other parents and/or professionals***

Nine parents (11%) referred to the positive information and support they had received from other parents and/or professionals. In the absence of a comprehensive early services programme, support from other parents was sufficient encouragement for a mother to develop a language stimulation programme for her daughter.

> *The moral support of meeting other parents was as useful as any professional advice and information. I saw how frustrated other mothers were trying to get speech therapy, so I spent a lot of time on play and stimulation. I believed that through play and interaction with her, speech and language would come.*

For another parent, the experience of positive professional advice and guidance reaffirmed her ability to help her daughter.

> *To be honest, I found all that time very good. From the first time I attended ...* [the service provider] *I felt I was under a canopy of help. The doctor was wonderful, so positive. The specialist information was very helpful. Even if you were doing your best, it was good to learn more especially about toys and learning through play. A lot of it was common sense, but it had a professional edge on it. Meeting other mothers helped me emotionally. I came home refreshed and more able to help C.*

A foster mother, whose foster son had a serious heart condition, had received extensive and continuous help at home from both the home teacher and the physiotherapist. It was not only the hands-on professional help that had been important, but also the reassurance that she was not on her own, which had made an enormous difference.

> *I would not have existed without the help I got from the physiotherapist and home teacher. T was very ill at the time. They came to the house each week and worked very hard together for him and to make life easier for me. They were always there. I had a phone contact. If I was worried, I could phone and they would talk me through it. They were very supportive when he was in hospital for surgery.*

For a mother living in a rural area, the fact that the nurse and speech therapist came to the house was important. It was not only for her convenience. The mother felt that the sessions in the child's own home were more useful than if they had been in an unfamiliar place.

> *The nurse was the person who came to the house about every three weeks. She came from the time he was six weeks old until he started his second preschool. She made appointments before she came out. It was helpful that she came to the house, as he was more settled and worked better in his own environment. She also gave help with exercises to help him sit, crawl and walk. I worked on those between visits. The speech therapist called to the house and left guidelines to work on.*

- ***Developmental educational programme***

Ten parents (13%) indicated that the developmental programme provided by early services had been important in preparing their son/daughter for preschool. One had found that physiotherapy had been important, as her daughter had been slow to walk. Another referred to the help received from an occupational therapist in helping her daughter develop fine motor skills. A third referred to the benefits of the team approach.

> *They really pushed her. If only it had continued through preschool she would have benefited.*

Although all of them had not rated the early services programme positively, nineteen parents specifically commented on the positive role the home teacher had played in their child's development and readiness for preschool. No parent commented negatively on the help they had received from a home teacher. Several parents, who had not had access to a home teacher, stated that it would have been beneficial if it had been available to them.

The home teacher was wonderful. She consistently came here every week. She did all the pre-Montessori skills: sitting still, concentration on a job, fine motor skills. She was the link between ... [service provider] *and me. However, she did not have control over speech therapy which I thought was very important. In the end I went to the health board and asked for speech therapy. But they said they could not provide it as J was under the care of ...* [service provider].

The home teacher was the best service we received. The teacher was excellent. It was a great service. She came every week for more than an hour and she always left work for us to go on with. She worked with jigsaws, shapes, colours, motor skills. It brought C on quite a bit. The home teacher also helped me find a preschool for C.

The role of the home teacher in assisting the development of young children who have Down syndrome, or other learning disabilities, deserves further investigation.

- ***Transition to preschool***

Six parents (8%) referred to a smooth transition between early services and preschool. Four of their children had attended a special preschool which was a continuation of the early services programme.

As early services were the special preschool, it made that easy. It was once a week from ten months on. At first by himself and then the group grew to three or four. The nurse was helpful and had ideas of what I should be doing at home.

Most parents reported that early services had ended when the child reached the age of three. This left a period when no services were provided. However, there were exceptions. One parent spoke of the value of the same team working with her daughter from soon after birth through preschool. Her daughter had moved from early services to a combined mainstream/special preschool arrangement.

I started going to them when she was three months old. The good thing was that the same team continued to work with her through preschool.

Another parent whose child had attended a mainstream preschool had also been helped in finding a suitable preschool by the early services team.

Summary

In this section the support services the study group received during their first three years have been considered. Twelve families (16%) had received very little or no professional help during their son's/daughter's first three years. All but three of those who received *any* service found the help that they had received to have been *helpful* or *very helpful*.

There was evidence that early services improved between 1982 and 1993. However, even for the youngest group in the study who were born in 1990, the support teams recommended by the 1990 Review Group on Mental Handicap Services were not generally available. The amount of support available varied widely and was more dependent on county of residence than on year of birth. The number of early service professional personnel available to parents was higher in Dublin and Kildare and lower in Limerick and Kerry.

Early service programmes failed to provide adequately for the reported needs of these students for speech therapy. Compared with speech therapy, their physiotherapy needs had been more adequately addressed.

Sixty-five percent of the parents believed that that their sons/daughters could have been better prepared for preschool by early services. The reasons centred around the three themes of: absence of services; inadequate programmes; and programmes which did not meet the child's or family's needs. Thirty-five percent of the parents responded that early services had

been positive in preparing their child for preschool. These responses were more diverse but could again be grouped into three themes: information and support from other parents and/or professionals; developmental educational programmes; and transition to preschool.

In the next section the preschool experiences of the study group will be examined and the effect of early services on preschool placement and outcome will be considered.

Chapter 7: Preschool

In 1990, the eldest group in this study had completed preschool; the middle-aged group were in preschool; and, the youngest group were infants. In that year, the Review Group on Mental Handicap Services recommended that "as far as possible, developmentally delayed children should be facilitated at approximately three years to attend local preschools or playgroups for other children subject to the preschool teachers and playgroup leaders following a programme recommended by the early intervention team."[1]

In 1993, the Special Education Review Committee (SERC) stated that "children who are slow in developing can be helped by attendance at a suitable playgroup or pre-school or by the provision of appropriate support in the home environment."[2] They stated that the majority of children who had been diagnosed as having learning disabilities "begin their schooling in special educational settings."[3] This would seem to indicate that up to that time the 1990 recommendation had not been implemented. However, the basis for this assertion was not stated and it is not known on what information the statement was based. The SERC Committee recommended that the Department of Health, through the health boards or voluntary bodies acting as their agents, continue to be responsible for the delivery and co-ordination of

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[1] *Needs and Abilities: A policy for the intellectually disabled.* Report of the Review Group on Mental Handicap Services (1990). Dublin: Stationery Office, pp. 24.

[2] Report of the Special Education Review Committee (1993). Dublin: Stationery Office, p.28.

[3] Report of the Special Education Review Committee (1993), p. 28.

assessment, advisory and support services for preschool children with disabilities.[4]

A counter proposal was made by the Commission on the Status of People with Disabilities (1998) who recommended that the Department of Education should be responsible for providing services to preschool children with disabilities. Further, they urged that "every encouragement and practical support, including financial support, should be given to community playgroups and pre-school groups who wish to include young children with disabilities in their services".[5] This recommendation was further strengthened by the Expert Working Group on Childcare who asserted that "children with disabilities should have access to specialised assistance in integrated settings as a matter of right".[6]

Regardless of these perhaps aspirational statements, the *Report on the National Forum for Early Childhood Education* (1998) found that "since there [was] no organised system of early years education for children with special needs, there [was] no readily available information on provision at this stage".[7] They recommended that "children with disabilities should be educated with their non-disabled peers to the maximum extent appropriate." What they meant by the *maximum extent appropriate* was not stated in their Report.

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[4] Report of the Special Education Review Committee (1993), pp.28-29.

[5] Commission on the Status of People with Disabilities (1998). *A Strategy for Equality: Report of the Commission on the Status of People with Disabilities.* Dublin: Stationery Office, p. 180.

[6] Expert Working Group on Childcare (1999). National Childcare Strategy: Report of the Partnership 2000 Expert Working Group on Childcare. Dublin: Stationery Office, p. 46.

[7] National Forum Secretariat, J. Coolahan (ed.) (1998). *Report on the National Forum for Early Childhood Education.* Dublin: Stationary Office, p.96.

The students in the study attended preschool during the period 1985-1998. This section will analyse their preschool placement patterns and consider whether those patterns changed over that time. The amount of specialist supports the children received will be assessed. Parents' evaluation of their sons'/daughters' preschool experience will be explored. This evidence may contribute to an understanding of what constitutes a positive preschool experience for this group of children.

Type of preschool attended

For the purpose of this study, preschool was defined to parents as their child regularly taking part in an educational or play programme outside the home with other children before beginning primary school. Using this definition, seventy-three (94%) of the parents reported that their children had attended preschool. Five children had not attended preschool; three were born in 1982, one in 1986, and one in 1990; three were female and two male. All those living in Dublin, Kildare, Galway and Cork had attended preschool. Some of the children moved from one preschool to another. Because of this, distinctions were made between first and last preschool attended.[8] The children first attended four categories of preschool: special (32%); mainstream (40%); combined special/mainstream (8%); neighbourhood playgroup (20%).[9] Similar numbers of boys and girls attended the various types of preschools.

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[8] Appendix 10. Type of preschool attended by county.

[9] *Mainstream preschool* is used to mean those preschools which the general population of children attend. They are preschools that have not been specially designated for children who experience disabilities. *Special preschool* is a preschool that has been specially designated for children who experience disabilities and one that typically developing children do not usually attend. *Combined special/mainstream preschool*, in the Irish context, means that the

There was a higher proportion of youngest children (67%), than either eldest/only (57%), or middle children (43%), who attended mainstream preschools or playgroups. However, there were no statistically significant differences between those who first attended the different types of preschool by age group, sex, size of family, birth order, experience of early services,[10] mother's employment status, or mother's level of education.

Differences for one variable were significant. Eighty-three percent of the children, who had received support from an early services home teacher, first attended a mainstream preschool or playgroup. The difference in the type of preschool first attended, between those who had been supported by an early services home teacher and those who had not, was statistically significant. (p=.005)

Twenty-one (29%) of the children attended more than one type of preschool. The most frequently occurring move was from neighbourhood playgroup to a mainstream preschool. These children moved from a loosely structured group to a more formal environment. A similar number of boys and girls made this change. No child moved to a neighbourhood playgroup from another type of preschool. This would indicate that parents tended to use neighbourhood playgroups as the first step into education and not as an alternative form of

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child attends two different preschools one or two days per week in the special preschool and the remainder in a mainstream preschool. The difference between a *preschool* and a *playgroup* is not precise but the distinction is made by parents and government policy documents. A playgroup usually implies children coming together for informal play activities for a few hours; the playgroup leader may or may not have formal training, and the children would tend to be younger than those who attend a preschool.

[10] The measure used here was parent's rating – positive or negative, as to whether early services had helped prepare their children for preschool. Types of preschool were combined into two groups: special and mixed special/mainstream; and, mainstream and playgroup.

preschool. The next most frequently occurring pattern of change was from a special preschool to a combined special/mainstream placement. These changes were usually extensions of the first placement. There were no moves from combined special/mainstream placement. However, the amount of time spent in one or other setting may have changed over time. The types of preschool last attended were: special (30%); mainstream (48%); combined special/mainstream (16%); and, playgroup (6%). Table 7.1 details the changes that occurred from the initial preschool placement to the last preschool

Table 7.1. Changes from initial preschool placement to last preschool placement.

From	Number who started	Number who changed	Moved to	Number who finished
Special preschool	23	-6 +5	-4 to special / mainstream -2 to mainstream +2 from playgroups +3 from mainstream	22
Mainstream preschool	29	-4 +10	-3 to special -1 to special/mainstream +8 from neighbourhood playgroup +2 from special	35
Special / mainstream (combined)	6	-0 +6	+1 from neighbourhood playgroup +4 from special +1 from mainstream	12
Neighbourhood playgroup	15	-11 +0	-2 to special -8 to mainstream -1 to special / mainstream	4
Total	73	21		73

In order to determine whether this group followed the pattern described in the SERC Report, that most students with learning disabilities begin their education in special settings, the four types of preschool were combined into two groups: special placement, either full time or part time, and ordinary preschool placement. Using these criteria, it was found that the majority of the students in this study had not begun their education in special settings.

In order to look for evidence of the effect of the 1990 Department of Health recommendation that children with disabilities should be facilitated to attend local preschools and playgroups, the three age groups were regrouped into those born before 1990 and those born in 1990. While a higher proportion of the younger group started in ordinary placements, a higher proportion of the older group were in ordinary last preschools. This was mitigated to some extent by the fact that, for the younger group, there was a net change of four from playgroup to a combined special/mainstream placement. For the study group, there was some evidence of increased non-special first preschool placement. However, the differences between the two age groups for either first or last preschool placement were not statistically significant. This information is tabulated in table 7.2.

Table 7.2. Type of first and last preschool of those born before 1990 and those born in 1990.

Year born	Special or special / mainstream		Mainstream or playgroup		total	
	First preschool					
Pre 1990	19	*43.2%*	25	*56.8%*	44	*100%*
1990	10	*34.5%*	19	*65.5%*	29	*100%*
Total	29	*39.7%*	44	*60.3%*	73	*100%*
	Last preschool					
Pre 1990	20	*45.5%*	24	*54.5%*	44	*100%*
1990	14	*48.3%*	15	*51.7%*	29	*100%*
Total	34	*46.6 %*	39	*53.4%*	73	*100%*

The finding that the majority of children in this study did not begin their education in special settings may have implications for the allocation and delivery of specialist supports and services for preschool children.

Age started preschool

Because a difference of months can be significant in the development of young children, the age in months was used for preschool entry age. There

was considerable variation in the age at which children started preschool. The age range was eighteen to sixty-six months. The mean age the children started preschool was just under forty months of age.[11] The mean age that girls started preschool was lower (38.4 months) than it was for boys (40.5 months). This difference was not statistically significant nor was the difference at which the three age groups had started preschool.

Children who first attended a mainstream preschool began at an older mean age than those who first attended other types of preschool. The difference in the mean age at which children began attending the types of preschools was statistically significant. ($p<.05$) 7.3 details the mean, range and median age at which the different groups first attended preschool.

Table 7.3. Type of first preschool and the number of children, the mean, range and median age they started preschool.

First preschool	Mean age started in months	Std. Deviation	Median age	Range in months	Number of children
Special	35.4	7.38	36.0	18-53	23 *31.5%*
Combined special/ mainstream	39.3	7.23	38.0	33-53	6 *8.2%*
Neighbourhood playgroup	40.0	9.58	40.0	24-55	15 *20.5%*
Mainstream	42.52	9.64	42.0	24-66	29 *39.8%*
Total	39.5	9.14	39.5	18-66	73 *100.0%*

Age left preschool

The age the children left preschool ranged from three to eight years. The mean age at leaving was 5.5 years.[12] The difference in the mean age of leaving preschool between boys and girls was not significant. The mean age

[11] The mean was 39.48 months, the median was 40.00 months and the mode was 40 months.

that children left special preschool was six months less than the mean age at which children left either mainstream or combined special/mainstream preschool. However, this difference was also not statistically significant.

Two boys, who left preschool at three years, had health problems and did not attend any school for a period. Six children moved from preschool at the age of four. Five of them moved to a special primary school and one moved to a special class in a primary school. The majority of the children moved from preschool to primary school either at the age of five (44%) or six (34%). Four remained in preschool until seven, and four until eight years of age.

Number of years in preschool

The amount of time spent in preschool ranged from one to six years. The overall mean number of years spent in preschool was 2.59 years (median 2.00 years). Nearly half (47%) spent two years; more than a quarter (27%) spent three years.[13] Differences in the number of years spent in preschool by mothers' level of education or employment status were not statistically significant.

The pattern of movement from preschool to primary school will be explored more fully in a subsequent section. However, there is one finding to be noted at this stage. Seven students spent only one year in preschool.[14] Although

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[12] The median was 5 and the mode was also 5 years.

[13] One boy who, because of his mother's health, had started special preschool at eighteen months, spent six years in preschool.

[14] For those who had spent only one year in preschool, the mean age for starting preschool (48.0 months) was higher than the overall mean age (39.5 months). Six of them were male and one female.

they had attended all the various types of preschool, they all then went on to special schools designated for students with moderate learning disability. Fifty-four students spent two or three years in preschool. Twenty-six (48%) then went to special schools/class designated for pupils with moderate learning disability, seven (13%) to special schools designated for pupils with mild learning disability and twenty-one (39%) went to mainstream primary schools.[15] It may be that longer preschool experience increased the options for school placement.

Benefit of preschool

A scale to measure the parents' assessment of preschool benefit was developed for the interview schedule.[16] Nine areas of development, which might be supported by preschool experience, were identified: language development, social skills, friendships, play skills, toilet training, independence, pre-academic skills, following classroom routine, and following the teacher's instructions.[17] Parents were asked how beneficial preschool had been for their son/daughter in those nine areas. The possible responses were:

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[15] Eleven children spent either four or five years in preschool. In this group seven were girls and four boys. The mean age that they began preschool (33.4 months) was lower than the average (39.5 months). Eight of these eleven spent at least part of that time in a mainstream placement. One of these children then moved to a special care unit; three went on to a special school designated for students with moderate learning disability; two went to a special school designated for students with mild learning disability; one to a special class for students with mild learning disability, and two went on to mainstream primary school.

[16] Choice of items for the preschool benefit scale was influenced by an analysis of the child-variables used in the *IEA Preprimary Project Report* and the curriculum issues for early childhood education (3-6 years) highlighted in the *Report of the National Forum for Early Childhood Education.* Choice of items was also influenced by the researcher's awareness of the skills primary schools expect of young children on enrolment. See: Hayes, N. and O'Flaherty, J. (1997). *A Window on Early Education: Summary Report on the IEA Preprimary Project.* Dublin: Dublin Institute of Technology, pp. 5-12, and National Forum Secretariat, J. Coolahan (ed.) (1998). pp. 47-52.

not beneficial, *beneficial*, *very beneficial*. It was explained to parents that the response *not beneficial* should be interpreted as their child had not made progress in that aspect of development; *beneficial* as their child had made some progress; and *very beneficial* as the child had made as much progress as the parents had thought the child could have made. These responses were assigned scores: 1=not beneficial; 2= beneficial; 3=very beneficial.

The sum of the scores given to each of the nine items was calculated giving a *preschool benefit score* (see table 7.4). The lowest possible score was nine; the highest possible score was twenty-seven. Overall, the parents judged that preschool had been most helpful in the area of play skills and social skills, and least helpful in friendships and language development.

A mean score for each item, and a mean preschool benefit score, were calculated for each type of last preschool attended. Differences between the types of preschool were statistically significant for the items of language development (Anova $p<.05$), social skills (Anova $p<.05$), and pre-academic skills (Anova $p<.005$). For some items the highest mean score was for children attending special/mainstream preschool; for others it was for children who attended mainstream preschools. Parents whose children attended mainstream preschools rated their children's experience higher on every item than did parents whose children attended special preschools. The difference in the mean preschool benefit score among the types of last preschool attended was also statistically significant ($p<.05$). The mean preschool benefit

[17] The reliability score (Alpha) between the nine items on the scale was .8922.

scores for those who attended either mainstream preschool or combined special/mainstream preschool were higher than for those who attended special preschools or playgroups.[18] Differences in mean preschool benefit score by sex of student, mother's education, mother's employment status, and family size were all not statistically significant. The mean parental rating of the benefit of preschool by type of last preschool is given in table 7.4.

Table 7.4. Mean parental rating of benefit of preschool by type of last preschool attended.

Type of preschool	*Special*	*Mainstream*	*Special/ mainstream*	*Playgroup*	*Total study group*	*ANOVA Sig.*
Language development	1.82	2.37	2.08	2.00	2.14	*p=.021*
Social skills	2.23	2.71	2.75	2.25	2.55	*p=.008*
Friendships	1.82	2.09	2.25	1.75	2.01	*p=.434*
Play skills	2.36	2.66	2.75	2.50	2.58	*p=.150*
Toilet training[19]	2.09	2.23	2.08	1.75	2.14	*p=.658*
Independence	2.23	2.51	2.75	2.00	2.44	*p=.083*
Pre-academic skills	1.73	2.46	2.25	1.50	2.15	*p=.000*
Following class routine	2.18	2.60	2.67	2.50	2.48	*p=.073*
Following teacher instructions	2.05	2.51	2.50	2.25	2.36	*p=.075*
Preschool benefit score	18.45	22.00	22.08	18.50	20.75	*p=.016*
Number of children	*21*	*36*	*12*	*4*	*73*	

[18] The difference between mainstream and special/mainstream were not statistically significant nor was the difference between special preschool and playgroup.

[19] The preschool benefit for toilet training was scored at the same low level as language development. It has not been highlighted. Some parents reported that preschool had not made any attempt to improve toileting skills. Others reported that their son/daughter had been fully independent in toileting before beginning preschool. Because of this "beneficial" had different meaning in different situations.

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There was a difference in the mean preschool benefit score between those whose parents had rated early services as positive preparation for preschool, and those who had rated them negatively (p=.055).

There were significant differences in the mean preschool benefit between those who received adequate early services speech therapy, and those who had not for the items of: language development (p<.005); social skills (p<.05); friendships (p<.01); playskills (p<.05); independence (p<.05); pre-academic skills (p<.05); following classroom routine (p<.05); following teacher instructions (p<.005); total preschool benefit (p<.005).[20]

There were also significant differences in the mean preschool benefit scores between those who had been supported by an early services home teacher, and those who had not, for the items of: language development (p<.05); social skills (p<.05); pre-academic skills (p<.005); total preschool benefit (p<.05).

The difference in the mean language development benefit score was significantly higher for those who received adequate preschool speech therapy, than for those who had not (p<.05). The differences between those who had received adequate preschool speech therapy, and those who had not, were not significant for the other items on the scale.

In their evaluation of preschool, parents had been asked to assess how beneficial preschool had been for their particular son/daughter with regard to his/her own developmental progression. Parents whose children attended

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[20] Scores were not significantly different for toilet training.

special preschool rated it as having been less beneficial for language development and play skills than parents of children in all other types of placement.

Speech therapy - preschool

There was some improvement in the level of speech therapy provided to the study group during preschool, compared with that reported during their first three years. The parents of seventy-four of the students (95%) believed that their sons/daughters had needed speech therapy during their preschool years. The proportion who had received at least some speech therapy increased with each successive age group. The proportion who needed, but had not received, speech therapy similarly fell. Nevertheless, the majority of parents in this study believed that their child had not received adequate speech and language therapy during this time. While a higher proportion of girls (24%) than boys (10%) had received adequate speech therapy, the difference was not statistically significant. One third of the children who needed speech therapy, did not receive any. Galway was the only county in which all those who needed speech therapy received at least some during their preschool years. Small differences in the level of preschool speech therapy by the variables of mother's education and employment status were not statistically significant. Table 5.5 indicates parental evaluation of the speech therapy their sons/daughters received during their first three years.

Table 7.5. Amount of speech therapy the students received during preschool.[21]

	1982 N=20	1986 N=28	1990 N=30	Total N=78
Did not need speech therapy.[22]	2 *10.0%*	2 *7.1%*	0 0.0%	4 *5.1%*
Received adequate speech therapy.	3 *15.0%*	3 *10.7%*	7 *23.3%*	13 *16.7%*
Received some speech therapy needed more.	6 *30.0%*	13 *46.4%*	16 *53.3%*	35 *44.9%*
Needed but did not receive speech therapy.	9 45.0%	10 37.7%	7 *13.3%*	26 *33.3%*

- ***Adequate speech therapy***

Of the seventy-four who needed speech therapy, thirteen (17%) had received what their parents considered adequate. Again, there was no apparent explanation why these few received more adequate speech therapy than others had.[23] Within this group, the amount of therapy received and the mode of its delivery varied considerably. The frequencies reported were: weekly (4); fortnightly (2); monthly (4); in periodic groups of sessions (2); as part of a mixed special/mainstream preschool programme (1). Although there were differences in frequency, the speech therapy occurred regularly. One parent commented on the importance of the continuity in speech therapy her daughter had received.

> *It was the same speech therapist continuously. She was very good and M took to her and got on well with her.*

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[21] As speech/ physiotherapy could be received outside preschool, those who did not attend preschool were included in this section. For those not in preschool, one parent said that the child had not needed speech therapy, the other four reported that they needed speech therapy but had not received any.

[22] Two were the same who had not needed it in infancy. Another parent thought her daughter had not been ready for speech therapy as it was offered. The other parent reported that "at that time his speech was very good and he was understood better than he is now."

[23] All three age groups were represented. The group had five males and nine females. Six of the seven counties were represented. Six of this group had also received adequate speech therapy as infants.

Some parents, whose children had received adequate, but less frequent speech therapy, reported that the speech therapist had directed a therapy programme which they, and sometimes the preschool, had worked on between sessions.

> *Every three to five weeks with lots of work to go on.*
>
> *Once every month or five weeks with programme to work on. The Montessori teacher also was involved and kept the programme going in the preschool.*

- ***Some speech therapy needed more***

The thirty-five parents (45%) whose sons/daughters had received some speech therapy but who had needed more, typically described it as having been insufficient and inconsistent. In most cases, they judged it simply to have been not enough.

> *I thought he needed more during this time — it was once a fortnight sometimes, other times less than once a month.*
>
> *He received some therapy at the unit, but it was not anything like what he needed.*

Frequent changes in speech therapist, and periods when no speech therapist was available, were cited as underlying causes of inadequate speech therapy.

> *It was very patchy. I was still under* [service provider]. *There were many changes in speech therapists and long periods without any.*
>
> *Very irregular, a few sessions and then a long gap, and then a new therapist.*

Parents also reported that, even when there had been some speech therapy, it had not been a planned developmental programme and that they had not been included in the implementation of the speech therapy programme.

> *Very minimal, one day a month. There was no real programme.*

It was part of the programme, but I am not sure how much.

For some children who attended a combination of special and mainstream preschools, speech therapy was part of the programme in the special preschool but was not carried over into the mainstream setting.

> *The day at the ...* [service provider's] *preschool they did some. We saw the speech therapist every six months or so.*

Although parents who had monthly or more frequent contact with speech therapists were confident to implement a language programme between therapy sessions, long intervals between contacts with the speech therapist were not considered adequate.

> *Yearly appointment with guidelines to work on.*
>
> *The speech therapist did an assessment about every year, often not under suitable conditions, once it was at 4 p.m. and H was falling asleep. She did her best and gave us a programme for the school and family to work on.*

- ***Needed but did not receive speech therapy***

Twenty-six parents (33%) reported that their children had needed, but had not received, speech therapy during their preschool years. Some had sought speech therapy without success.

> *At the age of four he developed a stammer which he still has. I begged for speech therapy and was told that it was not available; that the waiting lists were very long and that there was no hope of getting speech therapy as the "normal" children would have to be seen first.*

- ***Speech therapy by type of last preschool***

The difference between those who had attended special or combined special/mainstream school and those who attended mainstream preschools or playgroups was not statistically significant. This distribution is presented in table 7.6.

Table 7.6. Amount of speech therapy the students received during preschool by type of last preschool

	Type of preschool		
	Special or special/mainstream N=34	Mainstream or playgroup N=36	Total N=70 [24]
Received adequate speech therapy.	5 *14.7%*	8 *22.2%*	13 *18.6%*
Received some speech therapy needed more.	18 *54.5%*	17 *45.9%*	35 *50.0%*
Needed but did not receive speech therapy.	11 *33.3%*	11 *29.7%*	22 *31.4%*

Physiotherapy - preschool

Parents reported that sixty-four percent of the overall group had not needed physiotherapy during their preschool years. All but one of the twenty-eight children (46%), reported to have needed physiotherapy, had serious health concerns. There was very little reported difference between males and females. A higher proportion in the youngest group who needed physiotherapy, received at least some. Table 7.7 details parental evaluation of the physiotherapy their sons/daughters had received during their preschool years.

Table 7.7. Amount of physiotherapy the students received during their preschool years by age group.

	1982 N=20	1986 N=28	1990 n=29	Total N=77[25]
Did not need physiotherapy.	14 *70.0%*	16 *57.1%*	19 65.5%	49 *63.6%*
Received adequate physiotherapy.	2 *10.0%*	5 17.9%	5 *17.2%*	12 *15.6%*
Received some physiotherapy needed more.	1 *5.0%*	1 *3.6%*	3 *10.3%*	5 *6.5%*
Needed but did not receive physiotherapy.	3 *15.0%*	6 *21.4%*	2 *6.9%*	11 *14.3%*

[24] N=70. Five had not attended preschool and three who had attended preschool had not needed speech therapy. Type of preschool last attended was used for this analysis.

[25] N=77. One mother did not know whether her daughter needed or received physiotherapy.

- ***Did not need physiotherapy***

Of the forty-nine children (64%) reported by parents as not needing physiotherapy, twenty-four had serious health concerns. Eighteen had been diagnosed with a heart condition; seven had chest/breathing difficulties and six had skeleto-muscular problems. Seven had more than one health concern. It would seem that some of these children would have benefited from physiotherapy as part of their preschool developmental programme.

- ***Received adequate physiotherapy***

Twelve children (16%) had received adequate physiotherapy during their preschool years. All but one had a serious health concern. Eleven of them had been diagnosed with a heart condition; six had chest/breathing problems; four had skeleto-muscular problems. Three of them had more than one health concern. Even for this group, physiotherapy was more often a response to a medical crisis than a developmental support. Some of the physiotherapy parents referred to had occurred while the children were hospitalised.

> *Usually no formal therapy, having a younger brother brought her on. She was in the hospital quite a lot during this time so she would have had physiotherapy there when she needed it.*
>
> *If he was chesty or anything they would do it at...* [the special preschool].

- ***Received some physiotherapy needed more***

Five children had received some physiotherapy but had needed more during their preschool years. Three of them had been diagnosed with a heart condition; two had chest/breathing problems; one had limited use of his left side. One had two health concerns. Again, parents highlighted the fact that therapists were often not available.

Physio once a month but it was interrupted by maternity leaves- there was no cover. She did get good physiotherapy from the nurse the days she was at ... [the special] *preschool.*

- ***Needed but did not receive physiotherapy***

Eleven children had needed, but had not received, physiotherapy during preschool. Six of these children had been diagnosed with a heart condition; four had chest/breathing problems; four had skeleto-muscular problems. Three had more than one health concern. Some of this group had actively sought physiotherapy.

We kept asking for it at the health board, but we did not get any.

In the absence of physiotherapy, some parents had done what they could to support their child's physical development.

We worked with her, kept her going and responding.

- ***Physiotherapy by type of last preschool***

Again differences in the amount of physiotherapy needed and received by type of last preschool attended were considered. Sixty-nine percent of those attending ordinary preschools, compared with fifty-four percent of those attending special or special/mainstream preschools, were reported not to need physiotherapy. A higher proportion of those attending special or special/mainstream preschools who needed physiotherapy, received at least some therapy. The numbers of children in the various categories were small and statistical analysis was not possible. Table 7.8 details the amount of physiotherapy received by type of last preschool.

Table 7.8. Amount of physiotherapy the students received during preschool by type of last preschool

	Type of preschool		
	Special or special/mainstream N=33	Mainstream or playgroup N=39	Total N=72 [26]
Did not need physiotherapy	18 54.5%	27 69.2%	45 62.5%
Received adequate physiotherapy	8 24.2%	3 7.7%	11 *15.3%*
Received some physiotherapy needed more	3 *9.1%*	2 *5.1%%*	5 *6.9%*
Needed but did not receive physiotherapy	4 *12.1%*	7 *17.9%*	11 *15.3%*

In general, parents were less critical of the lack of physiotherapy than they had been of speech therapy. Physiotherapy usually was not seen to be a necessary component of a preschool developmental programme. One parent explained the difference in these terms:

> *I felt about his walking that I was in control. I knew that he would walk. I was confident that I could bring him on with time. I was not as sure about his speech and needed much more professional help.*

Assessment of preschool

Parents were asked how well preschool had prepared their son/daughter for primary school. The researcher and the same two independent raters reviewed parents' responses. Responses were first grouped into negative, mixed negative and positive, and positive assessments. These were cross-tabulated with preschool benefit scores. The difference in the mean preschool benefit score between the groups was found to be statistically significant. ($p<.001$) This indicates that parents' responses to this question mirrored their responses to the preschool benefit scale. Table 7.9 details this information.

Table 7.9. Parental responses as to how well preschool prepared their son/daughter for primary school and the mean preschool benefit score for each group.

Parent response	Frequency	Percent	Mean preschool benefit score
Negative	8	*11.1%*	12.63
Mixed negative/positive	18	*25.0%*	19.78
Positive	46	*63.9%*	22.41
Total [27]	72	*100.0%*	20.67

The question that had been asked, "How well did preschool prepare your son/daughter for primary school?" often was not answered directly. Parents often responded by giving more information about their child's preschool experience. Parents often gave multifaceted responses. The main point the parents made has been identified and highlighted.[28] The central point was sometimes mitigated or qualified by another element in the response. In those cases the full response will be quoted in this text.

Negative assessment of preschool

Eight parents (11%) gave negative replies to this question. This group of children had attended special preschools (5), playgroups (2), and a mainstream preschool (1).[29] There were four main themes to their negative responses: *preschool teacher not able to foster learning*; *negative learning*; *the child not welcome*; and *difficult distance to the preschool.*

- ***Preschool teacher not able to foster learning***

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[26] N=72. Five had not attended preschool and one mother did not know whether her daughter needed or received physiotherapy.

[27] N=72. Five did not attend preschool. One parent did not rate the preschool experience, but responded saying that "it was the family and not outside agencies that got her going".

[28] Inter-rater consensus was again obtained for categories of responses.

[29] For type of preschool last preschool was used.

Two parents reported that the preschool teacher had been unable to foster their son's/daughter's learning. These children were of different ages and attended different types of preschools.

> *The teacher they had was not really even able to mind them much less teach them. E just played with the same toys day after day.*

> *The first teacher was good. The second teacher was not able to cope at all. I usually found M sitting in the corner on her own doing nothing. One day I saw the teacher shaking M. I was very upset.*

- ***Negative learning***

Three parents, whose children had attended special preschools, had found that the environment of the special preschool had not stimulated their development. The absence of children who had typical language skills and socially acceptable behaviour was emphasised.

> *At the time it was the best of what they thought she needed. Speech therapy would have helped. She had words before she went, but lost them. She must have had a "set-back" there but they say she didn't. She might have come on more in her speech if the other children she was with were talking – if she heard more speech.*

> *He actually developed bad habits through no fault of the other children who were more disabled than he was. He copied their behaviours. It was a bad minding facility – not a learning environment.*

- ***Child not welcome***

One parent had felt that her child had not been considered to be a full member of the preschool and had been there on sufferance.

> *The teacher had her there on a week-to-week conditional basis. It was helpful for her independence, but as it was a private* [fee-paying] *preschool, the teacher did not want the other parents to think she spent too much time with her. At one point she scratched another child. This caused difficulties between me and the other parents. I felt bad vibes every time we met. She was really too old for the toddlers who were in the preschool.*

- ***Difficult distance***

Distance from the preschool was the underlying difficulty in two cases.

> *It was very difficult. We had to go to* [another town]. *Transport was a problem. He spent his time there crying. He was very unhappy. So we decided not to go any more. He found preschool very strange. Now the preschool is in ...* [home town]. *It would have been better if it had been here when he was that age.*

> *Travelling was difficult. It made it impossible to go more than twice a week. She never really got into the routine. They didn't get to know her.*

Mixed negative and positive assessment of preschool

Eighteen parents (25%) reported that their children's preschool experience had been both a positive and a negative preparation for primary school. The children had attended all types of last preschool: special (4); mainstream (6); combined special/mainstream (7); and playgroup (1). Although the preschool experience was positive, some of the same negative themes emerged in these responses: *not really belonging*; *negative learning*; and *difficult distance.* Another theme of this group was *lack of specialist support.*

- ***Not really belonging***

The feeling of having not really belonged, of not having been a full member of the preschool group, was reported by two parents.

> *He seemed to get on well in both places* [special/mainstream] *and two weeks before the end of the school term the Montessori teacher asked me not to send him any more because he was not sitting down. It made me very sad especially as there were only two weeks to go and he was going to go to the special school next year anyway. I felt that he, and I, had failed and that he wasn't wanted.*

> *She* [the preschool teacher] *did a lot for him. The fact that he was in nappies and in a buggy was not a problem to her. The contact with the other children seemed to stimulate him. He liked going. She had water, sand, goldfish. He learned to share. He learned that if I went away I would come back. One grandmother objected to him being there. I was careful to avoid her.*

- ***Negative learning***

Two parents had reservations about the preschool experience because of the bad habits their children had developed.

> *It helped him to be a bit more independent and to have contact with other children. He may have also learned undesirable habits.*
>
> *Mixing with the other children was very good, but following the teacher's instructions was not, because the teacher let her away with everything. She did copy a lot of what the other children did and this was good.*

- ***Difficult distance***

The distance from the home to the preschool was again cited as a difficulty.

> *He was ready to go to school, which he would not have been if we had just put him into school. But it was difficult to bring him to the preschool as there was no transport.*

In some of the smaller communities, parents' choice of preschool was limited. One mother believed that her son would have benefited from an extended period in preschool but this had not been an available choice.

> *He wasn't there long enough. The local preschool closed and the only choices were a special school* [18 miles away] *or the local national school. I would have liked him to have had another year of preschool. I think then he would have been more able for school. He was very young in himself when he started at the local primary school* [at five].

- ***Specialist supports***

Four parents reiterated their belief that speech therapy had been needed and lacking, and would have made a difference in the value of their children's preschool experience. Typical comments included:

> *Speech therapy would have made a huge difference, as it would have increased her ability to communicate with her teachers and peers.*
>
> *I would have liked more speech/physiotherapy. The only thing they taught him about school was taking orders and to sit down at lunchtime and things like that.*

Six of the children in this group had attended a combination of special/mainstream preschools. Some of the comments highlight the advantages, but note ways that this type of placement might be improved.

> *The preschool teacher had spent a lot of time on numbers, letters and words. He was doing very well. It might be better for the child if the services came to the preschool rather than him going one day a week to the special preschool. It would be more consistent and have helped the preschool teacher.*
>
> *Just mixing with the other children in the ordinary preschool brought him on. The teachers were not experienced, but were very willing to have him in their group.*

Positive assessment of preschool

Forty-six parents (64%) reported that preschool had been a positive factor in preparing their sons/daughters for primary school. Again, the children attended all types of last preschool: special (13); mainstream (27); special/mainstream (5); playgroup (1). A higher proportion of parents whose children had attended a mainstream preschool (79%) gave a positive response to this question than did parents whose children had attended other types of preschool.[30] Positive themes were: *development of social skills*; *improved concentration, attention and co-operation*; *pre-academic skills development*; *support services*; *positive teachers and preschool environment*

- ***Development of social skills and independence***

Thirty-eight parents (58%) spoke of the positive influence preschool had on their children's development of social skills and independence. The frequency

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[30] Fifty-nine percent of parents of children who attended special preschools, forty-one percent of parents of children who attended combined special/mainstream preschools and twenty-five

of reference to these elements was consistent with the high scores these two items received on the preschool benefit scale. The following were typical of responses illustrating the positive effect preschool had on the children's development of social skills and independence. Comments included:

> *It taught him how to mix with children of his own age as his brothers and sisters were a good bit older than him. It made him so that he did not mind going.*
>
> *His development was very slow. He was nearly three before he walked. At preschool he learned about taking turns and being with others. Painting was a favourite.*
>
> *She developed social skills and became accustomed to leaving home and going about her day on her own.*
>
> *He had a good relationship with the other children and they with him. We were new in the area and it was the basis for J's social integration. It did the job it was meant to do. They still know him when they see each other.*
>
> *It paved the way – in a big way really. If she had gone straight from home to school she never would have made it – the routine, everything. She made friends, learned to play, share, she became independent.*

- ***Improved concentration, attention and co-operation***

Fourteen parents referred to the contribution preschool had made in their children's improved concentration, attention and co-operation.

> *It taught him to mix better, to sit still for a while, to listen for a little while longer although his concentration was not very good at that stage.*
>
> *It got him into a routine of going in and sitting down and generally going along with what the others were doing – joining in and taking part.*

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percent of parents of children who attended playgroups gave positive responses. Because of the small number of children in some categories, statistical analysis was not possible.

There was very good structure. There were the same rules for her as there were for the other children. If she did anything disruptive she was brought back into the activity. She was ready for a bigger situation where she could not just walk around the place and do as she liked. She was interested in taking part in the group's activity.

One mother highlighted the fact that preschool learning was built on what the children had learned at home.

I think he learned a lot at home before he went to preschool. This has stood to him. He loved going. He learned to take part in the group – to know that the teacher was there and had the authority and you did what she said.

- ***Pre-academic skills***

In contrast to the high number of parents who had mentioned that preschool had been important in the development of social skills, only six parents mentioned the role preschool had played in the development of pre-academic skills. This would again reflect the low rating pre-academic skills had received on the preschool benefit scale. The pre-academic tasks some children had been engaged in were described.

She learned the beginning of reading – both look and say and phonics. She was familiar with colours. She had done basic number work. She had done a lot of tactile and manipulative work. She had good dexterity. Her social skills had developed.

She knew her letters, colours and numbers and was used to the routine.

- ***Support services***

Seven parents spoke of the positive role specialist personnel had played in their children's successful preschool experience.[31]

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[31] One mother whose son had severe visual impairment reported her experience in Scotland. "I think that the Royal Blind School helped him tune into his environment. His learning

It was very helpful that we had access to all the support of early services through preschool [outreach programme]. *Especially the early services teacher who went into the Montessori school one hour a week to support the preschool teacher.*

It was the public health nurse who suggested I try a local preschool. At that time all I could see was sending him to ... [a special residential school]. *The nurse asked the teacher if she would try M in her group. She had not done it before, but was willing to try. The teacher was very good. In the end she said that it had been a good experience for all.*

They [the special preschool] *had an excellent staff and she got on well with them. They gave the ordinary preschool some help which added to their confidence. They recommended that A go to the local national school.*

Although there was evidence of good practice, where specialist support personnel had worked effectively with preschools, the evidence also suggested that more specialist assistance and co-operation would benefit preschool children who have learning disabilities.

- ***Positive teachers and preschool environment***

Ten parents spoke spontaneously of the important role the preschool teachers had played in their children's positive preschool experience.[32] With or without previous experience of children who had learning disabilities, they had welcomed the children, taught the children, and had taken an interest and pride in their development.

She got used to the routine and doing what she was asked to do. The whole business of sitting down and tackling something. It gave her a good idea about how to set about doing things. The teacher took a great interest in her. Initially the teacher was a bit nervous, but took great interest in her progress especially during the second year.

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disabilities were less significant than his visual impairment. They worked on stimulating and educating his senses – smell, listening and mobility training."

[32] This does not imply that only ten parents thought highly of their son's/daughter's preschool teacher.

I was fortunate in that the Montessori teacher was experienced with children with learning disabilities and she knew what J would need to know and how to progress her along to those skills.

The teacher was excellent. She was very firm. It was a good foundation for anywhere.

The environment of a mainstream preschool gave one mother an opportunity to observe her daughter interacting with other children. This gave the mother a perspective on her child's ability to take part in activities and potential development that she believed would otherwise not have happened.

It gave me a great opportunity to see the change in her – her potential, her development – to see the wheel go round. If I had not had that opportunity to see this, I would have abandoned her to the system, to the institution.

Summary

Ninety-four percent of the students in this study had attended preschool. More than a quarter of the students attended more than one type of preschool. A majority of the children in the study began and ended their preschool career in ordinary settings. The mean age the children started preschool was forty months. The mean age at which children began attending mainstream preschools was significantly higher than it was for those who first attended other types of preschools. Children who attended special preschools also left at a younger mean age. The children spent on average two and a half years in preschool. There was some evidence that longer preschool experience increased the options for primary school placement.

As a group, the parents judged that preschool had been most helpful in fostering play skills and social skills, and least helpful in fostering friendships and language development. Differences between the type of preschool were

statistically significant for language development, social skills and pre-academic skills. Parents whose children attended mainstream preschools rated their children's experience higher on every item than did parents whose children attended special schools. Children who had received adequate early services speech therapy, and those who had been supported by an early services home teacher, had significantly higher preschool benefit scores.

The parents of ninety-five percent of the students believed that their sons/daughters had needed speech therapy during their preschool years. Only seventeen percent had received speech therapy that their parents considered adequate; forty-five percent had needed more than they had received; and, thirty-three percent had not received any speech therapy. Children who received adequate preschool speech therapy had a higher mean preschool benefit score for the item of language development than children who had not. The amount of speech therapy received by children attending different types of preschool was not significantly different.

Although many of the children had physical and/or health concerns, sixty-four percent of the parents reported that their children had not needed physiotherapy during preschool. Twenty-eight children were reported to have needed physiotherapy; twelve received what their parents considered to be adequate; eleven had not received any physiotherapy.

Overall, sixty-four percent of the parents judged that preschool had been positive in preparing their sons/daughters for primary school; twenty-five percent had mixed positive and negative assessments; eleven percent judged that it had not been a positive experience. Negative aspects mentioned were

that the teacher had not been able to foster the children's learning; negative learning had occurred; the children had not been welcome; the distance to the preschool had caused difficulties; specialist supports had not been available or could have been organised more beneficially. The positive aspects most frequently mentioned were the influence of preschool on the development of the children's social skills and independence; the fostering of improved concentration, attention and co-operation; the development of pre-academic skills; and the positive role of the preschool teacher. The assistance that specialist support personnel had given was also highlighted.

The supports and services the study group received during their early years have been explored and their preschool experience has been considered. During this time the children may, or may not, have been evaluated by a psychologist. As the children completed their preschool period, and their parents contemplated their primary school placement, the psychologist may have played an important role in the decision-making process. The role the psychologist played in school placement decisions will be considered next.

Chapter 8: Psychological Assessment

The Special Education Review Committee noted that it was "an unusual feature of assessment services in Ireland that they fall largely under the control of the health authorities even when the assessments are carried out for educational purposes."[1] The SERC Committee recommended that "an expanded School Psychological Service, staffed by psychologists with appropriate qualifications, under the aegis of the Department of Education...should be established on a countrywide basis without delay."[2]

The National Education Convention also considered that the provision of a comprehensive psychological and guidance for schools should be a priority. It envisioned that this service would diagnose learning difficulties, provide support to teachers and parents in dealing with students' learning and behaviour difficulties, and give educational and vocational guidance to students.[3]

In 1998, the Planning Group for a National Educational Psychological Service reported that there were thirteen psychologists working with primary school students and twenty who were working with post-primary students.[4] It also noted that about twenty-five psychologists were employed by voluntary bodies and were engaged in the provision of psychological services to twenty-seven

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[1] *Report of the Special Education Review Committee* (1993). Dublin: Stationery Office, p. 30.

[2] *Report of the Special Education Review Committee* (1993), p. 32.

[3] National Education Convention Secretariat, J. Coolahan (ed.) (1994). *Report on the National Education Convention.* Dublin: National Convention Secretariat, p. 66.

[4] Department of Education and Science. (1998b). *A National Educational Psychological Service: Report of the Planning Group.* Dublin: Stationery Office, pp.16-20, pp. 16-17. The

special schools and to students in a range of special classes in ordinary schools.[5]

The Report noted "a lack of consistency in the level of available provision" and stated that "in general, there appears to be limited provision of educational psychological services or of any particular psychological service, for many students with disabilities even though such students, and their teachers and parents, need such provision and the support it may provide".[6] The Report stated that some students who have disabilities may not have access to psychological services, but in "special schools associated with voluntary services, or in the few other areas where schools have a reasonably adequate provision, access to a psychologist may be somewhat easier".[7]

This study explored the frequency of psychological assessment and the role psychologists played in helping parents make educational decisions regarding their sons/daughters. It also attempted to ascertain the differences in the psychological services received by students who attended different types of schools.

Preschool Assessment

The Special Education Review Committee recommended that "an assessment of a child on the Health Board database should be carried out

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service was not available nation-wide. The Report indicated that an additional fifteen psychologists had been recently recruited for the primary school sector.

[5] Department of Education and Science. (1998b). pp. 23-24. The funding of the psychological services in the voluntary sector is provided from public funds by the Department of Health and Children through the Health Boards.

[6] Department of Education and Science. (1998b), p. 30.

during the year prior to her/his initial enrolment in an ordinary primary or special school and should contain a detailed description of the special needs of that child."[8]

Parents in this study were asked whether their sons/daughters had been assessed before beginning primary school, and if so, how frequently. They were also asked how helpful they had found the assessments; how they had felt about the assessments; and had the assessments influenced their decision as to which primary schools their children would initially attend.

Seventy-one students (91%) had been assessed by a psychologist before beginning primary school.[9] No parent who had been offered psychological assessment had chosen not to have their son/daughter assessed. Of those who had been assessed, twenty-nine (41%) had one assessment; fourteen (20%) had two assessments; ten (14%) had three assessments. Eighteen (25%) had continuous assessment.[10]

The mean age at first psychological assessment was 3.39 years.[11] The mean age at first assessment was lowest for those born in 1990. It was also lower for girls than for boys.[12]

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[7] Department of Education and Science. (1998b), p. 30

[8] Report of the Special Education Review Committee, p. 33.

[9] *Psychological* assessment had not been offered to five students, one boy had not yet been fostered and one mother did not remember. Two assessments had been arranged privately by the parents. Both were second opinions after initial assessment by health board psychologist.

[10] Where parents had said that assessment was on-going as part of preschool programme, more than four assessments, or when assessment occurred every year or more frequently, it was considered to be continuous assessment.

[11] Median and mode were both four years of age.

Parents' feelings about preschool psychological assessment

Parents were asked to evaluate the preschool psychological assessments of their sons/daughters. Of the seventy-one parents whose children had been assessed, eleven (16%) responded that the assessments had been *constructive*; thirty-three (46%) *somewhat helpful*; seven (10%) *unhelpful*, and twenty (28%) gave *other* responses. Parents were not specifically asked to comment, but many did and their comments were noted.

- ***Preschool assessments constructive***

Four of the eleven parents who had found the preschool assessments *constructive* commented on the guidance they had been given by the psychologist regarding their child's development. Parents found it constructive when the psychologist highlighted areas of development where they could help their children. The following are examples of these parents' views.

> *You are basically using your common sense. And so when someone tells you that you are doing something right that is great. The psychologist zoned in on aspects of development especially speech that I could concentrate on.*
>
> *The early ones were constructive as they showed me areas of development I should concentrate on.*

- ***Preschool assessments somewhat helpful***

The thirty-three parents who had found assessments to have been *somewhat helpful* did not voice strong opinions. Nineteen did not comment. One parent told of her mixed reactions to the assessments.

> *Although there were times I did not agree, I wanted to do what was best for her, what was realistic for her.*

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[12] Differences at first psychological assessment by age, sex of student, county of residence and last type of preschool attended were all statistically not significant.

Four commented that the results were as they expected them to be and they did not indicate that the assessment had given them new information or guidance. Typical responses were:

> *The assessments have agreed with my own thinking that she is great.*
>
> *We knew otherwise what age his mind was working at before the assessment.*

Five parents in this group commented that the testing had not been a valid assessment of their children's abilities.

> *When a psychologist sees a child only once a year it is hard to evaluate the child.*
>
> *It was accurate as far as it went. But it highlighted what she couldn't do rather than what she could do.*

Four parents felt that the professional objectives of the psychologist were different from their own; or questioned the choice of test items; or had not understood how the test results had been determined.

> *I feel that they are dispassionate — the cold impersonal language of the reports, but maybe they have to be 'professional'. It is what is expected.*
>
> *They did not seem to be fair assessments of what he could do. They never asked about most of the things he could do. But then, I don't know what they are looking for.*
>
> *I would have liked to have been shown how they arrived at their recommendation.*

- ***Preschool assessments unhelpful***

Five of the seven parents who had found the assessments to have been *unhelpful* did not comment. Two of this group again thought that the tests had not reflected the children's' skills.

> *They could have given her a bit more praise and credit. I felt that her understanding of things was better than she showed that day.*

- ***'Other' reactions to preschool psychological assessments.***

Nineteen of the twenty parents who recorded an *other* reaction to assessments, voiced strong opinions regarding their experience of psychological assessment. Their comments typically started with words such as: *upsetting*, *painful*, *angry*, *discouraging*, *unfair*, *disappointing*, *puzzling*, and *a waste of time*. This is a selection of their responses.

> *Upsetting. The first one especially. They made me feel that I was not doing enough with her.*
>
> *Painful. I felt they assessed her on her performance on that day only. She was only given one chance. Often she was able to do things that she did not do on the day.*
>
> *I don't understand enough. I was trying to find out what he might be able to do, what we might expect, but the psychologist said that "we don't label children anymore". But that was not the question.*
>
> *Angry. I felt that it did not matter how the child performed. There was a label and that put us in a category regardless of what we were able to do. Down syndrome equals moderate mental handicap. Also, I don't think that an assessment is possible in an hour. It should happen over a period of time.*
>
> *I never knew what the findings were, so I wondered whether they were assessing S or the job I was doing with him.*
>
> *It was a waste of everyone's time. The day I brought her for assessment, she was tired (and I am not just making excuses). In any case it is hard to base an assessment of a child in a half-hour - especially if you don't know the child.*
>
> *Discouraging. I would be working with him and thinking he was doing so well, but they would say that he was behaving at a lower level than I thought. He was always happy to go in and I think he always tries his best.*
>
> *I always felt under a great deal of pressure beforehand. It was always an emotional experience. It feels like an exam. I always felt disappointed with the process. He often did not perform on the day.*
>
> *It was puzzling. The evaluation seemed to hinge on her being able to do one single task — which she did not do during the session. (It was to make crossbars as on a window.) On the way home she made dozens of them in the car.*

Parents given copies of preschool assessment reports

The SERC Report further recommended that "parents should be actively involved with the professionals in making a recommendation concerning their child's initial school placement."[13] Parents in this study were asked if they had been given copies of preschool psychological assessments of their children. Of the seventy-one parents whose sons/daughters had been assessed at least once, fifty-one (72%) had never been given a copy of the assessment report. Twenty parents (28%) had been given at least one report. Only eleven parents (15%) had always been given the report.

The number of parents in the group who received at least one copy of a preschool assessment report was small. Statistical analysis was not possible. However, as might be expected, a higher proportion of parents of the youngest group had been given copies of assessment reports. One factor that may have influenced whether a copy was given or not, was whether parents had specifically asked that they be given a copy of the report.[14] Two parents had asked for reports and had been refused. Five parents had requested reports and had received them.

Influence of psychological assessment on school placement

Parents were asked whether the psychologist's assessments had influenced their decision as to which primary school their son/daughter would attend. Twenty-one parents (30%) reported that their decision had been influenced;

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[13] *Report of the Special Education Review Committee* (1993), p. 33.

[14] Parents had not been specifically asked whether they had requested a copy of the report. Some parents stated that they had. In those cases it was noted.

fifty (70%) reported that it had not been.[15] Parents were asked to describe the influence the preschool assessments had. The researcher and the same two independent raters again reviewed parents' responses. Parents' responses centred on the themes of: *parents wanted/sought professional advice*; *the psychologist was gatekeeper*; *it was the parents' own decision*; *it had been a teacher rather than the psychologist who had influenced the decision*; *negative attitude of the psychologist/unreasonableness of the tests lessened their influence*; *other factors,* and *parents thought there has been no choice to influence.* There was consistency between the pairs of parents' responses. These have been cross-tabulated and summarised on table 8.1.

Table 8.1 Number and percent of parents reporting that the psychologist had/had not influenced their decision regarding primary school placement and theme of reason given for this.

Did psychologist influence primary school placement?	Yes	No	total
	21 *29.6%*	50 *70.4%*	71 [16] *100%*
Theme of reason given			
Parents wanted/sought professional advice from psychologist.	15 *71.4%*	-	15 *22.4%*
Psychologist was gatekeeper.	3 *14.3%*	2 *4.0%*	5 *7.5%*
It was the parents own decision.	1 *4.8%*	16 *32.0%*	17 *25.4%*
It was a teacher rather than the psychologist who influenced decision.	-	5 *10.0%*	5 *7.5%*
Negative attitude of the psychologist / unreasonableness of test.	1 *4.8%*	7 *14.0%*	8 *11.3%*
Other	1 *4.8%*	10 *20.0%*	11 *15.5%*
Parents felt there was no choice.	-	10 *20.0%*	10 *14.1%*

[15] This is not the same group who received copies of the psychological assessment. Seventeen of the twenty who had received copies of the psychologist's report responded that they had not been influenced by the assessment.

[16] N=71. Seven children had not been assessed by a psychologist before beginning primary school.

- ***Parents sought/wanted professional advice***

All fifteen of this group had responded that the psychologist's assessment(s) had influenced their decision about which primary school their children would attend. Four in this group spoke of a non-directive role the psychologist had played in informing them of alternatives and weighing the various factors which were important for their son/daughter. Two of their children were then enrolled in mainstream primary schools; the other two enrolled in special schools for children with mild learning disabilities. Some responses were:

> *There were many factors which influenced the choice. My marriage was breaking up and J's Dad disagreed with me. He thought J should go to a special school. We were also moving. The psychologist told me of a school that might be willing to take J. It had experience of another child who had Down syndrome. The psychologist said that the staff and especially the principal were amenable and supportive. I had to make contact myself. But, I would not have known of the school otherwise.*

> *I was of two minds at the time – the choice between special and regular education. But, it must have had some bearing at the time. Perhaps because the psychologist emphasised the negative side of her development and the difficulties I would face if she had to transfer from the local school to the special school. I was not going to accept a school for the moderately mentally handicapped. It was either ...* [school for children with mild learning disabilities] *or the local school. This I was sure of.*

The eleven other parents in this group reported that the psychologist had been more directive and had indicated which schools the children should attend. Eight of the children were then enrolled in special schools designated for students with moderate learning disability; two children enrolled in mainstream primary schools; one child went to a special care unit. Examples of their experience were:

> *The psychologist recommended that she go to ...* [special school for children with moderate learning disabilities]*. I did not know any other alternatives. As things were, I thought A would have been lost in a national school. She was very shy.*

The psychologist said that because of her speech, which was very poor, she should go to ... [special school for children with moderate learning disabilities]. *... I felt that they were telling me what was most suitable for her. I also was concerned about her health and heart condition.*

He told me that M was quite capable of mainstream school. That it would be best for him. Nevertheless, your decision in the end is your own.

- ***Psychologist was gatekeeper***

The responses of five parents indicated that the psychologist had been a *gatekeeper*. Three of them responded that the assessment had influenced their decision. Their three children were enrolled in special schools for children with moderate learning disabilities. It was their assessed ability range which determined the primary school placement.

When she was assessed as moderate that automatically meant that she would go to a moderate school. Mild children have a much more difficult time. They are in a more uncomfortable pigeon-hole. It was a relief that we would not have to put her through the regular schools. The special system suits me fine – she is happy and attaining what she is capable of.

In two other cases, although a decision to enrol the children in mainstream primary schools had been made, the psychologists' assessments were necessary for both children's enrolment. Typical of their experience was:

The national school was looking for a report. Without it she could not go. You always have to keep going after them. It is all very slow.

- ***It was the parent's own decision***

The responses of seventeen parents indicated that they believed that primary school placement had been their own decision. All but one of them responded that the psychologist had not influenced their decision regarding their

children's first primary school placement.[17] Five of the students were first enrolled in a special school for students with moderate learning disabilities; four in special schools for students with mild learning disabilities; and eight in mainstream primary schools. Regardless of the type of school, these parents seemed confident that they had made the best decision available to them. However, within this group there were subtle differences. Some representative examples of the parents' statements give an indication of the variation of priorities the parents held.

> *I went out and looked at the schools in the district and looked to see which one would best meet his needs.*
>
> [The psychologist] *really wanted A to go to the local school, but there were 30 in the class and even with some help from a remedial teacher, A would need more encouragement and support and special care. She was not very verbal or socially able enough to cope without more support. In the end she went to a special school for students with mild learning disabilities.*
>
> *We always had our mind made up about W's education. We were not going to send him to a school where he would not be taught.*
>
> *The psychologist did not outline options or give direction. We wanted her to go to school in her own community. The psychologist raised no objections.*

- ***Teacher rather than psychologist who influenced decision***

All five of the parents in this group had responded that the psychological assessments had not influenced enrolment. Four of these students went on to mainstream primary school; one went to a special school for students with moderate learning disabilities. Parents felt that the teacher who had worked with their children over an extended period had a valid estimation of the

[17] One parent said that they had been influenced in as much as it had encouraged their own preference for integration.

children's abilities. This seemed to be the case even when the psychologist had given a conflicting recommendation, as their examples indicate.

> *He* [the psychologist] *thought she was desperate that day and did not see any chance of her accomplishing anything in mainstream school. He suggested special schooling. Both preschool teachers thought there was a good chance she could cope with national school.*

> *She* [the psychologist] *was not very positive about mainstream education. She said that if we really wanted to try it we could give it a go. The preschool teacher who had worked with him thought that he would be able to benefit from mainstream education, for at least a few years.*

- ***Negative attitude of the psychologist / unreasonableness of the tests***

Seven of the eight parents in the group of parents who commented on the negative attitude of the psychologist or the unreasonableness of the tests, responded that psychological assessment had not influenced the school enrolment of their children.[18] Two of this group were first enrolled in special schools for children with moderate learning disabilities; one in a school for children with mild learning disabilities; and, four in mainstream primary schools. One parent bluntly stated her position.

> *I didn't feel that the assessment adequately showed his ability – so there was no reason to take it into consideration.*

Another commented on the arbitrariness of the categorisations used.

> *The psychologist was trying to persuade me to send her to...* [the specia] school for children with moderate learning disabilities]. *One day I noticed that her records had her as being 'moderately mentally handicapped' although she has always tested as 'mildly mentally handicapped'. When I questioned this, I was told that it was just for the database and it was because over time her IQ would drop and she would be in that category.*

[18] The one parent who had been influenced by the psychological assessment thought that the tests results had not reflected the development her son had made in the past two years.

Parents also expressed the opinion that the testing had been for the purpose of placing their children in existing contexts and not for the purpose of identifying their individual needs and abilities.

> *They were assessing her for the services they could provide, or rather those they were providing.*

- ***Other considerations more important***

The parents of six of the students responded that other considerations had been more important than the psychologists' assessments in their school placement decisions. One child was first enrolled in a residential school; the other six were enrolled in special schools for children with moderate learning disabilities.

Two parents mentioned transport as being the determining factor. One parent believed that her son's behaviour required that he attend a residential school. A mother thought that sending a child with learning disabilities to the local school would not have been fair to the other children in the school. One mother said that she was comfortable with the special preschool and wanted to stay in the same system. Another said that her daughter's health had been the prime consideration.

- ***There had not been any choice***

Ten parents responded that psychological assessment had not influenced their school enrolment decision because there had been no choice of schools. All their children were first enrolled in special schools for children with moderate learning disabilities. Representative comments from the group were:

I honestly did not know that he could go to an ordinary school. I believed that there was no other choice. I thought that if he went to a special school he would have one-to-one teaching, but it can be a different thing when he is actually there. He gets very little teaching.

At the time we felt the schools in the area were far from ready for integration. There was no other choice.

There was an assumption on the part of all the professionals that because there was a special school in the general area, she would be expected to go there.

While the majority of students had at least one assessment prior to school enrolment, fewer assessments were reported during school years. The study group's experience of psychological assessments during school years is considered next.

Psychological assessments during school years

Parents in this study were asked whether their son/daughter had been assessed since starting primary school, and if so, how frequently. They were asked whether they had been given copies of psychological assessment reports. They were again asked how they had felt about the assessments and whether the assessments had influenced their decisions about their son's/daughter's education.

In contrast to seventy-one of the parents (91%) who reported that their children had been assessed prior to primary school entry, only forty parents (52%) knew that their sons/daughters had been assessed by a psychologist since starting primary school. Seventeen students (22%) had one assessment; fourteen (18%) had two assessments; six (8%) had three assessments; and, three (4%) had continuous assessment. Of the other thirty-eight parents, no parent had refused assessment. Nineteen stated that

assessment had not been offered. Nineteen reported that there may have been assessment at school but that it had not been reported to them. The following are typical of the statements this group of parents made.

They may have it for their own use, but we are not involved.

If they do assessments, we are not part of the process.

The remarks of these nineteen parents were consistent, indicating that it was not just a case of a few parents missing something that they could reasonably have been expected to have known about. Eight of these students were born in 1982; six in 1986; and five in 1990. Seventeen of the students attended special schools for students with moderate learning disabilities, one attended a special school for students with mild learning disabilities, and one attended a special class for students with moderate learning disabilities. There were a similar number of males and females in this group. Table 8.2 details the number of assessments the parents knew about by type of school. Special schools and special classes of the same designation are combined in this analysis.

Table 8.2. Number of school psychological assessments reported by parents by type of school

Number of school assessments	Special schools / special classes N=53	Mainstream schools N=21	Total N=74 [19]
None reported [20]	35 *66.0%*	3 *14.3%*	38 *51.4%*
One assessment	8 *15.1%*	8 *38.1%*	16 *21.6%*
Two assessments	5 *9.4%*	6 *28.6%*	11 *14.9%*
Three or more assessments	5 *9.4%*	4 *19.0%*	9 *12.2%*

[19] N=74 Two students in the study born 1982 were not in school. Two students were in special care units. Type of school attending at time of interview is used in this analysis.

[20] This includes 19 students whose parents thought son/daughter might have been assessed but they had not been informed of it happening nor had they been given results.

Parents' feelings about school psychological assessments

Parents were asked to evaluate the school psychological assessments their sons/daughters had received. Of the forty parents whose sons/daughters had been assessed, four (10%) had found them to be *constructive*; eighteen (45%) *somewhat helpful*; six (15%) *unhelpful*; and twelve (30%) *other.*

- ***School psychological assessments constructive***

Three parents found the guidance given by psychologists regarding help they might give their sons/daughters, to be *constructive.* An example would be:

> *She indicated areas of development that I could work on.*

One parent spoke of the way the psychologist, in addition to formal assessments, had assisted her daughter's inclusion in a mainstream school. The mother highlighted his role as facilitator between principal, teacher and parent. No other parents mentioned that a psychologist had taken a similar role in supporting the students' integration into mainstream school.

> *The psychologist, in addition to yearly more formal assessments, observes in class and will liase with the teacher, principal and me on how we might manage her behaviour and how we might bring her along academically and socially.*

- ***School psychological assessments somewhat helpful***

Eighteen parents said that the psychologists' assessments during school years had been *somewhat helpful.* Most did not comment further. Three parents expressed an appreciation of evaluation of their sons'/daughters' development by a trained observer.

> *I ask for him to be assessed so that I can keep track of how he is doing.*

The parents of a boy who had a reading difficulty said that the psychologist had been puzzled that his reading was so far behind his language, but the assessment hadn't provided them with clarification.

- ***School psychological assessments unhelpful***

Six parents responded that the assessments had been *unhelpful.* While one couple wanted their daughter's abilities to be recognised, they needed a psychological assessment that matched what she could do on a daily basis.

> *Untrustworthy. Private assessment was more helpful. It was more honest. The school we were applying to did not believe the other assessment.*

Three other parents found the assessments had been disheartening, unfair or unexplained.

> *I was told that he was good for his age, but that he would not keep up as time passed.*
>
> *There were many things asked that she could have done if they had been asked differently. If they had given her more time they would have seen what she could do.*
>
> *I have no idea what the assessment was for. We were given a vague answer when we asked — a brush off.*

- ***Other reactions to school psychological assessments***

Twelve parents had *other* reactions to school psychological assessments. One did not comment. In two instances testing was done to establish eligibility for support services. Although it had been necessary for the allocation of resources, the benefit of the assessment was limited to the purpose for which it was carried out.

> *It was a formality. The purpose of the assessment was to establish the school's eligibility for additional teaching hours.*

Four parents expressed anger at not being informed of the results.

Annoyed, there was no response, no reaction, no report.

The mother of a young boy who had visual impairment found the test he had been given invalid because he had been tested with a measure designed for sighted children. This, the mother believed, had been unfair. One mother reported that the psychologist had insisted that she stay during the assessment. She believed that her presence in the testing situation had distracted her son. Three parents responded that while the assessments had not been very helpful the psychologist had been encouraging.

Parents given copies of school assessment reports

Of the forty parents whose sons/daughters had been assessed, twenty-four (60%) had never been given a copy of school psychological assessments; sixteen (40%) had received at least a copy of one assessment. Of these, only nine parents had always received a copy of assessments.[21]

Influence of psychological assessment on educational decisions

Parents were asked whether psychological assessments had influenced their decisions about their sons'/daughters' education. Sixteen parents (20%) reported that they had; sixty-two (80%) reported that they had not.[22]

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[21] Of the sixteen who had received at least one copy of an assessment report, thirteen of their sons/daughters attended a mainstream school, two were in a special school and one was not in school. Eight of those who always received a copy of the assessment report had sons/daughters attending mainstream schools. The son of another parent who had always received a copy of the assessment attended a special school. She said that she had specifically asked for a copy of the report.

[22] Parents also were asked whether at any stage a psychologist had given them an IQ score or an ability range for their sons/daughters. Forty-two (54%) said that they had. Most of them indicated that it was an ability range (i.e., *moderately mentally handicapped,* or *high functioning).* Of these forty-two, thirty said that the psychological assessments had not influenced their decisions about their sons'/daughters' education. Twelve said it had. This

Parents were asked to describe the overall influence of psychological assessments on their decisions about their children's education. The most frequent themes were: *the psychologist as advisor; the psychologist as judge*; *other considerations took precedence* over psychological assessment and, that it was *the parents' own decision.* [23]

- ***Psychologist as advisor***

Twenty parents described the role of the *psychologist as advisor*. The parents who saw psychologists in this role valued their contacts with them. However, only twelve of them said that school psychological assessments had influenced their decisions about the education of their sons/daughters. The following remarks contain elements referred to by other parents.

> *There were times that I thought J might not be doing well enough and worried that she might be better in a more specialised environment. It is hard to know. At those times the psychologist has reminded me of how much J has progressed and the skills she has learned.*
>
> *I could not do it on my own. It was always my decision, but I felt I needed professional advice. Now any problems that come up (especially now that he is becoming a teenager) are discussed with the psychologist. I am asked if I am aware of whatever and how I feel about it and what I think should be done. They take me seriously. Together we work for a solution. Sometimes it is not easy. Sometimes they have missed something, others I have. It is not easy, but I feel we are working together.*
>
> *When we took J out of ...*[school], *the psychologist was very helpful finding an alternative.*

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would indicate that being given an ability range or IQ did not greatly influence parents' decisions about their children's education.

[23] The researcher and the same two independent raters had again reviewed parents' responses and grouped them. Sixteen parents (21%) did not elaborate. All of these had reported that psychological assessments had not influenced their decisions. Three others believed the teachers' advice to have been more important than the psychologists', six believed the attitude of the psychologist or the unfairness of the tests had diminished the influence of the assessment, and three believed there were no educational choices.

- ***Psychologist as judge***

Six parents stated that psychologists had played a determining role in whether their sons/daughters could attend the school that the parents preferred. The three remarks quoted here illustrate the differing degrees of influence psychological assessment had on these parents' choices.

> *Only in as much as she had to be judged able enough for where she now goes.*
>
> *They prevented him from going to the school I thought he should transfer to. Because he scored an average of forty-nine on IQ tests, he was not eligible for the school for the mildly mentally handicapped. I still think it is the school he should have gone to.*
>
> *The psychologist knew what was available and just used the test to pigeon-hole the child. It is up to the parent to decide where he will be the happiest and his needs best met. I knew what I wanted for C, but the psychologist's assessment gave me few choices.*

- ***Other considerations took precedence***

Eleven parents indicated that other considerations had taken precedence when making decisions about their sons'/daughters' education. All the students in this group attended special schools designated for pupils with moderate learning disabilities. There was no evidence that these parents' decisions were not in agreement with the psychological assessments. Some reasons given were:

> *Our decision was based on R's hearing difficulties. R uses sign. He now understands a lot more, but his speech is still minimal.*
>
> *Because we were so far away from any special school, we considered sending him to the local national school. But because of his incontinence, no school would take him. Assessment was just part of entry to the special school.*
>
> *Not the psychologist, but our doctor [influenced the decisions].*

- ***Parents' own decision***

Thirteen parents reported that the decisions about their sons'/daughters' education had been their own. Parents indicated that their decisions were based on their experience of their other children, on advice sought from others and on basic beliefs. Some diverse examples were:

> *With our experience of being parents to six other children, we discovered T's levels ourselves. T is better than I had ever hoped when she was born she could be. We wanted her to be socially acceptable and had not expected that she would be able to read and write which she now does. We didn't realise how easy that would be.*
>
> *I did my own research, spoke to as many people as I could and found out what I could and then we made our decision.*
>
> *The psychologist thought she should go to a special school. I had decided that, if at the age of six I sent my daughter into a special school, I was closing doors to educational opportunities for her.*

Some parents in this study found psychologists to be valued members of support teams. However, infrequent contact with students and sparse reporting of assessment results to parents were frequent criticisms of the system of psychological services at the time of interview.

Summary

The two questions investigated in this section were: did the students in this study receive comprehensive and regular assessments; what role did psychological assessments play in assisting parent make educational choices and decisions for their sons/daughters.

Seventy-one (91%) of the students in this study had been assessed by a psychologist before beginning primary school. The mean age at first preschool assessment was 3.39 years of age. Sixteen percent of the parents

responded that preschool psychological assessment had been *constructive* for them; forty-seven percent responded that it had been *somewhat helpful*; seven percent responded that it had been *unhelpful*; twenty percent expressed their reaction to it using their own words. Some of the words used by parents to describe preschool assessment were: *upsetting*, *painful*, *discouraging*, and *puzzling*. Of the seventy-one parents whose children had been assessed at least once before enrolling in primary school, fifty-one (72%) had never been given a copy of the assessment report. Only eleven parents (16%) had always been given the report. Twenty parents (30%) reported that preschool psychological assessment had influenced their decision as to which primary school their children would attend. Fifty (70%) reported that it had not influenced their decision. The parents gave their reasons why this had been.

Fewer students had received psychological assessments during their school years. Forty parents (52%) knew that their sons/daughters had been assessed. Of the other thirty-eight parents, no parent had refused assessment; nineteen stated that assessment had not been offered, and nineteen reported that there may have been assessment, but it had not been reported to them. A significantly higher proportion of students attending special schools and special classes than mainstream schools had not been assessed by a psychologist to the best of their parents' knowledge. Of the forty whose sons/daughters had been assessed, four (10%) had found the assessments *constructive*; eighteen (45%) had found them to be *somewhat helpful*; eight (20%) found them to have been *unhelpful*; and ten (25%) had *other* reactions to the assessments. Of the parents whose sons/daughters

had been assessed, twenty-four (60%) had never been given a copy of the assessment report. Only nine parents had always been given a report. Sixteen (20%) of the parents reported that psychological assessments had influenced their overall decisions regarding their sons'/daughters' education. Sixty-two (80%) said that they had not.

Since the time of the study interviews, changes have occurred which have implications for the psychological assessment of students who have learning disabilities. On May 30th 2000, the Minister for Education and Science announced that fifty additional psychologists had been selected for appointment to the newly established National Educational Psychological Service that would begin its work by September, 1st 2000. The service is to be organised into the regions coincidental with the ten Health Board regions. A management committee of officials from the Department of Education and Science, the Department of Health and Children and representation from the Health Boards had also been established to be involved in the overall management of the agency. These developments indicate that psychological assessment and counselling services for students who have disabilities may improve in the near future.

In the next section, the pattern of school placement for Irish students who have Down syndrome will be considered, the decision-making process will be further explored, and the educational supports and services the students received will be analysed.

Chapter 9: School Placement

First enrolment in primary school

Over half of the students (53%) were first enrolled in special placements designated for pupils with moderate learning disability; one-third (35%) enrolled in mainstream primary schools, and twelve percent in special placements designated for pupils with mild learning disability. At the time of the interviews, seventy-seven percent were still in their initial educational placement.

Student variables of age, sex and health

The majority (75%) of the students first enrolled in primary school either at the age of five or six. The mean age of those enrolling in special schools designated for students with moderate learning disability was six months younger than the mean age of students enrolling in mainstream primary schools. Boys and girls enrolled in the different types of primary schools at similar ages. The type of schools in which the students were first enrolled, and their age at initial enrolment, is detailed in table 9.1.

Table 9.1. Type of school and age of students at first school enrolment.

Type of school	Frequency	Percent	Mean age enrolled	Range	Mode
Special school (moderate LD)	38	*50.7%*	5.13	4-8	5
Special class (moderate LD)	1	*1.3%*	4.00	4	4
Special school (residential)	1	*1.3%*	7.00	7	7
Special school (mild LD)	8	*10.7%*	6.00	5-8	6
Special class (mild LD)	1	*1.3%*	8.00	8	8
Mainstream primary	26	*34.7%*	5.65	5-8	6
Total [1]	75	*100%*	5.45	4-8	5

[1] N=75. Two of the students were placed in special care units and did not go to school. Another boy, who had severe visual impairment, had moved to Ireland from another country

In order to analyse the influence of key independent variables on first primary school enrolment, it was necessary to combine the types of school placement into three categories.[2] Special classes designated for pupils with moderate learning disability and special residential schools were combined with special schools designated for pupils with moderate learning disability.[3] Special classes for pupils with mild learning disability were combined with special schools designated for pupils with mild learning disability. The third category was mainstream primary schools. This consolidation was done with the knowledge that the types of school placement thus combined were not identical. Because of the possible interaction with typically developing peers, special class placement may be quite different from special school placement. However, because pupil to teacher ratios, resourcing policy and inspection for special schools and classes of the same designation were similar, it was considered more accurate to do so than to combine special classes with mainstream placement.

Using these groupings, the difference in the mean age of students who first enrolled in special schools/classes for pupils with moderate learning disability was significantly lower than the mean age of those enrolling in mainstream schools, or in special schools/classes for pupils with mild learning disability

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and was not in school in Ireland for more than a year even though he was of compulsory school age. The principal of the special school for students with moderate learning disability would not accept his enrolment until a classroom assistant had been assigned to him by the Department of Education and Science.

[2] Three types of school placement were represented by one student only. In order to facilitate analysis, these students were grouped with those attending the type of school that was judged to be most similar.

[3] The school attached to the special residential school was designated for pupils with moderate learning disability. Some of the pupils who attended this school were not residents.

(Anova p<.005). There was also a degree of difference between boys and girls in the first schools attended. Sixty-three percent of boys were enrolled in special schools/classes designated for students with moderate learning disability compared to just forty-three percent of the girls.

For each successive age group, there was a trend away from placement in special schools/classes designated for pupils with moderate learning disability. Of those born in 1982, sixty-three percent were first enrolled in special schools/classes designated for pupils with moderate learning disability; of those born in 1990, forty-three percent were enrolled in this educational placement. Table 9.2 gives the type of first primary school enrolment by student's year of birth.[4]

Table 9.2. Type of first school enrolment by year of birth.

Type of school first enrolled	Year of birth			
	1982 N=19	1986 N=28	1990 N=28	Total N=75
Special schools/classes (moderate LD)	12 *63.2%*	16 *57.1%*	12 *42.9%*	40 *53.3 %*
Special schools/classes (mild LD)	2 *10.5%*	4 *14.3%*	3 *10.7%*	9 *12.0%*
Mainstream schools	5 *26.3%*	8 *28.6%*	13 *46.4%*	26 *34.7%*

A broad measure of the degree to which health problems had impinged on the students' education has been reported in an earlier section. The parents had been asked to rate the extent to which health problems had interfered with their sons'/daughters' education. For those in school, forty-one parents (55%) had reported that health problems had interfered to some extent. Thirty-four parents (45%) had reported that health problems had *never* interfered. This

[4] Differences in type of first school enrolment by sex of student and year of birth were not statistically significant.

response, when cross-tabulated with type of first school enrolment, indicated that there was little difference in the proportion of students for whom health problems had *never* interfered with their education among the three groups of school placements. Table 9.3 reports the details of this finding.

Table 9.3. Type of first school enrolment by health problems interfered with education.

Type of school first enrolled	Health interfered with education to **some** extent. N=41	Health **never** interfered with education. N=34	Total N=75
Special schools/classes (moderate LD)	22 *55.0%*	18 *45.0%*	40 *100.0%*
Special schools/classes (mild LD)	5 *55.6%*	4 *44.4%*	9 *100.0%*
Mainstream primary schools	14 *53.8%*	12 *46.2%*	26 *100.0%*

Family variables

The county in which the families lived may have been an important variable in determining the type of school in which the students enrolled. In Dublin, forty-one percent of the study group enrolled in special schools designated for pupils with moderate learning disability, fourteen percent in special schools/classes designated for pupils with mild learning disability, and forty-five percent in mainstream primary schools. In Kerry, all the students attended special schools designated for pupils with moderate learning disability. In each of the other counties, the highest proportion of students began primary school in special schools/class designated for students with moderate learning disability. However, because of the relatively small size of the sample taken from diverse counties, statistical analysis by county was not possible. Appendix 11[5] details the type of school first enrolled in by county.

[5] Appendix 11. First primary school by enrolment by county.

The influence of family size and position in the family were considered. Sixty-two percent of children from larger families (four or more children) enrolled in special schools/classes for students with moderate learning disability compared with forty-two percent of children from smaller families (three or fewer children). Seventy-one percent of *middle* children in families enrolled in special schools/classes designated for pupils with moderate learning disability compared with forty-six percent of eldest/only children and forty-nine percent of youngest children.[6]

Parents' education level was considered. All the various types of school placements had students whose parents' level of education ranged from primary school to third level education. However, a higher proportion of parents (69% of fathers, 64% of mothers) who themselves had less participation in education, enrolled their sons/daughters in special schools/classes designated for students with moderate learning disability, compared with those (44% of fathers, 47% of mothers) who had more participation in education.[7]

The current employment of the mothers was analysed in order to explore its influence on school placement decisions. A higher proportion of the mothers who were at home (64%) enrolled their sons/daughters in special

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[6] Differences in type of school enrolment by family size, position in family, parent's level of education and employment status were all statistically not significant.

[7] See Methodology chapter for full explanation of these two categories. Parents who had primary education only or some secondary education were considered to have had limited participation in the educational system. Parents who had completed second level education or who had third level education were considered to have had full participation in the education system. It should be remembered also that there was a close match between the education levels of sets of parents.

schools/classes designated for students with moderate learning disability, compared with those who were employed either part-time or full-time (40%). Employment status for mothers in this study was closely associated with their level of education.

As all but four fathers in the study were employed or had retired, analysis by the variable of current employment status of fathers was not considered useful. Instead, analysis by social class was considered. Fathers' social class, as defined by the Irish Census (1996) occupation-based categories, was found *not* to be an indicator of first school placement.[8] Because of the relatively small size of the study sample, the group was divided into two categories: one group included professional (Class I), managerial and technical (Class II), and non-manual workers (Class III); the other included skilled manual (Class IV), semi-skilled manual (Class V), and unskilled manual workers (Class VI). It was found that there was little difference in the type of first school placement between the two groups. Table 9.4 details the students' first school placement by fathers' social class as defined by these criteria.

[8] Central Statistic Office (1998). *Census 1996, Volume 8, Education, Scientific and Technological Qualifications.* Appendix 9. Social classes — list of constituent occupations, pp. 130-135. Dublin: Stationery Office.

Table 9.4 Type of first school enrolment by fathers' social class as defined by employment.

Type of school	Social class		Total N=66 [9]
	Class I,II,III N=40	Class IV,V,VI N=26	
Special school/class (moderate LD)	22 55.0%	13 50.0%	35 53.0%
Special school/classes (mild LD)	5 12.5%	3 11.5%	8 12.2%
Mainstream	13 32.5%	10 38.5%	23 34.8%

The apparent contradiction between the finding that fathers' education was an indicator of first school placement, and that fathers' occupation-based social class was not, may be an artefact of the size of the study sample. Moreover, nine fathers could not be included in the analysis of social class. Four were unemployed, three were dead, and two had no contact with the family.[10] In these nine instances, five students were first enrolled in special schools designated for pupils with moderate learning disability, one in special school designated for pupils with mild learning disability; three in mainstream schools. In addition, it was noted that six of the seven fathers (86%) whose occupation was categorised as social class V first enrolled their children in mainstream schools.

Students' experience prior to primary school entry

The first primary school in which the students were enrolled was cross-tabulated by the type of last preschool the students had attended. Although the small number of cases in several of the categories did not allow for

[9] N=66. Four fathers were unemployed, five were not part of the family (three of these were deceased) and three of their children were not in school.

[10] In these nine instances, five students were first enrolled in special schools designated for pupils with moderate learning disability, one in special school designated for pupils with mild learning disability; three in mainstream schools.

statistical analysis, there were identifiable patterns of transfer. All students who had never been to preschool, or who had been out of a preschool educational programme for more than a year, went to special schools designated for students with moderate learning disability. The majority of students (85%) who had attended special preschools went on to special schools designated for pupils with moderate learning disability. Students who had attended either mainstream preschools or combined special/mainstream preschools went on to a variety of primary schools. Half of them went on to mainstream primary schools. The number and percent of students transferring to the various types of primary schools by type of preschool last attended is laid out in table 9.5.

Table 9.5. First primary school placement by type of preschool last attended.

First primary school	Type of preschool last attended				Total [11] N=75
	Special N=20	Mainstream or playgroup N=37	Special / Mainstream N=12	None N=6	
Special school/class (moderate LD)	17 85.0%	12 32.4%	5 41.7%	6 100%	40 53.3%
Special schools/classes (mild LD)	2 10.0%	6 16.2%	1 8.3%	*	9 12.0%
Mainstream primary	1 5.0%	19 51.4%	6 50.0%	*	26 34.7%

Other aspects of experience prior to primary school were explored to determine whether they might have been variables that influenced primary school placement. Adequate speech therapy during pre-school-years may have had long-term implications for educational possibilities. Of those who had not received adequate speech therapy during their first three years, fifty-

[11] N=66. Four fathers were unemployed, five were not part of the family (three of these were deceased) and three of their children were not in school.

nine percent went to special schools/classes designated for pupils with moderate learning disability, compared with eighteen percent who had not needed or received adequate early services speech therapy.[12] Fifty-seven percent of those who had either received no speech therapy, or who had needed more, during preschool years, went on to special schools designated for pupils with moderate learning disability, compared with forty-one percent of students who either had received adequate speech therapy, or had not needed it. This difference was statistically significant (p<. 05).

Another early experience variable was the support from an early services home teacher. Sixty-five percent of students who had *not* received the service of a home teacher, were initially enrolled in special schools/classes designated for pupils with moderate learning disability, compared with just twenty-six percent of those who had home teacher support. This difference was also statistically significant (p<.01).

The benefit of preschool, as reported by parents on the preschool benefit scale, was also an indicator of the type of primary school the students would attend. There was a statistically significant difference in the mean preschool benefit score between those who first enrolled in the different types of primary schools. Table 9.6 gives a comparison of the type of first primary school by mean preschool benefit score.

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[12] P<.05, however two cells (33.3%) had expected count less than 5.

Table 9.6 Type of first primary school enrolment by mean preschool benefit score.

Type of primary school	Mean preschool benefit score	Number	Std. Deviation
Special schools/class (moderate LD)	17.37	40	7.55
Special schools/class (mild LD)	22.11	9	4.08
Mainstream	22.38	26	3.71
Total *(Anova p<.005)*	19.68	75	6.53

Having analysed the patterns of first primary school enrolment, the question of whether the initial enrolment was that of their parents' first choice was considered.

Parental choice of first school enrolment

Parents were asked: "Was the first primary school placement for your son/daughter that of your first choice?" Fifty-one parents (68%) responded that it had been; twenty-four parents (32%) said that it had not.[13] In both groups there were students from all of the seven counties covered by this study. Eighty-one percent of parents whose children first attended mainstream primary schools reported that this had been their first choice, compared with sixty percent of those whose children attended special schools designated for students with moderate learning disability.[14] Differences in year of birth and sex of student were not significant. Of those who reported that the school of first choice had *not* been available to their sons/daughters, sixteen then went on to special schools designated for pupils with moderate learning disability;

[13] N=75 This does not include the two who were in special care units, nor does it include the boy with a visual impairment referred to earlier.

[14] Sixty-seven percent of parents of students who first attended special schools/classes designated for pupils with mild learning disability said that it had been the school of their first choice.

three went to special schools/classes for pupils with mild learning disability; five went to mainstream primary schools.

Parents who responded that the schools in which their sons/daughters had first enrolled had *not* been the school of their first choice, were asked to elaborate. There were three themes to their responses: there had been *no practical alternative*; there had been *insufficient resources* to support their first choice; and the school of first choice had *refused enrolment* to their sons/daughters.

- ***No alternative***

The responses of twelve parents indicated that the school in which they had first enrolled their sons/daughters was not what they would have chosen had there been an alternative. In two cases, parents felt that decisions were determined by *catchment-area* designations. Both of the children referred to below were first enrolled in special schools designated for students with moderate learning disability.

> *I would have liked her to have stayed at …* [the school where she had gone to preschool] *but we were not in the catchment area.*
>
> *I did not really have a choice. It is determined by where you live.*

Three parents reported that their choices had been restricted by the practical considerations of transport and other family considerations. One student enrolled in a special school designated for pupils with moderate learning disability, one in a special class for pupils with mild learning disability and one in a local mainstream primary school.

The local school would have been my first choice, but it was not possible. I would have preferred ... [another special school] *but she would have had to board there as no transport was provided. I did not want her to have to live away from her family so there really was not any choice.*

I would have liked him to have gone to ... [a special school designated for pupils with mild learning disability] *but it was too far away. It would have meant six buses. That was not possible.*

When the preschool closed, I felt he was not ready for formal primary school. Where I wanted to send him, the place that I thought suited his needs best, was a Montessori primary school in ... [another town] *but I could not get him there. The other children were very small, it was just physically impossible to do so.*

The responses of seven parents indicated that they felt there had not been a choice to make, that only the one possibility had been open to their sons/daughters. One student was enrolled in a private primary school. The other six went to special schools designated for pupils with moderate learning disability.

There was no choice. There was only one possibility. I had asked the local primary school if they would take him, but they said that the other parents would not like it.

There has been no other choice. What we want for B, and what he is getting at school, are not the same.

They talked me into it and I did not know that there were other options.

- ***Insufficient resources***

Six parents reported that there had been insufficient resources available in the school of their first choice to support their sons/daughters adequately. All six stated their first preference for mainstream school placement. However, five of the students went on to special schools designated for pupils with moderate learning disability, and the sixth to a special school designated for pupils with mild learning disability.

One parent articulated the dilemmas she had faced in making her decision, and the isolation and lack of support she had felt at the time.

> *In my heart I wanted to send him to the local school. I needed help. I felt there was no support for me when I came to make the decision. The other parents seemed to be fiercely sure that they had made the right decision – whatever they had chosen. I did not want to take him from his …* [special preschool friends] *and put him in a national school where he might be the subject of ridicule. I could not be sure that he would get the speech therapy he needed if he were to go to the national school. I did not want to send him to mainstream and then have to go back within a few months and say that I had made a mistake, and error of judgement, so begrudgingly, I left him where he was.*

The other five parents assessed that adequate supports were not in the schools, and also had reason to believe that additional supports would not be put into the school if their child was enrolled. One parent described her experience in this way.

> *I wanted to send him to the local national school. But, when I did some research, I found that it would not be possible. I knew he could not cope without more resources. There were to be fifteen other children in his class and twenty or more other children under the same teacher (thirty-five in all and two classes.) The remedial teacher was shared between four schools. I contacted the Inspector and asked if there was any chance that a resource teacher or more remedial teaching would be given if R went to the national school. The Inspector said there was no hope of that happening.*

- ***Enrolment refused***

Six parents reported that their sons/daughters had been refused admission to mainstream primary schools. In three of these instances, parents reported that it had been an outright refusal. Two of these children were then enrolled in special schools designated for pupils with moderate learning disability, and one in a special school designated for pupils with mild learning disability.

The principal in the national school refused to have him. He said the other children would jeer him because he was different. Then to make me feel better he said that really there was nothing for him in the national school; that he would be better in a school that could cope with him. A few years later, the parish priest said that if he had known, he would have done something. But it was too late.

I found it impossible to get him into any of the local schools, as they do not accept children with handicaps.

I would have preferred if she could have stayed near home for another year because of the dreadfully long day going to ... [town where special school located]. *But the local school refused straight out. They said that the classes were too large and that they would not be able to give her the attention she would need.*

Three other parents, having been refused admission to a mainstream school, applied to other local schools and eventually obtained mainstream enrolment. All three made reference to the national schools of different religious denominations.

One student, for whom the local (minority denomination) national school would have been the family's religious preference, was refused admission.

We approached the local [minority denomination] *national school. The principal was not happy to take her. His sister had Down syndrome and he told us that there was no way his sister would have coped with a class in his school, so there was no way our daughter would. We approached the other local school and she was accepted without any problem.*

Two other families, who were not members of the parishes, were also refused enrolment. Their experiences were similar, although they lived in different parts of the country.

The ... [minority denomination] *school refused. We were not members of the parish. The second school said that they would give him a month's trial, but that she (the principal) thought that it would not work. The third school, because of our postal address, thought that we were in their catchment area (though I don't think we are) and agreed.*

> *The local national school did not really want her. The principal did not refuse outright but was very negative and said that they had no resources and that R would be much better off going to a special school where they were used to children like her. Another local school, the ...* [minority denomination] *school, was also small but they turned her down. Never really said why. They kept us waiting for months and then said that the board of management had taken a vote and said no. I looked around the general area for a small school and approached the principal of the school near my sister who minds R while I am working. They were willing to give her a trial. They had previous experience of one child who had a learning disability.*

The majority (77%) of the students in the study continued their education in the placement they first attended.[15] Students who attend special schools usually continue in the same school from first enrolment until the age of eighteen.[16] Changes in school placement will be analysed next and the reasons why there was no change in the other students' school placements will be explored.

Changes in school enrolment

Eighteen (23%) of the students had more than one educational enrolment. In five instances, the change was a natural progression through the education system.[17] Three of the sixteen-year-olds had progressed from mainstream primary school to mainstream secondary school. Another student had moved from a special class designated for students with mild learning disability to a special class of the same designation in a secondary school. One twelve-

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[15] N=78. Students who were not in schools were included for this analysis as it was possible that they could be moved to a school programme.

[16] In Ireland, special schools are in reality special primary schools although students who attend them may be up to eighteen years of age. They are administered by the primary sector of the Department of Education.

[17] N=78. For this analysis no school enrolment was considered to be a type of educational enrolment.

year-old had moved from a junior primary school (co-ed) to a senior primary school (boys) with his age peers at the age of eight.

Two other transfers may also be considered not to be changes in type of school enrolment. One boy who had not been enrolled in an educational programme, was enrolled in a special school designated for pupils with moderate learning disability. Another transferred from one school designated for pupils with moderate learning disability to another of the same designation in the same city.

Eleven transfers in school enrolment may be considered changes in type of school placement. Two students transferred from schools designated for pupils with moderate learning disability to mainstream primary schools. One transfer was successful, the other lasted one year.

Two students transferred from special schools designated for pupils with mild learning disability to schools designated for pupils with moderate learning disability. Another student was unable to continue in a special school designated for pupils with mild learning disability because of serious health problems and has not been in an educational programme since the age of eleven.

Six students who started school in mainstream primary schools transferred to special placement. Four of them transferred to special schools designated for pupils with moderate learning disability; one to a special school designated for pupils with mild learning disability; and one to a special class of that designation. Three of these students changed schools within, or at the end of, the first year. Two of the other three spent two years in mainstream primary

school, the third transferred during the third year. A more detailed report of all eighteen changes can be found in Appendix 12.[18]

Before leaving the topic of school transfers, some of the students' experiences as reported by their parents are considered. By definition, most of these will highlight instances where there had been difficulties. The experiences of these students were not universal, but by considering the situations in which problems arose, ways of avoiding or preventing such problems may be elicited.

In one case, a student had transferred from one school designated for students with moderate learning disability to another in the same city after a year. His parents had found that the first placement did not meet his needs.

> *The class was very large. There were twelve children to one teacher. The child was put back into nappies because the teacher did not have time to toilet. They were not using sign language, which he needed because of his hearing problem.*

In this case, the family had an alternative special education facility available. It is unusual to have a choice of special school.

Two students transferred from special schools designated for pupils with mild learning disability to schools designated for pupils with moderate learning disability. School discipline had been an issue in both instances.

> *After four years I found J was not learning. The school was not suiting her. She did not even know how to write her name and had forgotten a lot of what she had known. I should have acted sooner. There were discipline problems in the school and on the buses.*

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[18] Appendix 12. Changes in school enrolment giving year of birth, sex of student, age of first enrolment and age of transfer.

> [When the family moved] *A stayed at the school she had been attending. However, many of the students had multiple problems and made it very difficult for the students to get enough help. There was a serious incident of bullying which left A terrified. We decided that it would be better to send her to a school nearer home that might not be as positive academically but it would be more gentle.*

Four students transferred from mainstream primary schools within a year of first enrolment. One mother, feeling that her daughter was being left behind by the others in the class, suggested to the principal that her daughter should transfer to a special class in another local school. The two principals concerned arranged the transfer as the mother had requested. Two boys transferred after a year from a mainstream primary to special schools.[19] Although the parents had been pleased with their sons' progress, the principals had requested that they transfer to special schools. Another boy's enrolment in mainstream primary school lasted three months. His mother analysed of the problems he had encountered:

> *M first went to a regular primary school for three months. They could not cope with him and he could not cope with them. There were twenty-seven in the junior infant class and the school did not have any experience. He did not feel happy and secure. They need to have the resources there from the beginning. A teacher's aide is necessary from the first day – all day. Especially if the school is just starting off (including students with disabilities). Maybe later they won't need as much help when everything settles, but they certainly do at the beginning or it doesn't work.*

Three other students transferred from mainstream primary to special schools designated for pupils with moderate learning disability after the infant cycle. Their experiences are similar. All three parents thought that their children had

[19] One transferred to a special school designated for pupils with mild learning disability, the other to a school designated for pupils with moderate learning disability.

benefited from participation in mainstream education. Two of the parents were relatively content with the transfer, the other parent regretted having done so.

> *I always felt that J would not continue forever in ordinary school. I knew he would not be able to keep up with the others and there was no extra help of any sort. Also, the junior infant teacher was very good. The senior infant teacher did not want him. For once I was diplomatic and said maybe he was not ready for senior infants. He had a second year of junior infants and then went to …* [special school].

> *The classes were very big, thirty plus. The teacher was very helpful, but S was not getting the attention she needed.*

> *The teacher* [first class] *in the primary school decided that she wanted to see what they did in special school. From that day on her attitude changed and she kept telling me that she really thought he would benefit from special education. She kept at me and I began to be unsure. In the end she convinced me that it was the best thing for R. In hindsight, I realise that it was an unmitigated mistake, but there is no going back.*

Only one girl transferred from a special school to a mainstream primary school. She had attended special school designated for pupils with moderate learning disability for four years. Her mother's reason for doing so was quite straightforward.

> *I wanted her to be with other students who were talking. I thought it would help her speech.*

The student has continued in mainstream placement for four years.

Students who did not change schools

Parents of the fifty-six students (77%) who had attended the same school since first enrolment were asked whether this was because they believed it was the right school for their child; or because there was no alternative; or because they believed that a change would not make a difference. Sixty-one percent responded that the student was in the right school. However, when

this group was divided between those who were attending special schools of any designation and those attending mainstream schools, a significant difference was observed ($p<.005$). Parents of ninety-three percent of those attending mainstream schools responded that their sons/daughters were enrolled in the right school, compared with just forty-nine percent of those whose sons/daughters were in special education.

Overall change in type of school enrolment

There was little or no movement from enrolment in special schools designated for pupils with moderate learning disability. Ninety-seven percent of those who started in this type of school continued to be enrolled in that type of placement.

There was more change of enrolment for those who first enrolled in mainstream primary schools. Seventy-seven percent of those who started in mainstream schools continued their education there. All those who completed primary mainstream school then went on to secondary mainstream placement. From the reports of the parents of those who started in primary mainstream schools and transferred to other placement, it appeared that little support had been provided to them in the mainstream setting. The following table (table 9.7) summarises the overall changes in type of school enrolment from first enrolment to enrolment at the time of the interview.

Table 9.7. The changes in type of school enrolment from first enrolment to enrolment at the time of interviews.

Type of school attending at time of interview	Type of first school enrolment			
	Sp schools / classes (moderate LD)	Sp schools / classes (mild LD)	Mainstream primary / secondary	Total in type of school at time of interview
Special schools / classes (moderate LD)	38 97.4%	2 25.0%	4 15.4%	44 60.3%
Special schools / classes (mild LD)		6 75.0%	2 7.7%	8 11.0%
Mainstream primary/secondary	1 2.6%		20 76.9%	21 28.7%
Total of first school enrolment[20]	39 100.0%	8 100.0%	26 100.0%	73 100.0%

Communication of decisions by schools

Approximately three-quarters of the parents reported that enrolment decisions had been communicated to them in good time (75%) and in a suitable manner (72%). Fourteen parents (19%) reported that they had disagreed with enrolment and/or class placement decisions. None of these parents believed that they had a course of appeal.

Only eight of the twenty-four parents for whom the initial enrolment was not their first choice, reported that they had disagreed with the schools' decisions. As one parent explained:

Once they have decided that she should not be there, there is no point.

Before concluding this section on choice of school enrolment, there is one final issue that will be considered. Parents were asked: *In choosing a school for your son/daughter, what do you consider to be most important*? Their

[20] N=73. Five students were not included in this analysis. Three were not in school at the time when first enrolment might have occurred. One of them was subsequently enrolled in a special school designated for students with moderate learning disability. Two additional students were not in school at the time of the interviews. One had first enrolled in a special school designated for pupils with mild learning disability, the other in a special school designated for pupils with moderate learning disability.

responses identified some of their priorities when making school placement decisions. Parents responded spontaneously to this direct question and were not prompted in any way.[21]

Parental priorities in school placement decisions

While parents placed different emphasis on what they thought important in selecting a school for their sons/daughters, they frequently expressed shared desires and expectations, regardless of the type of school their children attended.[22] Although the responses have been grouped by central theme for analysis, many of the parents' responses contained elements of more than one theme.[23] The themes that occurred most frequently were: *class size, individual attention and special activities* (18%); *happiness and protection of the student* (17%); *attitude of teachers and ethos of the school* (17%); *social inclusion* (13%); *learning and broad curriculum* (13%); and *non-academic learning (social skills, self-help and independence development)* (9%). Other themes expressed were: *acceptance of student* (4%); *health concerns* (3%); *transport considerations* (3%); *continuity of the students' learning experience* (3%).

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[21] For this question it was judged that the non-prompted answers of the parents would be more spontaneous and yield more original information than if various factors were presented to parents for their agreement/disagreement. Because of this, the fact that parents did not mention a factor should not be interpreted to mean that they did not think it important. What they said was what was uppermost in their minds at the time of interview.

[22] In this analysis the type of school the students were attending at the time of the interview was used.

[23] Responses were grouped according to the theme judged to be central to the parents' statements. Responses were read and common themes identified. Consensus regarding the central theme of each response was obtained between the researcher and the two independent raters.

- ***Class size, individual attention and special activities***

The fourteen parents who prioritised class size, individual attention and special activities, sought conditions that would not be available in most mainstream schools under present conditions. The majority of the parents, whose responses were judged to belong to this category, enrolled their children in special schools designated for pupils with moderate learning disability. All but two of the students in this group were enrolled in special educational placements.[24] The following three responses are examples of what this group of parents thought was important for their children.

> *The class size was small and the teachers had assistants. There was bus service provided. I felt that she was going to the ...* [religious order of nuns] *and that they would be kind and good to her.*
>
> *I felt that there would not be enough resources at the local school to meet his needs. The special school would be familiar with his needs, the teachers there would have special training and there would be concentration on social skills.*
>
> *There is a good mixture of activities in the school. They spend their day doing a lot of active things. He would not be able to sit all day. He has his gym and his swimming. Those are the things which mean a lot to him.*

- ***Non-academic learning (social skills, self-help and independence development)***

Closely aligned to the first group of responses were those of the seven parents who indicated that they sought a curriculum not usually available in an ordinary school placement. All these students were enrolled in special

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[24] Eight students were in special schools designated for pupils with moderate learning disability, two in special schools designated for pupils with mild learning disability, one in a special residential school, one in a special class designated for pupils with mild learning disability, and two were in mainstream primary schools. There were seven boys and seven girls. Six were born in 1990, seven in 1986, and one in 1982.

education.[25] There were differences within this group regarding the type of learning the parents thought their children capable of mastering, and the amount of academic performance that should be expected of them.

> *I did not want her to go to the local National School where she might be ostracised especially as the years went on. She needs the smaller classes and extra help. She does not have to learn Irish which I would not have considered any use to her. She will learn cookery and extra subjects which she would not learn in the ordinary primary school. The school is less academically geared which suits her.*
>
> *I want the school to give her independence and social interaction. Academic learning will come if it is there. I don't believe in pushing children like R. They need to be helped work at their own level.*

There were also differences in what the parents expected the school to provide to students at different ages. The first parent's comments refer to an eight-year-old, the second to a twelve-year-old.

> *They are working very hard. She is not just being left there. They are teaching her to take care of her things, to wash her hands, hang her coat, mind her lunch box.*
>
> *That she will be able to look after herself. They are able to get through to her better than I can. She can well look after herself and do what is asked of her. She can do the washing up and things around the house. She is learning money so she can go shopping.*

- ***Broad curriculum learning***

The responses of the ten parents in this group indicated that they held higher expectations of the students and the learning opportunities that should be

[25] Two students were enrolled is special schools designated for pupils with mild learning disability, five were in schools designated for pupils with moderate learning disability. Two students were male and five female. Two were born in 1990, four in 1986, and one in 1982.

provided for them.[26] For this group there was more emphasis on academic attainment, particularly on literacy.

> *That she would learn to read and write and be able to take care of herself. A school that would bring her to her potential. That she would develop social skills, know right from wrong.*
>
> *I want him to learn to be independent, to learn to read, to handle money, to get as much potential out of him as I can, to bring out the best that is in him as far as possible.*

The value of the use of technology to support learning was mentioned by two of the parents. However, from the parents' comments it would seem that they were referring to an ideal, and that the schools their children attended were not using computers in their programmes.

> *Learning social skills is important, but I would like him to have access to computers. I would like him to read – he should be good enough to be able to learn to read.*
>
> *I think a school should be progressive thinking. They should be looking at helping the child reach his/her potential with whatever means they can. They should be looking at what is happening in other countries and be willing to try new ideas. Here they seem to be stuck in a rut. Even the terminology is ancient. They should have, and use, modern technology.*

The parents' belief that their sons/daughters were capable of continual learning, and that they expected the school to provide adequate learning opportunities, was clear from the responses of several parents.

> *That he be given a chance and opportunity to learn and be prepared to do a useful job after he leaves school.*

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[26] Two students were enrolled in special schools designated for pupils with mild learning disability; five in special schools designated for pupils with moderate learning disability, one in a special class (primary) designated for pupils with moderate learning disability; one in a special class (secondary) designated for pupils with mild learning disability; one was in a mainstream secondary school. There were seven males and three females. Two were born in 1990, five in 1986, and three in 1982.

A happy on-going education programme. I want T to be happy to go to school. I want her to be happily and constructively occupied and learning.

I want W in school for learning. We don't want minding for him. We can mind him ourselves. What we want from the school for W is education. Otherwise we are all just wasting our time and his.

- ***Social inclusion***

Five of the ten students whose parents' responses indicated that they believed social inclusion to be important in choosing a school, attended special schools designated for pupils with moderate learning disability, while five attended mainstream primary schools.[27] Two of the students attended a special school which, although it was self-contained, was on the same campus as a mainstream primary school. Their parents believed that this was an important consideration.

I like that the special school is part of the national school and that there is mixing with the other children.

That it be a school where she will develop social graces – that she will be integrated with other students – that there would be an experiential approach to learning – a place where they will give her some responsibilities.

Three other parents believed that social inclusion was important, but that it had not been available to them.

If I had a choice, I would have put him into the national school where the others went, so that he could be with the neighbourhood children.

I would have wanted mainstream experience for him so that when he leaves school at eighteen he would not be outside the circle. I would want him to be included in a range of activities. I would like him to be seen as the same as others, even if he was not as academically able as others might be.

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[27] There were six males and four females in this group. Four were born in 1990, four in 1986, and two in 1982.

The social aspect of being in her own community and being part of it. M is in school twenty-five miles away from her own community and that has bugged me all my life.

The five parents in this group, whose sons/daughters attended mainstream schools, responded that their children's non-segregation from the neighbourhood community was an important consideration in their school placement decisions.

The school had to be in the local community. We wanted C to go to the same school as the other children in the family. Fortunately the local school was open to the idea, provided they had the backup they needed to support C.

The most important thing for us was that he would be where the local children would be. It was the school that our other children had attended and were attending. We didn't want him to be separated from everyone else.

Maybe I should answer this the other way round. I feel that it is not natural and very negative to send a child to a special school to educate them with only other children who are disabled. It deprives them of their right to grow up in a normal environment. How does any child learn? They learn from what they see around them. If any of my other children had been sent to a special school, I wonder how they would have come out. If she went to a special school she would be on a bus for at least three hours per day. She would have no time or energy left for family or community life.

- ***Acceptance – being wanted***

Three parents gave short emphatic statements that they had believed it important that the chosen school would want their sons/daughters to be part of their school community. All three students were enrolled in mainstream schools.[28]

A school that would accept him. That would say YES!

---

[28] There were two boys and one girl in this group. Two were born in 1990, one in 1986.

- ***Health***

More than half of the parents, regardless of type of school placement, had reported that heath problems had interfered with the education of their sons/daughters at least to some extent. Yet, only two parents indicated that health problems determined their school placement decisions.[29] In one case, chronic Hirschsprung's disease caused toileting difficulties; in the other, a serious heart condition determined the placement.

- ***Transport***

Transport issues were also infrequently mentioned as the most important element in determining choice of school. Only two parents indicated that it had been. In both cases the parents enrolled their son/daughter in the special schools to which transport was provided.[30] If transport had been available to another special school, they would have preferred an alternative school.

- ***Continuity of services provided***

It had been considered that parents might have concerns about the effect of school placement on post-school-leaving job training and employment. The responses of this study indicate that such concerns were not considered to be important with only two parents giving it priority.[31]

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[29] There was one boy and one girl in this group. Both had been born in 1990.

[30] Both students attended special schools designated for pupils with moderate learning disability. One was male, the other female. They were both born in 1982.

[31] Both students attended special schools designated for pupils with moderate learning disability. There was one boy and one girl. One was born in 1990, the other in 1986.

- ***Happiness / protection of the student***

All the thirteen parents whose responses fell in this category had enrolled their sons/daughters in special schools designated for pupils with moderate learning disability.[32] To some extent, the responses reflect the parents' perception of the inability of mainstream schools to accommodate individual difference as much as they comment on the students' individual learning needs.

> *That the teachers would understand him and not leave him behind – that he would not stand out as being different. He needs small classes, individual attention.*
>
> *A place that would understand him and not lose their temper with him, because he can be frustrating. I would hate it if anyone would run him down or laugh at him. I would hope they would find something that he was interested in and that he could do.*
>
> *It is the only school she is eligible for. That she would be safe and occupied. That she would be wanted in the school.*
>
> *The homely atmosphere of the school, the staff – that the children are happy and like going to school. There is no drilling or pressure.*
>
> *That he would fit in and not be different from the other students.*
>
> *That he would learn as much as he could and that he would be safe and well looked after.*

- ***Attitude of the teachers / ethos of the school***

All of the thirteen students, whose parents' responses fell into this category, had or were attending mainstream schools.[33] Two of the students had started in mainstream primary schools but had transferred to special schools designated for pupils with moderate learning disability. Their parents felt that

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[32] There were seven males and five females. Six were born in 1990, two in 1986 and four in 1982.

[33] Five were male and eight were female. Four were born in 1990, five in 1986, and four in 1982.

the interest and attitudes of the teachers, especially the principal teacher, determined whether mainstream placement would be successful or not.

> *A school where he would have the support of the full staff especially the headmaster. If the headmaster is fully supportive, the rest of the staff come along. A place where he would not be left sitting. A place where he would be progressing at his own pace.*
>
> *The teachers' interest. If the teachers are not interested or see the child as a problem, it won't work, no matter how much effort you put into it.*

Seven of the students had started in mainstream schools and had continued in that placement. Another had transferred to mainstream school. Three of their parents specifically referred to the fact that they had been familiar with the school because it was where brothers/sisters had been educated.

> *The fact that our other two sons were there – that the principal approached me – that I was comfortable with the school – that I knew the teachers.*
>
> *We wanted her to go to the same school as her brothers so that she would be part of the local community. The teachers were very positive although they were unsure of what they would need to do. We knew so many of the teachers and felt we could speak with them and they with us. We knew we would need co-operation and support from the teachers as there was so little support otherwise. They gave us lots of support. At first, there was a difference between what the teachers thought we expected, and our actual expectations for her progress. As the teachers came to understand our expectations, they relaxed more.*
>
> *It was the same school her sister had gone to. The school was welcoming. They said they would fit her in the same as any other child in the area.*

Parents of the other five noted that the attitudes of teachers influences the success of the school placement.

> *The main factor is the willingness of the teaching staff to go that extra mile to meet her specialised needs in a "normal" environment. And that the emphasis not be on academic success as such, but on J's willingness to learn and the progress she is making within her own abilities.*

The teachers have to be willing to help her, to understand her. Once the teachers are willing to help, and the principal of course, the other children get to know her in the classroom.

Two of the students whose parents' responses emphasised the importance of the attitude of teachers and the ethos of the school, had started in mainstream primary school and had progressed to mainstream second-level education. Their parents commented on what had been important in making their choice of secondary school.

When it came to choosing a secondary school, there were more alternatives. We chose the school I had gone to and knew many of the teachers. I felt they would look out for her. Her friends from primary school were going there. It was near. It was an all-girls school with a gentle atmosphere.

The ethos of the school - in primary school, it was a multi-denominational school that believed in all children together. Though we had to open their minds to children with learning disabilities. Now (in second level), a broad experience, varied experiences - information going in, in ways other than just reading. It is an imaginative education.

The mother of one student, who had attended both special and mainstream schools at different times, and at the time of the interview was not in school, spoke of the importance of the willingness of teachers to accept a student if inclusive education is to succeed.

Co-operation from the teachers – a willingness on their part to accept him. If you have that, everything else follows. There is much more to education than book learning and exams. A school is a life-skills environment and a child should have a chance to learn in his own hometown. It can't be done far away with people he never sees otherwise. This is true especially for kids like E. Also, it is important for the other students that E is part of their world. The Constitution gives E a right to an education and a right to us to choose the school, but the Department won't provide a [support] *teacher so that this can happen.*

Summary

In this section, the type of schools the students initially attended was identified and patterns of school placement described. Subsequent changes in school enrolment were reported, and parental priorities in making enrolment decisions were explored.

More than half of the students (53%) in this study were first enrolled in special placements designated for pupils with moderate learning disability; approximately one-third (35%) enrolled in mainstream primary schools; and twelve percent in special placements designated for pupils with mild learning disability. The majority of the students were first enrolled in primary school at the age of either five or six. Boys and girls entered the different types of primary schools at similar ages. There was a larger proportion of boys (63%) than girls (43%) initially enrolled in special schools/classes designated for pupils with moderate learning disability. The mean age of enrolment for students in special schools designated for pupils with moderate learning disability was significantly lower than that of those enrolling in mainstream schools or special schools designated for pupils with mild learning disability. For each successive age group, there was a trend away from placement in special schools designated for pupils with moderate learning disability. For the study group, the presence or absence of health problems was not an indicator of type of school enrolment.

Students living in Dublin had a wider range of school placement than did those living in other counties. Children from larger families, those in the middle of family constellations, and those whose parents had less

participation in education themselves, were more likely to attend special schools designated for pupils with moderate learning disability.

A higher proportion of mothers who were at home enrolled their sons/daughters in special schools designated for pupils with moderate learning disability, compared with those who were in either part-time or full-time employment. There was little difference in type of school placement by fathers' occupation-defined social class.

All students who had not been in a preschool programme, and eighty-five percent of those who had attended a special preschool, were then enrolled in special schools designated for pupils with moderate learning disability. Half of the students who had attended a mainstream preschool went on to mainstream primary schools; thirty-two percent went to special schools designated for pupils with moderate learning disability.

Adequate pre-primary-school speech therapy and the support of an early services home teacher were found to be variables that may influence the type of primary school placement. The benefit of preschool was also an indicator of the type of primary school the students would attend.

Fifty-one (68%) parents reported that their child's first primary school placement had been their first choice. Twenty-four (32%) reported that it had not been. Twelve parents believed that there had been no real choice available; six parents that there had been insufficient resources to support their first choice, and six that the school of first choice had refused to enrol their sons/daughters.

Fifty-six students (77%) in this study continued their education in their initial placement. The parents of these students were asked why there had been no change. Parents of ninety-three percent of those attending mainstream schools responded that it was because their sons/daughters were enrolled in the right school, compared with just forty-nine percent of those whose sons/daughters were in special education.

Eighteen students (23%) had more than one educational enrolment. Five of these changes were natural progressions through the education system. Two others were also not considered to be changes in type of school enrolment. Eleven students changed type of school attended. Two students transferred from schools designated for pupils with moderate learning disability to mainstream primary schools. One was successful, the other lasted one year. Three students transferred from schools designated for pupils with mild learning disability; two went to schools designated for pupils with moderate learning disability, and one remained out of school. Six students transferred from mainstream placement to special placement. It was the experience of this group of students that, with one exception, all students who changed type of school enrolment transferred to *more restrictive* learning environments.

School enrolment decisions were based on a variety of parental priorities and situations. Class size and individualised activities; the happiness and protection of the student; the attitude of the teachers and school ethos; social inclusion and curriculum issues were cited as important considerations.

Chapter 10, Profile of the Schools and Analysis of In-School Learning Support Personnel

At this point it may be helpful to recall the characteristics of the study sample. There were seventy-eight students, forty males and thirty-eight females. Twenty of the students were sixteen-year-olds, twenty-eight were twelve-year-olds and thirty were eight-year olds. At the time of interview, forty-three (55%) were attending special schools designated for pupils with moderate learning disability; one was in a special class of that designation, and one was in a special residential school. Six (8%) were attending special schools designated for pupils with mild learning disability and two were in special classes of that designation. Twenty-one students (27%) were in mainstream schools. Four (5%) were not enrolled in any school programme.[1]

In this chapter, the various types of school are described in terms of enrolment, number of teachers, and teacher:pupil ratios. The Department of Education and Science Statistics Unit supplied the information regarding school enrolment and number of teachers but could not supply information regarding class-size and in-school learning support personnel for an individual student. It was therefore necessary to rely on parents for this information.[2] The additional learning support personnel parents believed their

[1] Two of these were attending care units provided for by the Department of Health.

[2] Data regarding the number of administrative principals attached to special schools was not available from this source, only the number of classroom teachers. The Department (Special Education Section, Athlone) informed the researcher that it was policy for all special schools with four or more teachers to have an administrative principal. The Department of Education and Science Statistics Unit provided enrolment data on the three secondary schools. The author obtained this information. In calculating pupil:teacher ratios, all teaching staff, including principals, remedial teachers and special class teachers attached to the school were included.

sons/daughters required was also considered.[3] Since the study is based on what parents believed occurred at school rather than on systematic observation of school practice, there may be a divergence between perceived and objective reality.

Special schools designated for pupils with moderate learning disability

Of the seventy-eight students in the study, forty-three students, (55%), attended seventeen special schools designated for pupils with moderate learning disability.[4] In this group there was a higher proportion of male students (65%) than female students (45%) and also a higher proportion of sixteen-year-olds (65%) compared with twelve-year-olds (57%) and eight-year olds (47%). The proportion of students in special schools designated for pupils with moderate learning disability by county of residence ranged from forty-three percent in Dublin to one hundred percent in Kerry. Of the seventeen special schools, seven were located in Dublin; three in Cork; two in Kerry; and one each in Wicklow, Meath, Kildare, Galway and Limerick. The number of students enrolled ranged from twenty to one hundred and twenty-eight (mean=79.2). The number of teachers per school ranged from three to

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[3] In this section the school situations of students attending special schools or classes of a given designation will be described separately in order to record differences. However, when summarising the information and making comparisons, the data for special schools and classes of the same designation will be combined into the categories that have been used in previous sections. The categories were: special schools/classes designated for pupils with moderate learning disability; special schools/classes designated for pupils with mild learning disability; mainstream primary and secondary schools; not in school. Percentages in this section are based on the entire study population (N=78) unless otherwise stated.

[4] Special schools designated for pupils with learning disability may enrol students from the age of four to eighteen. In some cases there was a demarcation between the *junior* and *senior* sections of the school, but generally they were on the same campus, used the same facilities and shared school transport.

nineteen (mean=11.3). The ratio of teachers to pupils ranged from 1:5.6 to 1:8 (mean=1:7)

However, teacher:pupil ratios include all teaching staff (administrative principals, remedial teachers and resource teachers). Class size is usually larger than the teacher:pupil ratio, and can vary between classes in a school. It was necessary to rely on parents for this information. Thirty-seven parents reported the number of students they believed were in the students' classes. Six were unsure of the class size. The reported mean class size was 8.9. The mean class size for sixteen-year-olds was 10.5; for twelve-year-olds it was 8.5; for eight-year-olds it was 8.0 indicating that schools tended to allocate more teaching staff to the younger students.

Learning support personnel reported for students in special schools designated for pupils with moderate learning disability

Parents had been asked: *At school, in addition to the classroom teacher, what teachers and other learning support personnel are involved with your son/daughter?* It was recognised that classroom teachers engage in a wide variety of curricular activities including physical education, music, art, drama and home economics. The purpose of the question was to ascertain the diversity of persons, in addition to the classroom teacher, who were involved in learning activities with the students.[5] The most frequent responses were that there was a classroom assistant (34 students) or a physical education

[5] Parents may not have been aware of all personnel who were involved in learning activities with their children. However, the fact that the parents knew of the involvement, indicated that it had some impact on the students' learning situation. This would apply to all the types of school placement that were investigated. The amount of involvement and the effectiveness of the additional learning support staff are beyond the scope of this study.

instructor (29 students). Other personnel reported were speech therapists, sports coaches, music teachers, speech/language/drama teachers, and home economics teachers. The eldest group, while in larger classes, had more contacts with diverse learning support personnel. The mean number of additional learning support personnel involved with the sixteen-year–olds was 4.2; for the twelve-year-olds it was 2.8; for the eight-year-olds it was 2.6. Table 10.1 details the reported number of additional learning support personnel for students in these schools by age and sex of student.

Table 10.1. In-school learning support personnel, additional to classroom teachers, reported by parents of students attending special schools designated for pupils with moderate learning disability, by sex of student and year of birth.

Learning support personnel	1982 N=13		1986 N=16		1990 N=14		Total N=43
	Male N=9	Female N=4	Male N=8	Female N=8	Male N=9	Female N=5	F=17 M=26
Classroom assistant	7	4	6	5	8	4	34
Physical educator	8	1	7	6	5	2	29
Speech therapist	6	1		2	4	3	16
Sports coach [6]	4	1	2	3	1	1	12
Music teacher	3	1	2	2	2	1	11
Home economics teacher	5	4	1	1			11
Speech/language/drama [7]	2		3				5
Dance teacher			1	2			3
Personal development	1	2					3
Physiotherapist	1				1		2
Principal					2		2
Team teaching	1			1			2
Computer instructor			1				1
Psychologist					1		1
Visiting teacher					1		1
Other	2				1	2	4
Total number of additional learning support personnel	*40*	*14*	*23*	*22*	*25*	*12*	*136*
Mean number of additional learning support personnel	*4.4*	*3.5*	*2.9*	*2.7*	*2.8*	*2.6*	*3.2*

Three types of learning support personnel were considered in greater detail: classroom assistants, speech therapists, and computer instructors.

[6] Only one student who did not have a physical education instructor had another type of sports coach. Sports coaching was in addition to physical education instruction for the others.

- ***Classroom assistants***

Parents were asked: *From what you know about your son's/daughter's present class situation, do you think a classroom assistant is necessary*? For this group of students, forty parents (93%) responded that a classroom assistant was necessary, one parent was unsure, and two parents said that a classroom assistant was not needed. Thirty-four parents (79%) said that there was a classroom assistant. Of these, twenty-seven were reported to be full-time in the classroom; two were part-time; five parents were not sure whether the assistant was full-time in the classroom.

- ***Speech therapy***

Sixteen parents (37%) of students attending special schools designated for pupils with moderate learning disability reported that a speech therapist was involved in their sons'/daughters' educational programme at school. Twenty-seven (63%) did not. At the time of interview, students in the middle age group were receiving less speech therapy than those in the younger or the older groups.[8]

As this question related only to the situation at the time of the interview, parents also were asked about the amount of speech therapy their sons/daughters had received during their school years. Six parents (14%) reported that there had been *adequate* speech therapy. Thirty-three (77%) reported that the student had *received some therapy but had needed more*.

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[7] Four of the five who had speech/language/drama teacher also had speech therapy. This was additional and not an alternative form of speech therapy.

[8] Differences in amount of speech therapy was not statistically significant by sex of student, but it was by year of birth. ($p<.05$).

Four parents (9%) reported that the student had *needed but had not received any speech therapy*.[9]

Forty-one of the students in this group were using speech as their means of communication. Two were using sign. Parents were asked whether their son's/daughter's speech was understood at home, at school, by strangers and on the telephone. The question whether the student was understood on the telephone was asked because it is sometimes asserted that young people who have Down syndrome rely on non-verbal gesture to augment the words that they are saying.

Table 10.2 lists the parents' responses to the questions on speech intelligibility for this group of students.

Table 10.2. Parent rating of speech intelligibility of students attending special schools designated for pupils with moderate learning disability. (N=41)

	Usually	*Sometimes*	*Rarely*
Speech understood at home	37 *90.2%*	4 *9.8%*	0 *0%*
Speech understood at school	33 *80.5%*	7 *17.1%*	1 *2.4%*
Speech understood by strangers	8 *19.5%*	27 *65.9%*	6 *14.6%*
Speech understood on telephone	23 *56.1%*	9 *22.0%*	9 *22.0%*

All eight students whose speech was usually understood by strangers were also usually understood on the telephone. Of the twenty-seven who were only sometimes understood by strangers, fifteen were usually understood on the telephone, and only four (15%) rarely understood.

This finding would indicate that improvements in face-to-face speech might be possible for those who were only sometimes understood by strangers, but

[9] Differences in parents assessment of the adequacy of speech therapy by sex of student and

usually understood on the telephone. Parents of only two of these students reported that they had received *adequate* speech therapy. Nine of the students had *received some therapy*, but their parents believed that they had needed more. All four of the students who had *needed but who had not received speech therapy* were in this group. At the time of interview, only five of the fifteen in this group were receiving any speech therapy and none of their parents reported a school speech/language/drama coach.

- ***Computer use / instruction***

Thirty-seven parents of this group (86%) reported that there was a computer in the special school their sons/daughters attended; four parents (9%) said that there was not; two parents (5%) were unsure whether or not there was a computer in the school.

Nineteen parents (45%) reported that there was a computer in their son's/daughter's classroom; seventeen (41%) said that there was not; and six parents (14%) were unsure whether or not there was a computer in the classroom.

Only four parents (9%) reported that their sons/daughters *frequently* used computers in schools; thirteen (30%) used computers *sometimes*; four (9%) *seldom* used computers; and fifteen (35%) *never* used computers. Seven parents (17%) were unsure whether or not the students used a computer at school. Only one parent reported that there was a person, in addition to the classroom teacher, who supported computer use in school.

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year of birth were not statistically significant.

Additional in-school learning support personnel needed in special schools designated for pupils with moderate learning disability

Parents were asked whether they believed that there was sufficient in-school learning support personnel for their sons/daughters. Ten parents (23%) responded that there was. Thirty-two (74%) believed that additional learning support personnel were needed. One parent was not sure.

Parents were then asked what other learning support personnel their sons/daughters needed at school. Table 10.3 records the *additional* personnel the parents believed were required.

Table 10.3. ***Additional*** *in-school learning support personnel believed by parents to be required in special schools designated for pupils with moderate learning disability, by sex of student and year of birth.*

Learning support personnel needed	1982 N=13		1986 N=16		1990 N=14		Total N=43
	Male N=9	Female N=4	Male N=8	Female N=8	Male N=9	Female N=5	M=26 F=17
None	*2*			*3*	*2*	*3*	*10*
Unsure				*1*			*1*
Speech therapist	2	3	6	3	3	2	19
More teacher time	3			1	5	1	10
Computer instruction	5		2	1			8
Music instruction	1		3	2	1		7
Classroom assistant			1		2		3
More academic instruction		1	1	1			3
Physical skills instruction			2				2
Other children				1	1		2
Other [10]			1	1	1		3

Parents' descriptions of the additional supports they believed were needed give contextual meaning to the above figures. Some of their comments have been selected as illustrations.[11] Among the issues raised were speech

[10] 'Other' were one each of speech and drama coach, social development instructor and psychologist.

[11] Most of the parents listed more than one additional learning support person that they thought was necessary. In order to preserve the integrity of the parents' comments, the statements are reported in their entirety.

therapy, teacher time, classroom assistants, academic learning, computer use, and music instruction.

- ***Speech therapists***

Additional support from speech therapists was identified as a need by nearly half of the parents of students in special schools designated for pupils with moderate learning disability. One parent described it as a "gaping hole in the system". Several parents expressed the opinion that what was needed was frequent, regular and continuous support for their sons'/daughters' language development. The need for guidance to enable parents to assist language development more effectively was also mentioned.

> *He needs help from a speech therapist more than twenty minutes once a week. He needs at least three sessions – they could be short. More often would be better than a long session. There should be a full-time speech therapist in the school for all those who need help.*
>
> *I would like him to have more speech therapy. It would be good if he could even have ten minutes a day as part of his schoolwork.*
>
> *Speech therapy has been very sporadic. The pattern has been: a new speech therapist comes and assesses all the children, then concentrates on the worst cases, then leaves, then a new therapist who assesses all the children, and so it goes on.*
>
> *He should have much more involvement/activities with able-bodied children for social inclusion and language development; music and drama as a form of communication. There should be speech therapy on a daily or on-going basis and more parent involvement and training in speech therapy.*

- ***More teacher time***

Although the mean class size for students who attended special schools designated for pupils with moderate learning disability was reported to be lower than nine students per class, parents indicated that the students within the classes varied considerably in age, ability, interest and learning needs.

Although there were assistants in a high proportion of the classes, more individual teacher time was an issue raised by a quarter of the parents.

> *I always thought they could do with a resource teacher, to work with small groups who could move on faster, especially for reading.*
>
> *The teacher does not have enough time to work with each child. They are all very different.*
>
> *I don't think she is learning very much. The teachers seem to change very frequently. There has not been much consistency. She also needs more speech therapy. I would like her to learn music.*

Two parents spoke of particular types of additional teachers that they believed their sons needed. The parent of one young man felt that he needed more male teachers in his learning environment.

> *He needs more men teachers. They have a* [male] *PE teacher this year, but up until then they did not.*

The parent of another student, a young boy who was visually impaired, believed that there was a lack of expertise to support his particular learning needs.

> *I would like to see more speech therapy. I wish there was more understanding of the impact of visual impairment and knowledge as to how to help him cope and develop in spite of not being able to see.*

- ***Classroom assistant***

Closely associated with parents' comments on the need for more teacher time was the need for additional assistance in the classroom. Although there were assistants in the majority of classrooms, there was an expressed need for more help.

> *Even with the small class, the teacher needs an assistant. Speech therapy should be part of the school day. And music, he loves music, he has great rhythm.*
>
> *I think that the teacher needs more help. S needs a lot of personal attention and there are children who need more help than he does. At least two of the children need nappy changes several times a day.*

- ***More academic instruction***

Another expressed need was for learning programmes that challenge and stimulate the students' cognitive development. No parent reported that the special schools placed too much academic pressure on their son/daughter. Several felt that there was need for more challenging learning programmes.

> *She is able for a higher level of academic task than most of the others. It would mean either time in the secondary school or an individual learning programme in the special school.*
>
> *It is a question of how it* [the teaching time] *is managed. They just don't seem to manage a structure for learning. There is enough help in the classroom, but it is not used properly. They do sports and social skills training very well, but they just don't seem to think that he can learn or that it is important that he can read and have an idea about money and numbers and to understand the world around him and how things work.*

- ***Computers***

Although eight parents suggested that their sons/daughters would benefit from additional use of computers, most of their comments were non-specific. The use of computers in supporting the learning of students with learning disabilities was seen to hold promise, but exactly what that promise might be remained undefined.

> *He would benefit from smaller classes and more individual teaching. He could use more teaching in computer skills. He should be beginning training for a job outside.*
>
> *I feel that he is getting everything they have to give him, but it would be good if he had more work with computers.*

- ***Music instruction***

Only a quarter of the parents had reported that there was participation in musical activities, additional to that provided by the classroom teacher. Seven parents suggested that the students would enjoy and benefit from more

musical activity. Learning to play a musical instrument was a specific learning aspiration held for the students.

> *The students should not just be all lumped in together, their individual abilities are not taken into account. E wants to be in the school band, but they won't let him. They don't say why. It seems that only the favourites get a chance. He would also be good with computers, he is good with mechanical things, he can play computer games at home, but he has not had a chance to learn about computers at school.*
>
> *A PE teacher would do him all the good in the world, he needs exercise very badly. He would benefit from music, there must be something he could learn to play, a drum if nothing else. He needs a speech therapist, his speech is getting worse. He has developed quite a bad stammer. I think he could learn to use a computer.*

Contact with students in other schools

Parents were aware of only limited contact between students attending special schools designated for pupils with moderate learning disability and students attending other schools. Thirteen of the forty-three parents (30%) reported that their sons/daughters had no in-school contact with students in other schools, eleven (26%) were unsure if there was contact or not, and nineteen (44%) said that there was contact with students from other schools.[12]

Six of the students who had contact with students in another school attended a special school that shared a campus with a national school.[13] The children who attended the national school were all local children, but those attending

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[12] Ten students who had contact with other schools were sixteen-year olds, five were twelve-year olds, and four were eight year olds, indicating that older students might have more contact with students from other schools than younger students.

[13] Special schools are not usually on the same campus as mainstream schools. In this study this was the only school where this occurred.

the special school came from a wide catchment area.[14] A mother described the type of contact the younger groups of students had with students in the mainstream school.[15]

> *They are on the same campus, each on one side or the other. They do cooking together, sometimes plays or concerts. They made their Communion in their own school, but Confirmation is together. They are together on the playground.*

The fact that they received their Communion separately was a disappointment and sadness to one mother.

> *I wanted her to make her Communion with the others, I lost the battle.*

The older students continued to be on the same campus as the national school. Although there was a secondary school located nearby, the amount of contact with approximate age peers for social or sporting activities was limited. The parent of one student aged sixteen reported that she had contact only with the younger national school students.

> *They know each other and do some things together, but the other students in the 'normal' school are younger than she is.*

The other sixteen-year old took art and home economic classes with the first year students in the secondary school, but the rest of her time was spent in the special school.

In other parts of the country, another pattern of contact emerged. Senior students in special schools and students in the transition year of secondary

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[14] Students attending this school lived up to thirty-five miles from the school. Parents commented that the school contacts did not carry over into non-school meetings or friendships.

[15] Of the study group who attended this school, two were born in 1982, three in 1986 and one in 1990.

school met for one half-day a week. Six parents of sixteen-year-olds reported this type of interchange.

> *The special school is linked with the transition year in the secondary school. There are various activities – usually music, sport or home economics. A morning a week in alternative schools.*

Three parents of the younger children reported that students from secondary schools helped with their swimming lessons. Three students had contact with primary schools for concerts, choir and art activities. One parent mentioned contact with other special schools for sports events. Another reported that students from the secondary school accompanied students from the special school for the annual school tour.

In the broad category of special educational provision designated for pupils with moderate learning disability, are also special classes and special residential schools. One student attended a special class of this designation, another a special residential school. Their particular learning situations will be described as case studies.

Special class designated for pupils with moderate learning disability

The special class was located in a primary school in a town approximately nine miles from the family home. The school had fourteen teachers and two hundred and thirty-three students. There were two special classes designated for pupils with moderate learning disability — a junior class and a senior

class.[16] The mother reported that there were eight students in the special class whose ages ranged from eight to fourteen. There was a full-time classroom assistant, access to a speech and drama teacher, a physical education teacher, and a music teacher. The student *frequently* used a computer in the classroom. The student spent seventy-five percent of the school day in the special classroom, but was in the mainstream school for physical education, speech and drama, music, and lunch break. The mother reported that the school had

> *... encouraged great involvement with the other students, especially shared reading, drama and music.*

It was the mother's judgement that there was sufficient learning support for her daughter in this school placement.[17]

Special residential school

One twelve-year-old student attended a special residential school as a weekly boarder.[18] The school had seven teachers and forty pupils, a teacher:pupil ratio of 1:5.7. His mother reported that there were eight students in his class aged between ten and twelve years. In addition to the classroom teacher, there was a physical education teacher. There were computers in the school, but not in his classroom. His mother was *unsure* whether he used a computer in school or not. He had *needed but had not received speech therapy* at

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[16] Although the number of special classes designated for pupils with mild learning disability increased from 107 to 216 during the period 1993-1999, the number of special classes designated for pupils with moderate learning disability increased only from four to six.

[17] Although the student did not receive speech therapy as such, the mother believed that the speech and drama activities at school and home were sufficient language development support.

[18] The school is designated for pupils with moderate learning disability.

school. His mother believed that this was the major area where he did not have sufficient learning support.

More than half of the students in this study attended special placements designated for pupils with moderate learning disability described above. Six other students attended special schools designated for pupils with mild learning disability.

Special schools designated for pupils with mild learning disability

Six students (8%) attended five special schools designated for pupils with mild learning disability in Dublin (two students in two schools), Meath, Limerick and Cork (two students in the same school). Four were female and two male. Three of the students in this group were born in 1986, and three in 1990.

The number of students enrolled in these special schools ranged from seventy-six to two hundred and five (mean=130.2). The number of teachers per school ranged from eight to seventeen (mean=13.8). The ratio of teachers to pupils ranged from 1:9.5 to 1:14.6 (mean=11.5). Parent reported class size ranged from seven to fourteen (mean=10.8). The mean class size for those born in 1986 was higher than for those born in 1990.

Learning support personnel reported for students in special schools designated for pupils with mild learning disability

The parents of this group of students reported, in addition to classroom teachers, an average of 3.7 support persons involved in learning activities with their sons/daughters. All six students had classroom assistants and four

of the six had speech therapy. The learning support personnel reported for these students by sex of student and year of birth, are listed in table 10.4.

Table 10.4. In-school learning support personnel, additional to classroom teachers, reported by parents of students attending special schools designated for pupils with mild learning disability, by sex of student and year of birth.

Learning support personnel	1986 N=3		1990 N=3		Total N=6
	Male N=2	Female N=1	Male N=0	Female N=3	M=3 F=3
Classroom assistant	2	1		3	6
Physical educator	1			1	2
Speech therapist	1			3	4
Sports coach	1	1			2
Team teaching/peer tutoring	2				2
Other [19]	1	2		4	7
Total additional learning support personnel	*8*	*4*	*0*	*11*	*23*
Mean additional learning support personnel	*4*	*4*		*3.7*	*3.8*

Three types of learning support were again investigated in greater detail: classroom assistants, speech therapists, and computer instructors.

- ***Classroom assistants***

Parents of all six students reported that there was a classroom assistant. All six believed that a classroom assistant was necessary. Three of the parents reported that the classroom assistant was full-time; two were not sure, and one reported that the assistant was shared with another class.

- ***Speech therapy***

Four of the six parents reported that a speech therapist was involved in their son's/daughter's education programme. Both of the students not receiving speech therapy in school were born in 1986. Parents reported that during these students' school years, two had received *adequate* speech therapy;

[19] Other included one instance each of a principal, religious education teacher, home economics teacher, music teacher, dance teacher, student nurses and occupational therapist.

three had *received some therapy but had needed more*: and one had *needed but had not received speech therapy*.

A pattern of speech intelligibility similar to that reported for students in special schools designated for pupils with moderate learning disability was reported. Most students were usually understood at home and at school; they were less frequently understood by strangers; and were better understood on the telephone than they were by strangers. Table 10.5 lists the parents' responses to the questions on speech intelligibility for this group of students.

Table 10.5. Parent rating of speech intelligibility of students attending special schools designated for pupils with mild learning disability. (N=6)

	Usually	*Sometimes*	*Rarely*
Speech understood at home	5 *83.3%*	1 *16.7%*	0 *0%*
Speech understood at school	4 *66.7%*	2 *33.3%*	0 *0%*
Speech understood by strangers	2 *33.3%*	3 *50.0%*	1 *16.7%*
Speech understood on telephone	6 *100%*	0 *0%*	0 *0%*

- ***Computer use / instruction***

Five parents reported that there was a computer in the schools their sons/daughters attended; one parent was unsure. Only one parent reported that there was a computer in the classroom. No parent reported that their son/daughter *frequently* used computers in school; two reported that the students *sometimes* used computers; two that they *seldom* used computers; and two that they *never* used computers at school. None of the parents of students attending special schools designated for pupils with mild learning disability reported that there was a person, in addition to the classroom teacher, who supported computer use in school.

Additional in-school learning support personnel needed in special schools designated for pupils with mild learning disability

Parents of these six students were asked if they believed that there was sufficient in-school learning support personnel for their sons/daughters. Two parents responded that there was; four responded that there was not. They were then asked what other learning support personnel their sons/daughters needed at school. Again, parents believed that additional speech therapy and computer instruction were needed. Table 10.6 records the additional personnel the parents believed were required.

Table 10.6. ***Additional*** *in-school learning support personnel believed by parents to be required in special schools designated for pupils with mild learning disability, by sex of student and year of birth.*

Learning support personnel needed	1986 N=16 Male N=2	1986 N=16 Female N=1	1990 N=14 Male N=0	1990 N=14 Female N=3	Total N=6
None				2	2
Unsure					0
Speech therapist	2	1			3
More teacher time	1				1
Computers	1			1	2
Music instruction	1				1
Physiotherapist	1				1

As this group was small, the parents' responses will not be categorised by type of expressed need. However, three representative comments will be recorded to elaborate the parents' intended meaning.

> *There should be a full-time speech therapist, a resource teacher and a specialist reading teacher.*
>
> *He should have instruction in computer skills, more music, speech and physiotherapy should be part of his school programme. They go swimming once a week, but with W's proneness to infections he cannot always go. If he does not go swimming, we have to fetch him and bring him home. There is nothing else offered.*
>
> *I would like her to be using computers. She uses the v-tech at home and can manage to record on the video. So I think she would be quite able to learn how to use a computer.*

Contact with students in other schools

Only one parent reported that there was contact between the special school and students in other schools; one parent was unsure; four responded that there was no contact. The reported contact was that children from the special school received their First Communion with children from three national schools in the parish where the school was located.

In the broad category of special educational provision designated for pupils with mild learning disability there are also special classes. One student attended a special class in a *primary* school, another a special class in a *secondary* school. Their particular learning situations will be described as case studies.

Special classes designated for pupils with mild learning disability

Both students attended special classes designated for pupils with mild learning disability in suburban schools situated near their homes. The *primary* school to which the special class was attached had sixteen teachers and one hundred and ninety-two students. There were four special classes with four teachers and fifty-two pupils. The mother reported that there were ten students in her daughter's special class and that the students' ages ranged from ten to thirteen years. This class and another special class were team-taught by two teachers. There was no classroom assistant, but the mother believed that an assistant was not necessary. There were computers in the student's classroom which the student used every day. Except for lunchtime, the student spent the full school day in the special class. The student had

received speech therapy, but was reported to have *needed more*.[20] With the exception of speech therapy, this mother believed that her daughter had sufficient in-school learning support.

The *secondary* school to which the special class was attached had four hundred and twelve students and twenty-nine teachers. In this special class there were nine students whose ages ranged from twelve to seventeen years. In addition to the classroom teacher, there was contact with a physical education teacher, music teacher, metal work instructor, woodwork instructor, home economics teacher, science teacher and art teacher. There was no classroom assistant, but the mother judged that an assistant was not necessary. There was a computer in the classroom. When the student was asked if his class used the computer, he said that they "just do it for a bit of fun". The student's mother reported that he had *not needed* speech therapy. His speech was very clear and he was very articulate in expressing his opinions. Except for lunchtime, the special class was not integrated with the other students in the school. The mother believed that there was sufficient in-school learning support.

Students who were not in school

Four of the study group were not enrolled in a school. Two attended *care units* provided for by the Department of Health and Children. Two others had been enrolled in a school programme but were no longer in school at the time of the

[20] Between the ages of eight and nine and a half the student had received speech therapy once a week. She had not received any before or since that time.

interview. Their parents were asked to describe their present situation. These were reported as case studies.

Department of Health care units

The mother of the eight-year-old reported that her daughter attended a day care unit for four hours a day Monday to Thursday. She was collected from home at 10:15 a.m., attended the unit from 11:00 a.m. until 3:00 p.m. and returned home at 3:40 p.m. On Fridays, the programme was an hour shorter. Seven students attended the unit. There was a nurse and assistant. A Montessori teacher had recently been appointed. The student's mother believed that there was not sufficient learning support for her daughter in this situation.

> *There is no access to a speech therapist. M really needs one. She was speaking some words, now she is not. I would like her to be with other children who are talking.*

A sixteen-year-old attended a care unit with eight others aged nine to eighteen years of age. This young man had serious health problems, sensory impairments and autistic-like behaviours. His mother described the care unit he attended.

> *There is a nurse, assistant, sometimes two, occupational therapist a half day a week, physiotherapist one or two days a week and a speech therapist is attached to the unit but speech therapy is irregular due to constant changes in therapists. There also is a sensory room and a hydropool. They go swimming and horseback riding once a week. There is a teacher attached to the unit, but she works mostly with the younger students. She does some computer work with B.*

His mother was not sure whether there was sufficient learning support for him. She recognised that her son thrived on one-to-one attention, but considered that if he had undivided attention all day it might make him more dependent

and demanding of total attention. However, she believed that he had received very little speech/language therapy and had needed a great deal more.

Not attending School

Two sixteen-year-olds were not in a school programme. One young man had been attending the local primary school for two hours a day until the age of fifteen when the principal informed the mother that other parents were objecting that he was taking up too much of the teachers' time. She had then withdrawn her son from the school. At the time of the interview he had just started attending a post-school-leaving job training course two days a week. His mother did not believe that there was sufficient learning support for her son in this situation.

> *The others are older than he is. He needs speech therapy so that he will be better understood. He needs individual tuition in reading, writing, money, sums, road training. But it should be training to help him be able to live in the area he will be living in, not some other place.*

The other sixteen-year-old had attended a special school designated for pupils with mild learning disability until serious illness had interrupted her education. Her parents reported that she had not been in school or any formal learning situation since she was eleven years of age. They did not believe that there was sufficient learning support available to her.

> *She is picking up general knowledge from her family but she would benefit from a home teacher. Her academic skills have not developed since she had the cardiac arrest. We were so happy just to have her alive. But now it would stimulate her to be involved in learning and give her more contact outside her home.*

Having considered the learning environments of students in special placements, the situations of students in mainstream placement remains to be examined.

Mainstream schools

Twenty-one students (27%) attended mainstream schools. Eighteen attended *primary* schools, three had continued on to *secondary* schools. A higher proportion of females (34%) than males (20%) attended mainstream schools.[21] There was a lower proportion of those born in 1982 (15%) compared with those born in 1986 (21%) and those born in 1990 (40%) in mainstream school placement.[22] The proportion of students in mainstream schools by county of residence ranged from forty percent in Galway to none in Kerry.

The eighteen mainstream *primary* students attended seventeen schools;[23] nine were in Dublin and two each in Meath, Kildare, Galway and Cork. The number of students enrolled in the primary schools ranged from sixty-two to five hundred and eighty-five (mean=296.9). The number of teachers per school ranged from three to twenty-two (mean=12.5). The ratio of teachers to pupils ranged from 1:17.5 to 1:29.35 (mean=1:23.8).

Two of the mainstream *secondary* schools were in Dublin and one in Limerick. Two were co-ed and one a single-sex (girls') school. The number of students enrolled in the schools ranged from three hundred and ninety-six to six hundred and eighty-nine (mean=529.0) The number of teachers per school

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[21] Eight of the students in mainstream primary schools were male and ten female. All three attending mainstream secondary schools were female.

[22] The fact that this was a younger group of students should be kept in mind when interpreting the data.

[23] Two students attended the same primary school but were in different classes.

ranged from twenty-nine to forty-seven (mean=37). The ratio of teachers to pupils ranged from 1:13.7 to 1:14.7 (mean=1:14.3).

All parents of students attending mainstream schools reported the number of students they believed were in their son's/daughter's class. The overall mean class size was 27.8. The mean number of students per class for those born in 1982 was 22.0;[24] for those born in 1986 it was 31.2; and for those born in 1990 it was 27.5.

Learning support personnel reported for students in mainstream schools

Parents of this group of students were also asked to identify the teachers and other learning support personnel, in addition to the classroom teacher, who were involved with their sons/daughters at school.

The three students attending mainstream *secondary* schools had more contact with diverse learning support personnel than any other group in this study (mean=13).[25] Their parents described the in-school learning support personnel with whom they had contact.

> *There are seven subject teachers, a guidance counsellor, and a visiting teacher.*
>
> *Seven subject teachers and there is a "learning-department" with four teachers and a leader. There also is a music teacher, a year dean, assistant head, head master, and school secretary.*

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[24] It was recognised that class size in secondary schools often varies by subject. However, to get some indication of the learning group size, the parents were asked the size of the class considered to be the student's 'home room' at school.

[25] It is recognised that the role of subject teachers in mainstream secondary schools is different from that of classroom teachers the senior students in special schools.

She has eight subject teachers. Two retired members of the community work with her individually on maths and English. Also this year, because of extra teaching hours, she has extra French and art. French is on her own and art is in a small group.[26]

The most frequently reported learning support persons for students attending mainstream *primary* schools were: remedial teachers (14 students); visiting teachers (9 students); resource teachers (8 students); and classroom assistants (8 students). The mean number of additional learning support personnel for those born in 1986 was 3.8; for those born in 1990 it was 2.2. The number of in-school learning support personnel, additional to classroom teachers, for students attending primary and secondary mainstream schools is listed in table 10.7. The table also indicates differences by the age and sex of the students.

[26] Support from the Department of Education for students with learning disabilities in secondary schools is frequently in the form of extra teaching hours assigned to the school. The school usually has discretion as to how the extra teaching hours will be used.

Table 10.7. In-school learning support personnel, additional to classroom teachers, reported by parents of students attending mainstream primary and secondary schools, by sex of student and year of birth. (N=21)

Learning support personnel	Secondary school		Primary school				
	1982 N=3		1986 N=6		1990 N=12		Total N=21
	Male N=0	Female N=3	Male N=3	Female N=3	Male N=5	Female N=7	F=13 M=8
Remedial teacher		2	3	3	4	4	16
Classroom assistant		1	2	2	1	3	9
Visiting teacher		1	1	2	1	4	9
Resource teacher			1	1	3	3	8
Physical education			2	1		2	5
Other support teacher [27]			1			1	2
Dance teacher						2	2
Computer instructor			1	1			2
Other [28]			2			2	4
Subject and other teachers in secondary schools		36					36
Total number of additional learning support personnel		*39*	*13*	*10*	*9*	*21*	*92*
Mean number of additional learning support personnel		*13.0*	*4.3*	*3.3*	*1.8*	*2.6*	*4.4*

Again, three types of learning support personnel were considered in greater detail: classroom assistants, speech therapists and computer instructors. In addition, the amount of support from specialist teachers (remedial teachers, resource teachers and visiting teachers) was also considered.

- ***Classroom assistants***

Although seventeen of the eighteen parents (94%) of students attending mainstream *primary* schools responded that a classroom assistant was necessary, only eight parents (44%) reported that there was a classroom assistant. Only three of the assistants were full-time with the students'

[27] One non-statutory agency provided an out-reach support teacher for the students in mainstream schools who had attended their early services and preschool programmes.

[28] Other support personal were one instance of sport coach, music teacher, visiting speech therapist and a speech and drama coach.

classes. The amount of support from a classroom assistant for the other five ranged from one and a half-hour per week to half of the school-day.[29]

One student in a mainstream secondary school had some assistance in class. The parents of another believed that a classroom assistant, for help as needed in some subjects, would be "helpful and logical".[30]

- ***Speech therapy***

Of the twenty-one students attending mainstream schools, two students (10%) had *not needed* speech therapy during their school years; three (14%) had received *adequate* speech therapy; and sixteen (76%) had received *some therapy but had needed more.* All students whose parents thought they needed speech therapy had received at least some therapy during their school years. Only one student was receiving speech therapy at school.[31]

The similar pattern of speech intelligibility was again reported. Most students were understood at home and school; they were less frequently understood by strangers; and were better understood on the telephone than they were by strangers. Table 10.8 lists parent rating of speech intelligibility for this group of students.

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[29] Amounts reported were: three half-hour sessions a week; two hours per week; four hours per week; a quarter of the school day; half the school day.

[30] The student had five hours per week assistance. The parents of the other student thought that the availability of some additional help in some subjects would enhance the range of learning opportunities for the student. Examples mentioned were machine sewing in home economics, lab work in biology, and computer studies.

[31] This eight-year-old was receiving speech therapy at a mainstream primary school. The mother understood that this was not a permanent support. She did not expect it to continue after that school year.

Table 10.8. Parent rating of speech intelligibility of students attending mainstream schools (N=21)

	Usually	*Sometimes*	*Rarely*
Speech understood at home	20 *95.2%*	1 *4.8%*	0 *0%*
Speech understood at school	16 *76.2%*	5 *23.8%*	0 *0%*
Speech understood by strangers	8 *38.1%*	12 *57.1%*	1 *4.8%*
Speech understood on telephone	15 *71.4%*	5 *23.8%*	1 *4.8%*

In interpreting this data, it should be remembered that a higher proportion of the youngest students (born 1990) attended mainstream schools compared with other types of school placement.[32]

- ***Computer use / instruction***

Twenty parents (95%) of students in mainstream schools reported that there was a computer in their sons'/daughters' school. Ten (48%) parents reported that there was a computer in the classroom.[33] Seven parents (33%) reported that the student *frequently* used computers at school; nine (43%) used computers *sometimes*; two (10%) *seldom* used computers; two (10%) *never* used computers in school. One parent was not sure whether or not the student used computers at school.

Of the eighteen students in mainstream *primary* school, only two parents reported that there was a person, in addition to the classroom teacher, who supported computer use in school. Two of the three parents of students attending mainstream *secondary* schools voiced the opinion that the students

[32] All students born in 1982 were *usually* understood in all four situations. The student *sometimes* understood at home and *rarely* understood by strangers was born in 1990; four of the five who were *sometimes* understood at school were born in 1990; and nine of the twelve who were *sometimes* understood by strangers were also born in 1990.

[33] There were computer rooms in the three secondary schools. These have not been included in the ten reported here.

would benefit from more individual or small group instruction in keyboards and computers. One parent commented:

> *In the coming year, her transition year, A could do well working with computers either for skill and general knowledge or as pre-employment development. The school has just had a large investment in computers. One of the main reasons they received this grant was because A and others, who have learning disabilities, are in the school. Because of this, they should be given priority access to them. I am not sure this will happen. The school has no obligation to use the computers for this group of students. It is at the school's discretion how they will be used.*

- ***Remedial teachers***

There were remedial teachers in all but two of the mainstream schools the students attended (91%). Nine remedial teachers were full time in the school; two were full-time in the school but had other duties; six were shared with one other school; two were shared with more than one other school. Sixteen of the nineteen students who attended mainstream schools that had a remedial teacher were taught by the remedial teacher. The mean amount of remedial teaching time per week the students received was 144.33 minutes. The median and mode were both 60 minutes. The parent-reported amount of remedial teaching students received in mainstream schools is listed in table 10.9.

Table 10.9. Remedial teaching for students attending mainstream primary and secondary schools.

	1982 N=3	1986 N=6	1990 N=12	Total N=21
Remedial teacher in school	2 *66.7%*	6 *100%*	11 *91.7%*	19 90.5%
Full time	1 *50%*	3 *50%*	5 *45%*	9 *47.4%*
Full time with other duties	1 *50%*		1 *9.1%*	2 *10.5%*
Shared with one school		3 *50%*	3 *27.3%*	6 *31.6%*
Shared with more than one school			2 *18.2%*	2 *10.5%*
Remedial teacher works with student	2 *100%*	6 *100%*	8 *66.6%*	16 *76.2%*
Range of time with the remedial teacher per week	*300-500 minutes*	*30-300 minutes*	*30-210 minutes*	*30-500 minutes*
Mean amount of time with the remedial teacher per week.[34]	*400 minutes*	*105 minutes*	*103 minutes*	*143 minutes*

- ***Department of Education support teachers***

Sixteen of the eighteen students in mainstream *primary* schools, and one of the students in mainstream *secondary* school, had been assigned support from either a Department of Education visiting teacher or resource teacher.[35] In all cases it was either a teacher of one designation or the other but not both.[36]

The amount of time students in mainstream *primary* schools received from resource or visiting teachers varied considerably. In three instances, support

[34] One secondary student had ten remedial class periods a week. The remedial teacher was the teacher of the student's English class and also sat in on her maths class to give her support. In the other students' school there was a learning support team. The student had daily sessions with the team who concentrated on English and maths. The other student had five hours per week tutoring from a team of remedial support teachers.

[35] Parents were not always sure of the official designation of the support teacher. (The visiting teacher service is part of special education. Resource teachers are part of the mainstream system.) Parents reported that eight of the support teachers were visiting teachers and eight were resource teachers. Because of the ambiguity of the teacher's designation in this text, the term *support teacher* refers to both visiting and resource teachers.

[36] One of the students who did not have a Department of Education support teacher received two hours a week specialist support from a non-statutory out-reach teacher. Another received some support from a community nurse who occasionally visited the school.

teachers had been appointed but, for various reasons, were not teaching at the time of the interview. The amount of time the other thirteen students received ranged from seven minutes per week (half an hour once a month) to six hundred and sixty minutes per week (two full days and an hour another day in a small group of three students). Twelve of the thirteen specialist teachers worked with the students outside the classroom. Ten of them worked with the student individually; two sometimes worked with the student individually and sometimes with a small group of students. Seven co-ordinated specialist teaching with the class programme; four followed a programme that was different from class work; two used the class reading programme and also other programmes not used in the class.

One *secondary* student received two-hourly sessions from a visiting teacher. The teacher usually worked with the student on her own, but sometimes with a small group of students. The visiting teacher co-ordinated her programme with the other teachers.

- ***Assessment of combined specialist support***

It was the experience of the students in this study that entrance into *secondary* mainstream education was predicated on successful completion of mainstream *primary* school. No student entered a second level mainstream school without completing mainstream *primary* school, and all three who completed *primary* mainstream education continued to mainstream *secondary* education.[37]

[37] All students who transferred from mainstream schools to special schools did so within the first three years of their enrolment.

It was the experience of the small group of students who were in second level mainstream education that the schools assumed a *whole-school* approach to their learning. While there may have been persons assigned to supervise and plan their programmes, many teachers were involved in the implementation of the programme. The additional support provided by the Department of Education was in the form of extra teaching hours, grants for computers, and in one case some support from a visiting teacher.

For this group of mainstream *primary* students, class size ranged from twenty to thirty-eight. Mean class size was 28.7 students; for those born in 1986 it was larger (mean=31.2) than for those born in 1990 (mean=27.5).

Two-thirds of the twelve-year-olds and one third of the eight-year-olds received some help from classroom assistantants. The amount of help received per week varied from less than two hours to the full school week

The older of the two groups of *primary* students received more support from remedial teachers. The mean amount of remedial teaching support for the twelve-year olds was an hour and forty-five minutes per week. The mean for the eight-year-olds was just one hour per week. [38]

The type and amount of specialist teacher support, the help from classroom assistants, and the class size for the individual students in mainstream primary schools are recorded in table 10.10. By recording the information by

[38] This is base on all eight year olds (N=12). The amount of time reported in table 10.9 is the amount of time for the eight year olds who were receiving remedial teaching (N=8).

individual student the interplay of the various factors of specialist teacher support, class size and availability of classroom assistant are portrayed.

*Table 10.10. The type and amount of specialist teacher support received by students in mainstream **primary** school classes, and the class size and amount of support from classroom assistants. (Unless specified otherwise, time is given in minutes per week.) (N=18)*

Sex of student	*Amount of time per week received from Dept of Ed visiting or resource teachers*	*Amount of time per week received from other support teachers*	*Amount of time per week received from remedial teachers*	*Number of specialist teachers*	*Total time per week of specialist teacher support in minutes*	*Classroom assistant (time per week)*	*Class size*
Students born in 1986 (12-year-olds)							
Female	660	-	60	2	720	1 1/2 hours	24
Female	Appointed [39]	-	300	1	300	-	30
Male	120	-	150	2	270	4 hours	38
Male	-	120	60	2	180	full time	32
Female	45	-	30	2	75	2 hours	30
Male	Appointed [40]	-	30	1	30	-	33
Students born in 1990 (8-year-olds)							
Male	180	-	180	2	360	-	26
Male	150	-	210	2	360	1/2 time	30
Female	60	-	120	2	180	1/4 time	34
Female	100	-	60	2	160	-	21
Female	150	-	-	2	150	-	30
Male	120	-	-	1	120	-	36
Female	60	60	-	2	120	-	25
Female	90	-	-	1	90	-	24
Female	45	-	30	2	75	full time	31
Male	Appointed [41]	-	60	1	60	-	20
Male	-	-	60	1	60	-	33
Female	7	some [42]	-	1	7+	full time	20

The overall mean amount of specialist teacher support, including remedial teacher support, for students in mainstream primary schools was 184 minutes (3.0 hours). The mean amount for the twelve-year-olds was higher (4.4 hours) than it was for eight-year-olds (2.4 hours).

[39] The parent reported that a resource teacher had been appointed but "she is never there, always out sick. The Department do not provide cover for resource teachers on sick leave."

[40] The parent reported that the resource teacher was scheduled for three 45-minute sessions per week. The teacher was ill and had not been replaced at the time of the interview.

[41] The parent reported that a visiting teacher had been appointed, but had not started. A second one had just been appointed at the time of the interview, but had not started.

[42] The remedial teacher does not usually take students until they are in second class, but occasionally gave this student some time, but it was not scheduled or regular.

It is difficult to identify a pattern of practice from the above data. In fact, the one statement that can be made is that there is no pattern of specialist support that can be educed from the experience of this group of students. It would appear that support had been allocated by ad hoc decisions and not based on entitlements or policies.

Additional in-school learning support personnel in mainstream primary and secondary schools

When asked whether they believed that there was sufficient in-school learning support personnel for their sons/daughters who attended mainstream schools, three parents said that there was; sixteen responded that there was not; and two were not sure. Parents then identified the in-school learning supports that they believed their sons/daughters needed at school. Table 10.11 records the additional personnel thought to be required.

*Table 10.11. **Additional** in-school learning support personnel believed by parents to be required in mainstream primary and secondary schools, by sex of student and year of birth.*

Learning support personnel needed	1982 N=3 Male N=0	1982 N=3 Female N=3	1986 N=6 Male N=3	1986 N=6 Female N=3	1990 N=14 Male N=5	1990 N=14 Female N=7	Total N=21 M=8 F=13
None			*1*		*1*	*1*	3
Unsure				*1*	*1*		2
Classroom assistant		1	2	1	2	5	11
Specialist teacher time			2		3	3	8
Computer instruction		2		2		1	5
Speech therapy						2	2
Speech/drama coach						1	1

The three main issues the parents raised were classroom assistants, more specialist teacher time, and computer use. Speech development was also mentioned. Some of the parents' comments have again been selected to augment this data.

- ***Classroom assistants***

Eighteen of the twenty-one parents of students in mainstream schools believed that a classroom assistant was necessary. Only eight of these students had any assistance, and only three assistants were full-time.

Parents were aware that, because of large classes, some of the mainstream schools were concerned about whether they were providing enough learning support for the students. One parent believed that a classroom assistant would allay some of the anxiety. Another thought that an assistant would help overcome the difficulties of class size.

> *If they had a classroom assistant, I think the school would be more relaxed and confident that he is getting enough attention and not getting into trouble. Even part-time would be helpful.*
>
> *A classroom assistant for at least part of every day because the class is so large. Someone trained to give him the help he needs. Or at least a resource teacher every day.*

Ideas of how classroom assistants might be used to support the students' learning were voiced by two parents.

> *A classroom assistant would be a great help especially when the class is doing geography, Irish or history. The classroom assistant could do something else with J or even a different level of what they are doing.*
>
> *In order to help H get started and stay on task in a multi-class room, a classroom assistant would be very helpful.*

Parents did not see the role of the class assistant to be that of *minder* but rather as a resource that could assist not only the student but also the class as a whole.

> *A classroom assistant would be very helpful. She would not just have to take B, she could take a group.*
>
> *At the moment she is getting too much one-to-one attention. A needs someone to help her if she is in trouble, but not all the time. An assistant working with the whole class would be good. A needs to know what she is to do, someone to lay out her work, to get her started.*

- ***More teacher time***

The parents' remarks indicated that they had understood the inter-relationship between class teacher, specialist teacher and classroom assistant. Additional support, whether reduced class size, specialist support, or the appointment of a class assistant, was seen to be beneficial. The availability of one type of resource would reduce the need for another.

> *He needs a resource teacher for at least one hour a day and/or a trained classroom assistant with specialist advice from the resource teacher for the assistant and the classroom teacher.*
>
> *The resource teacher only works with reading. J would benefit from individual or small-group help with maths. She really needs daily sessions from the resource teacher, or alternatively, help from a classroom assistant (half-time) who would be directed by the classroom teacher.*

The availability of a resource teacher *within* the school, as part of the permanent staff, was seen by one parent to be highly desirable.

> *A specialist resource teacher within the school would be a blessing.*

The role of the resource or visiting teacher as provider of materials and programme supports for the teacher, parent, and/or class assistant to use was considered to be important.

> *A specialist teacher at least twice a week for individual help and to give the teacher suitable materials to work on with the class.*
>
> *A resource teacher or a centre to provide materials and guidelines for the teacher and for me. Speech therapy. A classroom assistant for the whole class.*

- ***Computer use***

Five of the parents believed that the students would benefit from more instruction in computer use. Basic computer skills were considered to be of life-long value to the students. Keyboard competency was also seen as a

beneficial alternative to handwriting for a student who experienced fine motor difficulties. Representative comments were:

> *Someone to help her develop basic computer skills that would be very helpful in the long term.*
>
> *More specialist teacher help. At least an hour a week, more would be better. More work with computers as I believe that she is going to have difficulties with writing.*

A large amount of data regarding the characteristics of the schools and in-school learning support personnel has been reported in this section. Before moving on to other issues, a brief comparison of the supports and services available to the students in the different types of school placements is given.

Comparison of learning supports for students attending the different types of schools

In this comparative resume, data for special schools and classes of the same designation were combined, returning to four groups of students. The groups are those in special schools and classes designated for pupils with moderate learning disability (58%); in special schools and classes designated for pupils with mild learning disability (10%); in mainstream primary and secondary schools (27%); those not in school (5%).

- ***Relative proportions of students in different types of schools***

The first issue considered was the relative proportion of students who attended the different types of schools. The majority (58%) of students attended special schools/classes designated for pupils with moderate learning disability. A higher proportion of the males (68%) than females (47%) attended schools/classes of this designation. There was also a higher

proportion of those born in 1982 (65%), compared with those who were born in 1986 (64%), and those born in 1990 (47%).

A small proportion (10%) of students attended special schools/classes designated for pupils with mild learning disability. There were fewer males (8%) compared with females (13%) in this group. A higher proportion of those born in 1986 (14%) attended special schools designated for pupils with mild learning disability compared with the other two age groups.

More than a quarter of the study group (27%) attended mainstream primary and secondary education. A higher proportion of females (34%) than males (20%) attended mainstream schools. Of those born in 1982, only female students were in mainstream secondary schools. For the other age groups, the proportions that attended mainstream schools were thirty-three percent of the females and twenty-nine percent of the males. The proportion of students in mainstream education increased with each successive age group: fifteen percent of those born in 1982; twenty-one percent of those born in 1986; forty-percent of those born in 1990.

- ***Comparison of class size***

Parents of students who attended mainstream schools reported the largest size of classes. For students in special schools/classes designated for pupils with moderate learning disability, mean class size was nine students; for students in special schools and classes designated for pupils with mild learning disability it was eleven students; for students in mainstream education it was twenty-eight students. This difference in class size by type of school can be seen across all three age groups but was more pronounced for

the younger students. For those born in 1982, class size in mainstream education was twice as large as in special schools; for those in the younger age groups it was more than three times as large.

- ***In-school learning support personnel***

Students in second level mainstream schools had contact with the greatest number of learning support personnel. Students in the youngest group attending mainstream schools had the fewest. Three categories of learning support persons were specifically considered: classroom assistants, speech therapists and computer instructors.

Classroom assistants

More than ninety percent of parents of students in special schools/classes designated for pupils with moderate learning disability believed that a classroom assistant was necessary. There were classroom assistants in seventy-eight percent of the classes their sons/daughters attended. Most of them were full time in the classroom. Three-quarters of the parents of students who attended special schools/classes designated for pupils with mild learning disability believed that an assistant was necessary. There were assistants in all of these classrooms. Although ninety percent of parents of students who attended mainstream schools believed that an assistant was necessary, there were assistants in only forty-three percent of the classrooms. Only three of them were reported to be full-time with the student's class. When the youngest group were compared by type of school attended, this discrepancy was greatest. For those born in 1990, eighty-eight percent in

special education of any designation had an assistant assigned to their class, whereas only thirty-three percent of those in mainstream education did.

Speech therapy

At the time of the interview, the highest proportion of students receiving speech therapy as part of their educational programme attended special schools/classes designated for pupils with mild learning disability (67%). Fewer students (37%) who attended special schools/classes designated for pupils with moderate learning disability were receiving speech therapy. Only one student in a mainstream school (4.8%) received speech therapy at school.

However, speech therapy can be delivered outside school, and is often given in series of sessions followed by a break in therapy. When considered over the period of school years, a different pattern emerged. All students who attended mainstream schools had received at least *some* therapy. Approximately twelve percent of students in special education had not received any speech therapy. Twenty-five percent of students who attended special schools/classes designated for pupils with mild learning disability had received *adequate* speech therapy during their school years. A similar proportion (14%) of students in special schools/classes designated for pupils with moderate learning disability, and of students in mainstream schools, had received what their parents considered *adequate* speech therapy.

A pattern of speech intelligibility was identified. Most of the students were *usually* understood at school and home; they were less frequently understood by strangers and were better understood on the telephone than they were by

strangers. While there was little difference by type of school for those born in 1990, the differences increased with age. This data is given in table 10.12.

*Table 10.12. Number and percent of students whose speech is **usually** understood in specific situations by age and type of school attended.*

Speech **usually** understood	Special schools and classes (moderate LD)		Special schools and classes (mild LD)		Mainstream primary and secondary		Total [43]	
1982	N=13		N=1		N=3		N=17	
At home	11	84.6%	1	100%	3	100%	15	88.2%
At school	12	92.3%	1	100%	3	100%	16	94.1%
By strangers	3	23.1%	1	100%	3	100%	7	42.1%
On the telephone	9	69.2%	1	100%	3	100%	13	76.5%
1986	N=18		N=4		N=6		N=28	
At home	17	94.4%	4	100%	6	100%	27	96.4%
At school	14	77.8%	3	75.0%	5	83.3%	22	78.6%
By strangers	5	27.8%	3	75.0%	3	50.0%	11	39.3%
On the telephone	12	66.7%	4	100%	5	83.3%	21	75.0%
1990	N=12		N=3		N=12		N=27	
At home	11	91.7%	2	66.7%	11	91.7%	24	88.9%
At school	9	75.0%	2	66.7%	8	66.7%	19	70.4%
By strangers	1	8.3%	0	0.0%	2	16.7%	3	11.1%
On the telephone	3	25.0%	3	100%	7	58.3%	14	48.1%
Total	N=43	%	N=8	%	N=21	%	N=72	%
At home	39	90.7%	7	87.5%	20	95.2%	66	91.7%
At school	35	81.4%	6	75.0%	16	76.2%	57	79.2%
By strangers	9	20.9%	4	50.0%	8	38.1%	21	29.2%
On the telephone	24	55.8%	8	100%	15	71.4%	47	65.3%

Computer use

Students who attended mainstream schools used computers more frequently than did students in special schools and classes. Seventy-six percent of students in mainstream schools used computers at least once a week; compared with fifty percent of students in special schools/classes designated for pupils with mild learning disability and forty percent of students in special schools/classes designated for pupils with moderate learning disability

A composite table lists the data reviewed so far in this summary (table 10.13).

[43] The two students who were using sign were not included in this study because there was no way of determining whether their signing was clear but not understood because the person they were communicating with did not understand sign.

Table 10.13. Summary of distribution of students by sex of student and year of birth in the various educational placements and some of the learning supports available to them in those learning environments. (N=78)

	Not in school	Special school/class (moderate LD)	Special school/class (mild LD)	Mainstream schools
1. Students who attended type of school				
Number	4	45	8	21
Proportion	5.1%	57.7%	10.3%	26.9%
a. proportion by sex				
Males	5.0%	67.5%	7.5%	20.0%
Females	5.3%	47.4%	13.2%	34.2%
b. proportion by year of birth				
1982	15.0%	65.0%	5.0%	15.0%
1986	0.0%	64.3%	14.3%	21.4%
1990	3.3%	46.7%	10.0%	40.0%
2. Class size				
Mean class size	N/A	8.9	10.5	27.8
Mean students born 1982		10.5	9.0	22.0
Mean students born 1986		8.4	11.8	31.2
Mean students born 1990		8.0	9.3	27.5
3. Mean number of in-school learning support persons available to the students in addition to the classroom teacher.				
Mean number of learning support persons	N/A	3.1	4.4	4.3
Mean for students born 1982		4.2	8.0	13.0
Mean for students born 1986		2.7	2.8	4.0
Mean for students born 1990		2.6	5.3	2.3
a. Parents who believed that a classroom assistant was necessary	N/A	91.1%	75.0%	90.5%
b. Students who had classroom assistants assigned to their classrooms for any amount of time	N/A	77.7%	75.0%	42.9%
4. Students who were receiving speech therapy as part of their educational programme at school at the time of the interviews.	25%	37.0%	67.0%	4.8%
5. Parental assessment of speech therapy students received during their school years (includes therapy received outside of school).				
Did not need speech therapy	0.0%	2.2%	12.5%	9.5%
Received adequate therapy	0.0%	13.3%	25%	14.3%
Received some needed more	50.0%	73.3%	50%	76.2%
Needed but did not receive	50.0%	11.1%	12.5%	0.0%
6. Availability and use of computers in school				
Computer in school	N/A	86.7%	87.5%	95.2%
Computer in class		44.4%	37.5%	47.6%
Uses frequently		11.0%	12.5%	33.3%
Uses sometimes		28.9%	37.5%	42.9%
Seldom uses		8.8%	25.0%	9.5%
Never uses		33.3%	25.0%	9.5%
7. Parents' response to question: *Is there sufficient learning support for your son/daughter?*				
Yes	0.0%	24.4%	50.0%	14.3%
No	75.0%	64.4%	50.0%	76.2%
Unsure	25.0%	11.2%	0.0%	9.5%

- ***In-school learning support***

Half of the parents of students who attended special schools designated for pupils with mild learning disability considered that there was sufficient learning support for their sons/daughters. A quarter of parents of students attending special schools designated for pupils with moderate learning disability, and one-eighth of those whose students were in mainstream education, believed that the learning support was sufficient.[44]

Six figures on table 10.14 should be noted as they indicate that fifty percent or more of students in a given educational placement enjoyed this support. Seventy-eight percent of students in special schools/classes designated for pupils with moderate learning disability had the support of a classroom assistant, as did seventy-five percent of students in special schools/classes designated for pupils with mild learning disability. Seventy-six percent of students in mainstream schools were supported by remedial teachers, and eighty-one percent by either a resource teacher or a visiting teacher. Sixty-eight percent of students in special schools and classes designated for pupils with moderate learning disability had access to a physical education instructor. Fifty percent of students in special schools/classes designated for pupils with mild learning disability received speech therapy.

There were three other figures in table 10.14 that should alsol be noted. Only forty-three percent of students in mainstream education had any support from a classroom assistant. Of the entire study population, only twenty-eight percent of the students were receiving the services of a speech therapist. In

only three situations was there a person, in addition to the classroom teacher, who assisted the students in computer skill development.

Table 10.14. Comparative number of in-school learning support personnel, additional to the class teacher, and the proportion of students who had access to that type of support person, by type of school attended. (n=74)

	Special schools and classes (moderate LD)		Special schools and classes (mild LD)		Mainstream primary and secondary		Total	
	N=45	%	N=8	%	N=21	%	N=74	%
Classroom assistant	35	*77.8%*	6	*75.0%*	9	*42.8%*	50	*67.6%*
Physical education	31	*68.9%*	2	*25.0%*	5	*23.8%*	38	*51.4%*
Speech therapist	16	*35.6%*	4	*50.0%*	1	*4.8%*	21	*28.4%*
Remedial teacher					16	*76.2%*	16	*21.6%*
Sports coach	12	*26.7%*	2	*25.0%*	1	*4.8%*	15	*20.3%*
Music teacher	12	*26.7%*	1	*12.5%*	1	*4.8%*	14	*18.9%*
Home economics teacher	11	*24.4%*	1	*12.5%*			12	*16.2%*
Visiting teacher					9	*42.9%*	9	*12.2%*
Resource teacher					8	*38.1%*	8	*10.8%*
Speech/language/drama	6	*13.3%*			1	*4.8%*	7	*9.5%*
Dance teacher	3	*6.7%*	1	*12.5%*	2	*9.5%*	6	*8.1%*
Team teaching	2	*4.4%*	2	*25.0%*			4	*5.4%*
Personal development	3	*6.7%*					3	*4.1%*
Principal	2	*4.4%*	1	*12.5%*			3	*4.1%*
Computer instructor	1	*2.2%*			2	*9.5%*	3	*4.1%*
Other support teacher							2	*2.7%*
Physiotherapist	2	*2.2%*					2	*2.7%*
Other	5	*11.1%*	3	*37.5%*			8	*10.8%*
Subject teachers – secondary schools			7		36		43	
Total number of learning support personnel	*141*		*31*		*92*		*264*	
Mean number of learning support personnel.	*3.1*		*3.9*		*4.4*		*3.6*	

- ***Additional in-school learning support parents believed needed***

The final issue considered in this section was the *additional* supports and services parents believed necessary to support their son's/daughter's development. The provision of classroom assistants in special schools had been reported by parents to be one of the positive aspects of school placements. A small number of parents (7%) believed that more were needed.

[44] This difference was not statistically significant.

However, for students in mainstream education, the absence of an assistant in most of their classrooms was seen by the parents as a deficit. Fifty-two percent of parents of students in mainstream placement expressed the belief that additional classroom assistance was needed.

Parents of students attending special schools and classes believed that more class teacher time was needed, and those of students in mainstream schools expressed the need for more specialist support. Nearly half of the parents (46%) of students in special placement expressed a need for more speech therapy.

A comparison of the additional learning support personnel thought to be needed, by type of school attended, is reported in table 10.15.

*Table 10.15. **Additional** in-school learning support personnel believed by parents to be required, by type of school. (n=74)*

	Special schools and classes (moderate LD)		Special schools and classes (mild LD)		Mainstream primary and secondary		Total	
	N=45	%	N=8	%	N=21	%	N=74	%
None	11	24.4%	3	37.5%	3	14.3%	17	23.0%
unsure	1	2.2%			2	9.5%	3	4.1%
Speech therapy	20	44.4%	4	50.0%	2	9.5%	26	35.1%
Computer instruction	8	17.8%	2	25.0%	5	23.8%	15	20.3%
Classroom assistant	3	6.7%			11	52.4%	14	18.9%
Class teacher time	10	22.2%	1	12.5%			11	14.9%
Specialist teacher time					8	38.1%	8	10.8%
Music instruction	7	15.6%					7	9.5%
Academic instruction	3	6.7%					3	4.1%
Physical education	2	4.4%					2	2.7%
Other children	2	4.4%					2	2.7%
Speech/drama coach	1	2.2%			1	4.8%	2	2.7%
Social skills instruction	1	2.2%					1	1.4%
Psychological support	1	2.2%					1	1.4%
Physiotherapy			1	12.5%			1	1.4%
Total number of learning support personnel needed	58		8		27		93	
Mean number of learning support personnel needed	1.3		1.0		1.3		1.3	

Summary

In this section, some characteristics of the schools attended have been described and supports and services analysed. At the time of interview, more than half (58%) of the students attended special schools/class designated for pupils with moderate learning disability. The relative proportion of students in this type of school was higher for males and for older students. A small proportion (10%) attended schools/classes designated for pupils with mild learning disabilities. Approximately one-quarter (27%) attended mainstream primary and secondary schools. Four (5%) were not enrolled in a school programme.

Class size was smaller in special schools than mainstream schools and varied by the age of students. For the oldest group, mean class size in mainstream schools was twice as large as it was for students of the same age in special schools; for the younger age groups, it was three times as large. Students in mainstream secondary schools had the highest number of learning support personnel. The youngest group in mainstream schools had the fewest.

Ninety percent of parents, regardless of type of school the student attended, believed that a classroom assistant was necessary. There were classroom assistants in more than seventy-five percent of the special classes, but only in forty-three percent of the mainstream classes attended.

Sixty-seven percent of students in special schools/classes designated for pupils with mild learning disability, thirty-seven percent of those in special schools/class designated for pupils with moderate learning disability, and five percent in mainstream schools had speech therapy in school. However, all

students in mainstream schools had received at least some speech therapy during their school years. Twelve percent of students in special education had not received any speech therapy during their school years.

Half the parents of students who attended special schools designated for pupils with mild learning disability considered that there was sufficient learning support for the students; one-quarter of those in special schools designated for pupils with moderate learning disability and one-eighth of those in mainstream schools believed that the learning support provided was sufficient.

The key learning support personnel, additional to classroom teachers, for students in special schools were classroom assistants and physical education instructors. For students in mainstream schools they were remedial teachers and either a resource or a visiting teacher.

The supports and services most frequently mentioned as *deficient* were classroom assistance for students in mainstream schools; speech therapy for students in special schools designated for pupils with moderate learning disability; and computer instruction for students in all types of schools.

Students in mainstream schools used computers more frequently than those in special education. For the entire study population, there were only three persons in addition to classroom teachers who were reported as helping students with computers.

The level of supports and services reported by parents indicated that, at the time of interview, they believed additional resources were needed to support

the students' development and increase their learning opportunities. At the time of interview, the effect of a Department of Education initiative announced a few months earlier was not evident. This initiative guaranteed students in integrated settings an *automatic entitlement* to special teaching, and introduced a formalised system of childcare support for all students with special needs (Appendix 13).[45] The findings reported here may service baseline data to measure the effect of this initiative. In the following chapter some indicators of student well-being will be considered.

[45] Appendix 13. Press Release, Minister for Education and Science, Micheál Martin. T.D., November 5, 1998.

Chapter 11: Student Well-being

In this section, students' attitudes towards attending school and the schools' accommodation of the students were examined. Specific aspects of school experience were explored including: distance to school and time spent travelling; issues of bullying and student behaviour; the extent to which the parents believed the schools responded to the educational and social needs of their sons/daughters; the effect of school placement on student activities and opportunities for friendships.

Student attitude about school

The first question parents were asked: *How do you think your son/daughter feels about going to school?* The parents reported that the majority (69%) of the students were *delighted to go*; a minority (27%) were *agreeable to go*; and a few (4%) had negative feelings about going to school.[1] While most (90%) of those who attended mainstream schools were reported to be *delighted to go* to school, a smaller proportion (60%) of those who attended special schools/classes had this positive attitude towards school.

The small number of students reported to have negative feelings about going to school, all attended special schools designated for pupils with moderate learning disability. In one case, the insecurity about going to school related to incidents that happened on the school bus.

[1] The negative categories were: *insecure about going; reluctant to go; hates going.* There was one student in each of these categories.

> *Now it is OK, for a while there was a problem with one lad, more on the bus than in school. She would sometimes come home with bruises. The bus driver moved her to just behind him. Now the problem is solved, I take her to school in the mornings.*

The bus journey was also implicated in the case of another student who was *reluctant* to go to school.

> *I do not really know why. It may be because he is on the bus too long - one hour each way. Or, perhaps it is because they change teachers so often.*

The student who was reported to *hate* going to school had attended a mainstream primary school for three years and then transferred mid-term to a special school.[2]

> *He only hates going to school since he started at ...* [*special school*]. *He used to love going. I think that even with all the sports and activities he is bored. He also finds it difficult to be only with other children with handicaps. He will say, 'I don't want to go, I hate it.'*

While these three students may have been more affected than others, the length of time spent on school transport was a negative feature of the school experience of the majority of students in special educational placement. Distance to school and time spent on school transport were examined in greater detail.

Distance and travel-time

The distance from the students' home to their schools ranged from less than a mile to thirty-five miles. The mean distance for students who attended special schools/classes designated for pupils with moderate learning disability was

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[2] The parent reported that the student had been travelling on the school bus for four hours a day. The parents now drive him to and from school. This is three hours driving for them. The

9.9 miles; for students who attended special schools/classes designated for pupils with mild learning disability it was 5.3 miles; and for students who attended mainstream primary and secondary schools it was 2.6 miles. These differences were statistically significant (Anova p<.001). The distances, by type of school attended, is detailed in table 11.1.

*Table 11.1 One-**way** distance from students' homes to their schools, by type of school attended. (N=74)*

Distance **one-way** to school from home.	Special schools/classes (moderate LD)	Special schools/classes (mild LD)	Mainstream schools	Total
Under 2 miles	4 *8.9%*	1 *12.5%*	10 *47.6%*	15 *20.3%*
2 - 4.9 miles	7 *15.6%*	4 *50%*	6 *28.6%*	17 *23.0%*
5 - 9.9 miles	15 *33.3%*	2 *25%*	5 *23.8%*	22 *29.7%*
10 - 35 miles	19 *42.2%*	1 *12.5%*	0 *0.0%*	20 *27.0%*
Mean	9.9 miles	5.3 miles	2.6 miles	7.4 miles
Range	*0.5 - 35 miles*	*1.5 – 18 miles*	*0.1 – 7 miles*	*0.1 – 35 miles*
Total	45 *100.0%*	8 *100.0%*	21 *100.0%*	74 *100.0%*

The mode of transport used also varied by type of school attended. The majority of students (84%) who attended special schools/classes designated for pupils with moderate learning disability travelled on a school bus, compared with half (50%) of the students who attended special schools/classes designated for pupils with mild learning disability, and only two (10%) who attended mainstream primary/secondary schools.

Because of the additional travel-time that resulted from indirect school bus routes, differences in distance translated into even greater discrepancies in

parent explained why they had felt it necessary to do so. *He hated the school bus and I couldn't stand forcing him on to it every day and the constant complaints of the bus driver.*

time spent travelling to and from school.[3] The mean daily travel-time for students who attended special schools/classes designated for pupils with moderate learning disability was ninety-six minutes; for students who attended special schools/classes designated for pupils with mild learning disability it was sixty-seven minutes; for students who attended mainstream primary and secondary schools it was twenty minutes per day. These differences were statistically significant (Anova p<.001) The amount of time students spent travelling to and from school, by type of school attended, is listed in table 11.2.

Table 11.2. Amount of time in minutes students spent travelling to and from school , by type of school attended. (N=74)

Time spent travelling to and from school	Special schools/classes (moderate LD)	Special schools/classes (mild LD)	Mainstream schools	Total
Less than 30 minutes	2 *4.4%*	2 *25%*	16 *76.2%*	20 *27.0%*
30 to 59 minutes	11 *24.4%*	3 37.5%	4 *19.0%*	18 *24.3%*
60 to 89 minutes	10 *22.2%*	1 *12.5%*	1 *4.8%*	12 *16.2%*
90 to 119 minutes	6 *13.3%*	1 *12.5%*	0 *0.0%*	7 *9.5%*
120 + minutes	16 *35.6%*	1 *12.5%*	0 *0.0%*	17 *23.0%*
Mean	96 minutes	77 minutes	20 minutes	72 minutes
Range	*20-240 minutes*	*14-240 minutes*	*2- 60 minutes*	*2-240 minutes*
Total	45 *100.0%*	8 *100.0%*	21 *100.0%*	74 *100.0%*

The distance from the family home to the special schools affected the students' use of time. It was also a variable that influenced the amount and quality of communication between school and family. Approximately one-third (34%) of the parents of students who attended special schools/classes of any designation reported that communication between themselves and the school

[3] As bus routes to school and returning home may differ, the sum of the time travelling was

was *very good*, compared with nearly two-thirds (62%) of those who attended mainstream schools. This difference was statistically significant ($p<.05$).

School policy on countering bullying behaviour

Parents were asked whether there was a policy on bullying in the school their son/daughter attended. This issue was current at the time of the interviews and it was believed that parents would consider school policy on bullying important. The Department of Education had directed that all schools formulate a policy to counter bullying behaviour in school.[4]

Overall, forty-one parents (55%) reported that there was a school policy on bullying. Less than half (45%) of the parents of students who attended special schools/classes of any designation knew of a school policy on bullying, compared with a majority (81%) of the parents of students who attended mainstream schools. The difference between the groups was statistically significant ($p<.005$). Table 11.3 reports parental knowledge of school policy on bullying by type of school attended.

Table 11.3. Number of parents who reported school policies on bullying, by type of school attended. (N=74)

Is there a school policy on bullying?	Special schools/class (moderate LD) N=45	Special schools/classes (mild LD) N=8	Mainstream schools N=21	Total N=74
Knew school had policy	19 *42.2%*	5 *62.5%*	17 *81.0%*	41 *55.4%*
Did not know of a school policy	26 *57.8%*	3 *37.5%*	4 *19.0%*	33 *44.6%*

used.

[4] Department of Education (1993). *Guidelines on Countering Bullying Behaviour in Primary and Post-primary Schools.*

Twenty-one of the thirty-three parents who did not know of a school policy on bullying did not comment further. Nine of the twelve who did indicated that, although they were unaware of a specific policy, they believed bullying was not tolerated in the schools. Two of the students attended special schools designated for pupils with mild learning disability. One parent remarked:

> *I am sure there must be as M is very happy there.*

The other seven attended special schools designated for pupils with moderate learning disability. Representative of their comments were:

> *If they knew of bullying, they would not tolerate it.*
>
> *He is well able to talk up for himself, but I think they would put an end to it if there was any bullying.*
>
> *Whenever there has been a problem, another child hitting or scratching K, they have let us know about it and apologised.*

Reported incidents of bullying

Seventeen parents made reference to conditions or incidents that indicated bullying had occurred. Parents of eleven of the forty-five (24%) students who attended special schools/classes designated for pupils with moderate learning disability indicated concern. Two referred to incidents that had occurred in the past.

> *In the past there have been incidents. Some of them relatively serious, though not usually. Recently there was a parents meeting about bullying – perhaps a new incentive.*
>
> *There was bullying at ...* [the previous special school designated for pupils with mild learning disability]. *I have not come across any at the school where she is now.*

One parent believed the school put an end to any bullying they saw, but only

... when they see it. I don't know how much they see. A lot of the children are non-verbal. R can tell me and there seems to be some that goes on when it is not seen.

Three other parents expressed concerns based on the students' vulnerability.

They don't like bullying, but I doubt that it is totally effective. T doesn't speak so I don't know.

I think they try their best, but some of the older ones have bad behaviour and can be very rough.

It is not really bullying, but sometimes I feel that the other students are at him too much, dragging out of him and he does not tell them to leave him alone. He would at home, but not at school. I feel that it is not really acceptable behaviour.

Five parents of students attending special schools designated for pupils with moderate learning disability reported that, while bullying might not happen at school, it had happened on school transport. Representative of the parents' reports were the following examples.

There has been one rather serious incident on the bus, but not at school.

There is only the driver on the bus and no escort. There are big lads and small babies all there together and sometimes it gets very rough. There should be someone on the bus to supervise.

She has been bullied on the bus by an older student. K told me about it and I had them separated. The older student has to sit in the back and K is just behind the driver.

While it was physical bullying that was most frequently experienced by students who attended special schools designated for pupils with moderate learning disability, more verbal bullying was experienced by half of the students who attended special schools/classes designated for pupils with mild

learning disability.[5] One mother referred to a situation that had occurred in the past.

> *Two years ago she was bullied. Now they are looking for it.*

Another parent reported that

> *... they do their best, but I know from what she says that the 'normal-looking' ones sometimes call her a 'mentaler'.*

A father commented that his son was at times the *fall-guy* for his more *street-wise* peers.

> *He can be blamed for things he hasn't done – left holding the baby. He is not really able to defend himself. He doesn't see it coming.*

A student who attended a secondary special class of this designation, came into the room at this point of the interview with his parent. When asked if there was any bullying in his school, he replied:

> *They are not allowed, but they do sometimes – name calling and thumping.*

Only two of the twenty-one parents (10%) of students in mainstream schools made reference to incidents of bullying behaviour. A mother spoke of a situation that had recently begun and had not yet been dealt with.

> *There has never been any serious incidents. This year for the first time M has said that one of the young fellows was laughing at him, but this is definitely the exception.*

A father referred to a situation which he believed had been well handled and settled.

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[5] Two students who had transferred from special schools designated for pupils with mild learning disability to schools designated for pupils with moderate learning disability had both experienced bullying in their first schools. This bullying had been a reason for their transfer.

Yes, it [the school policy on bullying] *is certainly being adhered to. He did come up against one or two incidents, but they were handled very well.*

School interventions to prevent bullying

There was evidence that schools of all categories were taking positive action to counteract and prevent bullying. Positive action to prevent bullying was reported by parents of fourteen of the forty-five students (31%) who attended special schools designated for pupils with moderate learning disability. Examples were:

It [the school policy on bullying] *is being amended at the moment with parents' consent. I have no reason to believe that it has not been effective.*

The parents and the school work through any situation.

They have mentioned it during a parents' meeting. They keep good communication with the parents. If there was bullying going on they would tell the truth.

Four (50%) parents of students who attended special schools/classes designated for pupils with mild learning disability made positive statements about the schools' policies. A mother of a student who attended a primary school special class of this designation reported that

... anything that happens is paid attention to. L knows that if anyone teases her or bullies her, she should tell her teacher.

More positive action to prevent bullying was reported by parents of students who attended mainstream schools than other types of schools. Seventeen of the twenty-one parents (81%) were positive in their evaluation of the school

policies that were in force in the schools their sons/daughters attended.[6] The following are examples.

> *The school is just starting a new programme and is involving parents in it. The principal is determined to see that it does not occur. The teachers have told us that the class 'hard fellows' are his minders.*
>
> *Yes, and they also put the stay-safe programme into effect. It is known as a happy school where each child is an individual.*
>
> *Yes, it is important to the teachers.*

Student behaviour

Because student behaviour is an aspect of social interaction that affects learning opportunities, behaviour that was considered to be difficult, the conditions under which the behaviour occurred, and family/school responses to problem behaviour, were considered to be relevant issues.

The parents were asked: *Has your son/daughter ever had behaviour problems?* If yes, *To the best of your knowledge, did these behaviour problems happen at school?*, and *How were they handled?* These questions were designed to quantify the extent to which problem behaviour occurred; to identify what happened and in what circumstances, and to explore the reactions and consequences evoked by the behaviour.

Most (65%) of the students did *not* have problem behaviour *either* at home or in school, and very few of the problems reported were major or continuous. Some, which had occurred when the student was younger, had disappeared. Several were related to language difficulties and the resultant frustration.

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[6] Three parents of students who attended mainstream schools did not comment. None of the three had reported knowledge of a school policy on bullying.

Some in-school problem behaviour could have been prevented or ameliorated with additional support. Other difficulties were precipitated by unsatisfactory school transport arrangements.

Parents reported that twelve of the students (16%) had engaged in problem behaviour at home, and that twenty-six (35%) at school.[7] There were differences in the type of problem behaviour described, both by the age of student and by the type of school attended. These distinctions and similarities were explored.

A higher proportion of behaviour problems *at home* were reported for male students (21%) than female students (11%); for eight-year-olds (24%), compared with twelve-year olds (11%), and sixteen-year-olds (12%); for students who attended special schools/classes designated for pupils with moderate learning disability (22%), compared with students who attended special schools/classes designated for pupils with mild learning disability (0%), and students in mainstream schools (10%).[8]

The occurrence of problem behaviour *at school* was similar, with one exception. Again, a higher proportion of problems were reported for male students (40%) than female students (31%); and for eight-year-olds (48%), compared with twelve-year-olds (29%), and sixteen-year-olds (24%). The exception was that an equally high proportion of problems were reported for

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[7] All but one who had behaviour difficulties at home, also had behaviour difficulties at school. Fifteen of those who did not have behaviour difficulties at home had some behaviour difficulties at school.

[8] Difference by type of school attended, sex of student and year of birth were not statistically significant.

students who attended special schools/classes designated for pupils with moderate learning disability and students in mainstream schools (38%) compared with students who attended special schools/classes designated for pupils with mild learning disability (12.5%).[9] All students in mainstream education who had behaviour difficulties were eight-year-olds. This group received a low level of in-school support.[10]

The behaviour considered to be problematic is described here and the context in which it occurred. Analysis by sex and age of student and type of school attended will allow similarities and differences between groups to be identified.

Behaviour problems reported for female students

Eleven females (30%) were reported to have had behaviour problems. Seven of them did not have problems at home, only at school.[11]

The problem behaviour of a sixteen-year-old girl occurred on school transport. She attended a special school designated for pupils with moderate learning disability. The mother reported:

> *She goes to school in an over-crowded taxi with seven children 'rooting' and fighting. There have been complaints. But at home no behaviour problems. She is very good and easy.* [At school] *they don't do very much. They tell her not to fight.*

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[9] Again, difference by type of school attended, sex of student and year of birth were not statistically significant.

[10] See table 10.10.

[11] One was born in 1982, three in 1986, and seven in 1990.

Three twelve-year-old girls were reported to have behaviour problems. They all attended special schools designated for pupils with moderate learning disability. The reported problem of one girl referred to a time when she had first started school. The situation had been resolved when she had progressed to another class and teacher.

> *The first year she would do nothing for her teacher, it was a personality clash, but the teacher should have been able to get around her. That year they* [the school] *handled it very badly. We were constantly being called in. Everything improved when she changed from that teacher. There have been no problems since.*

One girl also had a serious heart condition. Her mother reported that recently she had become very angry.

> *... she is very bold this year. She is cursing and hitting others and shouting and roaring at them. This is not like her. I don't know why. Maybe she is tired ... she sleeps for twelve to thirteen hours ... it could be her heart. I told her that if she did not behave she could not go to school. She loves school. The teacher is saying the same thing. So far, the threat has not been carried out.*

The other student's behaviour was more directly related to adolescent sexuality. Although it occurred infrequently, her mother was concerned that her daughter might be ostracised for socially unacceptable behaviour.

> *I don't know if she was copying someone else or not. We are working on it helping her know that it is a private thing to do.* [At school] *I am not sure. Seems they are given something to do - a distraction.*

Seven of the eight-year-old girls were reported to have had problem behaviour. Two attended special schools designated for pupils with moderate learning disability. Their behaviour difficulties occurred both at school and home. The behaviour described was typical of children who experience

language delays and who find it difficult to negotiate their wishes in a socially acceptable manner.[12]

> *She can be very stubborn. You have to be very firm with her. The teacher says that I have to be very firm with her and not let her get away with being bold.*

> *Tantrums, but they are usually manageable.* [At school] *They ignore her and sing a song and carry on with the rest of the class. After a while she comes over and says 'sorry'.*

One girl in a mainstream school exhibited similar, although less frequent, disruptive behaviour. In this instance there was a full-time class assistant, but negligible specialist teacher support and advice.[13]

> *No serious problems, but if she decides that she is not doing something she can did her heels in. She can then be very noisy and disruptive. She goes for months fine and then acts up again. I am not sure why it happens, but it seems to be when she is tired. It happens much more at school than at home. They have tried different things – taking away privileges, but it does not seem to have great effect. It usually suddenly gets better.*

The situations described by the parents of the other four young girls in mainstream schools have a common theme of the girls breaking either stated or implied school rules. In one situation there was specialist support for an hour a week, no classroom assistant, and twenty-five students in the class.

> *The school felt there were problems and made a big deal of them. It was things like she might scribble in someone's copy, bang a book, leave her school bag in the middle of the floor. Usually I was told what she had done. Other than that, the school did very little. The out-reach teacher spoke with her. Painting was used sometimes as a reward for being good.*

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[12] One girl had very limited speech. She used some sign language *Lamh.* Her mother did not know if she had speech therapy at school or not. The family was not involved in any language development programme with the girl. The other girl was receiving group speech therapy once a week at school.

[13] The parent reported that the school had the support of a visiting teacher for a half-hour a month.

In another situation the girl was in a class with thirty students in the class and and had specialist teacher support for two and a half hours per week. There was no classroom assistant. In the second situation there were thirty-four students, a classroom assistant for one quarter of the school day, and specialist teacher support for three hours per week.

> *When she first started she could sometimes walk out of the classroom. She was told she had to stay in the classroom. They kept a close eye on her. The visiting teacher helped by talking to her and explaining that she had to stay in the classroom like the other children.*
>
> *Last year she left school twice and there were incidents on the school yard. The teacher handled it very badly. She told the other children to tell their parents. One of the parents told me so that I would be aware of it. This year there have not been any problems.*

Another parent spoke of a positive intervention by a psychologist.

> *There had been some aggression towards the other children in school, no one in particular – pushing, shoving, hitting. It happened only at school. I was told about it by the teacher and the principal and I contacted the psychologist. He was willing to sit in on the class to observe if this would be agreeable to the principal and the teacher. He (the psychologist) felt strongly that protocol had to be observed. His analysis was that she felt excluded. He suggested that they change from her doing different work in isolation, to sitting at a table with other children she got on with and doing similar, if sometimes different, work. Things improved.*

Behaviour problems reported for male students

Fifteen of the male students (40%) were reported to have had behaviour problems at some stage of their school career.[14] Seven of them did not have problems at home, only at school.

Three sixteen-year-old male students were reported to have had problem behaviours. Two attended special schools designated for pupils with

moderate learning disability, one attended a special class designated for pupils with mild learning disability. With maturity and language development, the behaviour difficulties of two of the students had disappeared. The behaviour of the third student was related to school transport and had improved.

> *When younger he sometimes had tantrums. He was frustrated at not being understood.*
>
> *Minor ones, he would not stay in line when he was young. He was a rebel.*
>
> *On the bus he picked on children. I felt that he was frustrated. He has settled down very well now, but it still happens occasionally.* [At school] *he would be sent to another teacher and might lose a privilege.*

Five of the twelve-year-old boys were reported to have had behaviour problems. They all attended special schools designated for pupils with moderate learning disability. One was a weekly boarder at a special residential school. His mother reported that, when younger, he had been hyperactive and had difficulties sleeping. His behaviour had improved with age.

> *Certainly at an earlier stage he had behaviour problems. He was hyperactive, had sleeping problems. He would disappear in a moment.* [At school] *they certainly need to keep an eye on him. Sometimes he would take things. They tend to send him to the principal. They sometimes remove privileges – he would not be allowed to play football which he loves.*

The other three boys attended special day school. One student had difficulty being understood and found this frustrating. The boy's parents also reported a lack of communication from the school regarding discipline.

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[14] Three were been born in 1982; five in 1986; and seven in 1990.

> *At times he will get frustrated when people won't understand him. But he is not bad really. You can take him anywhere. He has good manners.* [At school] *the teacher confiscates his school bag. This upsets him very much. It seems that the teacher takes the bag so that we will notice that it is missing and will know that he has been 'bold'. But the teacher never sends a message home or makes any attempt to tell us what the problem is. We are very unhappy about this.*

Communication difficulties of another type were the source of the problem for two other students. At times, the clearest words said by students who have language delays are words that get them into trouble at school. They hear other people using these words and phrases with force and clear articulation and while the exact meaning of the words may not be understood, the emotional content is perceived. The two *lads* had been in trouble for *bad language.*

> *Not really, we can bring him anywhere and he gives no problem. He was in trouble in school for using bad language. It just seemed to pass.*
>
> *Bad language, temper tantrums. It doesn't happen very often.* [At school] *the threat of a loss of a privilege – not being able to play football, is enough to keep it in check.*

Understanding and dealing with adolescent sexuality caused difficulties for one student.

> *At home no. Apparently one day there was a problem on the school bus. The bus driver didn't say anything nor did the school. I didn't know anything until a man from CIE came to the door. I was very embarrassed. He was taken off the bus for a week. It could have been handled better.*

Seven of the eight-year-old boys were reported to have behaviour difficulties. Four attended special schools designated for pupils with moderate learning disability; three were in mainstream schools. The behaviour of three of the four who attended special schools was difficult both at school and home. The behaviour of two of them was typical of children who have limited language

and who have difficulties negotiating their wishes in a socially acceptable manner. The father of one of the boys had recently died and both he and his mother were struggling to come to terms with the loss.

> *He can have a mind of his own – can be very stubborn.* [At school] *basically they try to bribe him. Sometimes they ignore him, sometimes they take away privileges.*
>
> *He can be very bold. He is just stubborn. If he wants to do something he will just do it whatever. He is very angry at the moment, since his Daddy died. But* [at school] *not as much as at home. He takes more notice of them than he would me.*

The mother of the third boy was able to influence his school behaviour by arranging positive rewards at home. The student had good use of language and was able to negotiate his reward, to remember it and to remind himself that it would happen at the end of the week if all went well. For him verbal approval and praise were also effective.

> *He is strong willed, knows his own mind. It is hard to get him to change his mind once it is made up. He can be demanding, but you can appeal to his good nature.* [At school] *the teacher rings me and I talk to him. I tell him that if he is bold in school I will be very disappointed and if he is good I will be proud of him. I arrange prizes, small things for the end of the week if he has been good. I give him lots of praise if he has been.*

The fourth boy did not have behaviour problems at home. He had very little expressive language. His mother believed that his reported school behaviour was out of character with his home behaviour and was in a quandary as to whether the teacher was exaggerating an innocent accident or whether it was more serious.

> *Now at the moment, for the first time* [he has behaviour problems in school]. *It is alleged that he has hit his teacher and head-butted her. But this has not happened at home. I feel that it has been very badly handled by the teacher. There seems to be a clash of personalities or a power struggle between T and the teacher. It could have been an accident. The incident was over putting on his coat. The principal, psychologist and I have met. The cards are on the table. I am not sure what the outcome will be.*

Three of the eight-year-old boys in mainstream school were reported to have had some behaviour problems. Language difficulties were implicated in all three cases. Although the parents of one boy realised that there would be different expectations of academic performance for their son and his peers, they expected that he would behave according to the standards of the school. In this case there were thirty-six students in the class, two hours per week of specialist teacher support, and no classroom assistant.

> *Not major problems. He can be stubborn, can sulk, he is not very good at expressing what he wants to say.* [At school] *we don't really know, but it does not seem to be a major problem. For standards of behaviour, we want him to be treated the same as the other children in the school.*

In two instances, difficulties arose on the playground at break time. It would seem that the boys were making non-verbal attempts to join in the unstructured play. In the first situation, there were thirty-three in the class, remedial teaching for an hour a week and no classroom assistant. In the second case, there were twenty in a multi-grade classroom, remedial teaching for an hour a week and no classroom assistant.

> *Pushing on the playground, nothing serious. They* [the school] *usually ring.*

No problems at home. At school, in the yard. He is very strong and can push the others quite hard. This has really only become a problem this year. At big break the boys play football. He doesn't but he takes their football and runs away. They chase him. I think if he had his own football it would help, or if there were more footballs so that he could play too.

Accommodation of students' educational and social needs

A scale was developed by the researcher to measure parental assessment of school accommodation of their sons'/daughters' educational and social needs. Eight criteria were identified as indicators of student accommodation. They were: *provides a broad and balanced curriculum; provides a safe and caring learning environment*; *provides individualised learning goals; holds high, but realistic expectations for the student*; *includes him/her in a variety of school activities*; *encourages friendships with his/her peers; provides him/her with role models of acceptable behaviour*; *encourages his/her individual interests and talents*. (Appendix 14).[15]

Parents were asked to rate the degree to which the present schools provided for their sons/daughters in those eight areas. The five options were: *very well, well, adequately, poorly, very poorly.* These were assigned scores from *very well* =5 to *very poorly* =1. The sum of the items was calculated giving a *student accommodation score*. The lowest possible score was eight, the highest possible score was forty.

As a group, the parents highly rated the schools with an overall mean score of 33.84. Parents gave the highest rating (4.73) to the item: *provides him/her*

with a safe and caring environment. The item that received the lowest rating (3.77) was: *provides him/her with individualised learning goals.*

A mean score for each item and a mean *student accommodation score* were calculated.[16] Parental ratings of student accommodation, by type of school, are reported in Table 11.4. Parents were asked to assess how well the schools accommodated their particular son/daughter with regard to his/her academic and social needs and abilities.

Table 11.4 Comparison of mean student accommodation score by type of school attended. (n=74)

How well do you think the present school meets your son's/daughter's needs in the following areas?	Special schools and classes (moderate LD) N=45		Special schools and classes (mild LD) N=8		Mainstream schools N=21		Total N=74	
	Mean	Std. D	Mean	Std. D	Mean	Std. D	Mean	Std. D
Provides a broad and balanced curriculum	3.80	1.06	4.50	.93	4.00	.77	3.93	.98
Provides a safe and caring environment	4.78	.56	4.50	.76	4.71	.56	4.73	.58
Provides him/her with individualised learning goals	3.67	1.09	4.38	.74	3.76	.77	3.77	.99
Holds high, but realistic expectations	4.02	1.06	4.50	.76	4.33	.73	4.16	.95
Includes him/her in a variety of activities	4.67	.83	4.25	.89	4.86	.48	4.68	.76
Encourages friendships with his/her peers	4.18	.94	3.75	1.49	4.48	.87	4.22	1.00
Provides role models of acceptable behaviour	4.07	.99	4.13	1.36	4.67	.48	4.24	.95
Encourages individual interests and talents	4.04	1.07	4.50	.76	4.14	.79	4.12	.96
Mean student accommodation score	33.22	5.60	34.50	5.10	34.90	3.55	33.84	5.05

[15] The reliability score (*Alpha*) between the eight items on the scale was .8468. Bivariate correlations between the items are given in Appendix 14 *Bivariate Correlations of Student Accommodation Scores.*

[16] Differences for the individual items and for overall *student accommodation score* by year of birth and sex of student were not statistically significant.

Comparison of student accommodation ratings by type of school

Special schools/classes designated for pupils with moderate learning disability received the highest rating on one item only: *provides a safe and caring environment.*

Special schools/classes designated for pupils with mild learning disability received the highest ratings on four items: *provides a broad and balanced curriculum; provides individualised learning goals; holds high, but realistic expectations for him/her; encourages individual interests and talents.*

Mainstream schools received the highest ratings on three items: *includes the student in a variety of activities; encourages friendships; provides role models of acceptable behaviour.*[17] Mainstream schools also received the highest mean *student accommodation score.*

There was a wide range of *student accommodation score*s. The broadest range (21–40) was for students who attended special schools/classes designated for pupils with moderate learning disability. All seven *student accommodation scores* with a mean rating of *adequate* or lower were from parents of students in this type of school.

There were also differences by school type at the upper end of the scale. Maximum ratings for each item were given by three parents of students in special schools/classes designated for pupils with mild learning disability, by eight parents of students in special schools designated for pupils with

[17] Difference between special and mainstream was significant for the item of *provides him/her with role models of acceptable behaviour* ($p<.05$).

moderate learning disability, and by one parent of a student in a mainstream school.

The proportion above and below the mean score (33.84) by type of school were compared. Twenty-five parents (56%) of students in special schools/classes designated for pupils with moderate learning disability; four parents (50%) of students in special/schools classes designated for students with mild learning disability; fourteen parents (67%) of students in mainstream schools gave ratings that were higher than the mean score.

Student attitude towards going to school and *student accommodation score* was compared. Student accommodation ratings, higher than the mean, were given by sixty-seven percent of the parents whose sons/daughters were *delighted to go* to school, compared with only forty percent of those whose sons/daughters were *agreeable to go* to school. Two of the three parents of students who had negative feelings about going to school gave ratings well below the mean score.

The mean *student accommodation score* for students who were reported to have had behaviour problems in school was lower (32.96) than it was for those for whom behaviour had not been an issue (34.31). There was also a similar difference in mean score given by those parents who had not known of a school policy on bullying (32.92) and those who had (34.60).

Student social involvement

Two measures of student social involvement were explored: the number of activities students participated in, and the frequency that friends came to their home and they went to friends' homes.

Parents were asked whether their sons/daughters were involved in sporting, artistic, and social activities.[18] The list of activities and the number and percent of students participating in the activity, by type of school attended, is given in table 11.5.

Table 11.5. Student involvement in sporting, artistic and social activities by type of school attended. N=78

Is your son/daughter involved in:	Sp schools / classes (moderate LD)	Sp schools / classes (mild LD)	Mainstream schools	Not in school	Total
	N=45	N=8	N=21	N=4	N=78
Special Olympics	24 *53.3%*	0 -	7 *33.3%*	1 *25.0%*	32 *41.0%*
Team sports	18 *40.0%*	1 *12.5%*	5 *23.8%*	0 -	24 30.8%
Individual sports	34 *75.5%*	5 *62.5%*	11 *52.3%*	3 *75.0%*	53 *67.9%*
Drama	14 *31.1%*	2 *25.0%*	8 *38.1%*	0 -	24 30.8%
Dance	13 *28.8%*	2 *25.0%*	5 *23.8%*	0 -	20 *25.6%*
Art	2 *4.4%*	0 -	2 *9.5%*	0 -	4 *5.1%*
Music	7 *15.5%*	4 *50.0%*	3 *14.3%*	1 *25.5%*	15 *19.2%*
Scouting	1 *2.2%*	1 *12.5%*	4 *19.1%*	0 -	6 *7.7%*
Church activities	0 -	0 -	3 *14.3%*	1 *25.5%*	4 *5.1%*
Other [19]	4 *8.8%*	2 *25.0%*	0 -	0 -	6 *7.7%*
Mean number of activities	2.6	2.1	2.3	1.5	2.4

[18] Planned programmes that took place in school outside of ordinary class work were considered to be activities. For example, playing football informally at lunchtime or as part of a physical education class was not included, but playing with a school football team was. Artwork done as part of class work was not included, but a weekend or after-school art club at the school was.

[19] Other activities included: sailing, golf, greyhound racing, local football supporters club, visiting and exercising pets in the neighbourhood, and summer camp.

The number of activities a student participated in ranged from zero to five. Overall, the mean number of activities was 2.4.[20] Students who attended special schools designated for pupils with moderate learning disability had the highest mean number of activities (2.6).[21] As with all children, the number of activities differed by age of student. The sixteen-year-olds and twelve-year-olds had similar number of activities. The eight-year-olds had approximately half as many.[22]

Individual sporting activities were most frequent (68%). Students who attended special schools designated for pupils with moderate learning disability had the highest mean number of sporting activities.[23] However, less than half of the students in the study group were involved in Special Olympics. Even in special schools designated for pupils with moderate learning disability, just over half of the students participated. This is somewhat modified when the oldest group were considered. Thirteen (65%) of the sixteen-year olds were involved in Special Olympics. There was low participation in art activities (5%), scouting (8%) and church activities such as youth groups or choirs. (5%).

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[20] Differences in the mean number of activities by type of school attended and by sex of student were not statistically significant.

[21] Difference in the mean number of activities, by type of school attended and sex of student were not statistically significant.

[22] Mean number of activities for students born in 1982 was 2.9 activities; for those born in 1986 it was 3.0; and for those born in 1990 it was 1.6. The difference between the two older groups was not significant, however between those born in 1986 and 1990 it was statistically significant ($p<.001$).

[23] The activities included were: swimming, cycling, horse-riding and gymnastics.

It was considered that student participation in three or more activities could be used as an indicator of student interest and participation in diverse social contexts. When the number of students involved in three or more activities was compared by age of student and type of school attended, the following pattern emerged (table 11.6).

Table 11.6. Number and percent of students who were involved in three or more activities by age of student and type of school attended.

	1982 N=17	1986 N=28	1990 N=29	Total N=74
Students in special schools/classes of all designations who had three or more activities	9 64.3%	17 77.3%	2 *11.8%*	28 *52.8%*
Students in mainstream schools who had three or more activities.	3 *100%*	3 *50%*	6 *50%*	12 *57.1%*
Students involved in three or more activities by age group	12 *70.6%*	20 *71.4%*	8 *27.6%*	40 *54.1%*
Students with fewer than three activities by age group	5 29.4%	8 28.6%	21 72.4%	34 45.9%

Half (54%) of the students had three or more activities. For the twelve-year-old group, a higher proportion in special education had three or more activities. However, this was reversed for the other two age groups.

Contact with friends

Parents of students who attended mainstream schools rated the schools' encouragement of friendships higher than did parents of students who attended special schools. Two questions were asked in order to explore whether or not the type of school attended influenced contact with friends out of school: *How often do your son's/daughter's friends come to your home?* and *How often does your son/daughter visit friends in their homes?*[24]

[24] For these questions *friends* referred to both neighbourhood friends and school friends.

It is recognised that the question of friendship for students who have learning disabilities deserves consideration that is beyond the scope of this study. The reported number of home contacts with friends reported in table 11.7 should be seen as a measure of opportunity for contact rather than of capacity for friendship.

Table 11.7. Frequency of friends coming to students' homes and students going to friend' home by type of school attended.

	Sp. schools / classes of all designations	Mainstream schools	Total
Friends come to student's home	N=53	N=21	N=74
Less than once a month	44 83.0%	9 42.9%	53 71.6%
Once a month or more, but less than once a week	2 3.8%	5 23.8%	7 9.5%
Once a week or more	7 13.2%	7 33.3%	14 18.9%
Student goes to friends' homes			
Less than once a month	47 88.7%	8 38.1%	55 74.3%
Once a month or more, but less than once a week	3 5.7%	10 47.6%	13 17.6%
Once a week or more	3 5.7%	3 14.3%	6 8.1%

Students who attended mainstream schools had more contact both with friends in their own homes, and in friends' homes than did students who attended other types of school. The difference by type of school attended for both questions was statistically significant ($p<.005$).[25] Distance from home to school was also an important variable. Forty-seven percent of students who lived less than two miles from their school had weekly or more frequent home contact with friends, compared with twelve percent who lived further away. Twenty percent of those who lived within two miles of their school visited

[25] Differences in contact with friends at home by sex of student were not statistically significant.

friends in their homes weekly or more frequently, compared with five percent of those who lived further away.

For the entire study group, contact at home with friends was infrequent. A mother of a young boy expressed her feelings about the lack of friendship opportunities for her son – a sense of longing that was shared by other parents.

> *I feel that this is an awful miss in his life. His friend C lives fifteen miles away. It is very sad that no one ever comes through the door for him.*

Summary

Ninety percent of students who attended mainstream schools were *delighted to go* to school; fewer students (60%) in special education were as positive about going to school.

The length of time spent on school transport was a negative feature of school experience for the majority of students in special educational placement. Distance from home to school and the amount of time spent travelling were greatest for students who attended special schools and classes designated for pupils with moderate learning disability. The mean time spent by these students (96 minutes) was five times greater than that of those in mainstream schools (20 minutes). Differences by type of school in distance to school and time spent travelling were statistically significant ($p<.005$).

Distance from family home to school influenced communication between the parents and school. Nearly two-thirds (62%) of parents in mainstream schools considered communication with the school to be *very good*, whereas only one-third (34%) of parents of students in special educational placement rated

it as highly. This difference translated into difference in parental knowledge and participation in the implementation of school policies. An example of this was parent knowledge of school policy on countering bullying behaviour.

Less than half (45%) of the parents of students in special schools/classes of any designation knew of a school policy on bullying, compared with a large majority (81%) of the parents of those in mainstream schools. This difference was statistically significant ($p<.005$).

A quarter (23%) of the parents made reference to conditions or incidents that indicated bullying was, or had been, an issue. It was a concern for a quarter (24%) of those in special schools/classes designated for pupils with moderate learning disability; half (50%) of the students in special schools/classes designated for pupils with mild learning disability, and only a few (10%) of those in mainstream schools. There was evidence that schools of all categories were taking measures to prevent bullying behaviour. Positive action was reported by one-third (31%) of parents of students in special schools/classes designated for pupils with moderate learning disability, half (50%) of the parents of students in special schools/classes designated for pupils with mild learning disability, and by nearly all (81%) of those in mainstream schools.

Student behavioural difficulties, and the manner in which schools dealt with behaviour problems, were considered. Most (65%) of the students did *not* have behaviour difficulties, either at home or at school. The highest frequency of in-school behaviour difficulties were reported for males (40%), for those in the youngest group (29%); and for those who attended either special schools

designated for pupils with moderate learning disability or mainstream schools (38%). However, all those in mainstream schools who had behaviour difficulties were eight-year-olds. Few of the problem behaviours reported were major or continuous, some had disappeared with maturity, several were related to language difficulties, others could have been prevented or ameliorated with additional teacher support. Unsuitable transport arrangements were implicated in several of the situations where students' behaviour was a problem.

Parents were asked to rate how well the schools accommodated their sons/daughters on eight variables: learning environment; curriculum; learning goals; expectations; activities; friendships; role models; individual interests. The sum of the scores on the items yielded a *student accommodation score.*

As a group, the parents rated highly the schools their sons/daughters attended. The highest ratings were given to the items: *provides him/her with a safe and caring learning environment,* and *includes him/her in a variety of activities.* The items that received the lowest overall ratings were: *provides him/her with individualised learning goals,* and *provides a broad and balanced curriculum.*

Special schools/classes designated for pupils with moderate learning disability received the highest rating for the item referring to protection and care. Special schools/classes designated for pupils with mild learning disability received the highest rating for the four items that were more specifically learning-goal oriented. Mainstream schools received the highest ratings for

the three variables of inter-student relationships and also the highest mean *student accommodation score.*

More than half of the students (54%) were involved in three or more activities. The number of activities differed by age of student. The eight-year-olds had half as many as the older two groups. As a group, students who attended special schools designated for pupils with moderate learning disability had a higher average number of activities. When those who had higher than the mean number of activities were compared by type of school, this difference was no longer evident.

Students who attended mainstream schools had more contact with friends in their own homes and in friends' homes. The difference by type of school was statistically significant for both items. Distance from home to school was an important variable for frequency of out-of-school contact with friends. Twenty percent of those who lived within two miles of their school visited friends in their homes weekly or more frequently, compared with five percent of those who lived further away.

Chapter 12: Student Academic Attainment

Choice of research instrument to record student academic attainments

As the present study was parent interview based, neither psychological assessments nor school records were available to the researcher. A scale that could be used to record parent-reported student attainment was sought.[1] The measure chosen for use was the *Academic Attainments Checklist* developed by Sloper *et al.* at the Hester Adrian Research Centre, University of Manchester.[2] This non-standardised checklist was developed by the Manchester research team because they had found that there was no standardised measure which covered the early stages of pre-reading, number and writing skills and the more advanced skills. It was believed that such wide coverage would be necessary in order to record the academic attainments of the study group.

When relying on parent-reported attainment, three questions arise: whether parents are accurate reporters; whether parents have regular involvement with the students while they were doing academic tasks and have knowledge of their performance level; and whether the indicators used are ones which parents understand and have opportunity to observe.

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[1] Psychological assessment reports had not been given to parents on a regular basis.

[2] Sloper, P., Cunningham C., Turner S. and Knussen, C. (1990). Factors related to the academic attainments of children with Down's syndrome. *British Journal of Educational Psychology*, vol. 60, pp. 284-298, p. 286.

In response to the first question, one might with justifiably argue that unless evidence can be produced to the contrary, parents should be assumed to be no less or no more accurate than any other assessor. They know their sons/daughters over an extended period of time, in a variety of formal and informal situations, and have daily contact with them. The findings of Miller and Miller *et al.* have been cited regarding the accuracy of parental reporting of language ability *at the time in question.*[3] Cunningham *et al.* and Dale also found parental reporting to be reliable.[4] The questions asked in this study referred to student attainments at the time of the interview.

The second question was whether parents in this study had regular involvement in academic activities with their sons/daughters. In order to obtain an indication of parental involvement in and knowledge of the academic development of their sons/daughters, parents were asked several questions about homework. Parents of forty of the students (54%) reported that they *usually* had homework; nineteen (26%) *sometimes* had homework; and fifteen (20%) *never* had homework assigned.[5] Forty-five (77%) of the students who had assigned homework *usually* required help; twelve (20%) *sometimes*

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[3]Miller, J. (1992). Development of speech and language in children with Down syndrome. In Lott, I. and McCoy, E. (Eds.) *Down Syndrome: Advances in Medical Care.* New York: Wiley-Liss, pp. 39-50; Miller, J., Sedey, A. and Miolo, G. (1995). Validity of parent report measures of vocabulary development for children with Down syndrome. *Journal of Speech and Hearing Research.* Vol.38, pp1037-1044.

[4] Cunningham, C. and Sloper P. (1984). The relationship between maternal ratings of first word vocabulary and Reynell language scores. *British Journal of Educational Psychology*, vol. 54, pp.160-167; Dale, P. (1991). The validity of a parent report measure of vocabulary and syntax at 24 months. *Journal of Speech and Hearing Research,* vol. 34, 565-571.

[5] The time spent on homework varied from five minutes to more than two hours. Of those who had homework, two parents (3%) believed that it was *too much*, forty-four (75%) found it *a reasonable amount*; and thirteen (22%) thought that *not enough* was assigned. Fifteen parents (25%) believed the assigned homework was *an integral part* of the student's learning; forty (68%) that it was *beneficial*; and four (7%) that it *could be more useful.* Seventeen

needed help and two (3%) *never* needed help. Forty-five of the students (64%) were helped with homework by their mothers; two (3%) by their fathers; ten (17%) by either parent; and nine (16%) received help with homework from other persons.[6]

Parents were also asked whether they initiated *homework* activities after school that had not been assigned by the teachers. Forty parents (54%) did; thirty-four (46%) did not.[7] When parent-initiated *homework* was cross-tabulated with those who had school assigned homework, only five (15%) of the students who attended school did not do learning tasks regularly at home.[8] This finding indicated that the majority (85%) of the parents in this study had regular involvement in academic activities with their sons/daughters.

The third issue was whether parents understood the criteria that were used in the *Academic Attainments Checklist* and could answer knowledgeably. The lists of specific skills were reviewed by the researcher. It was considered that the wording of the items was unambiguous and that terms used would be understood.[9] Another study that had used a sub-set of the *Academic*

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students (29%) accomplished their homework *enthusiastically*, thirty-two (54%) *mostly willingly;* and ten (17%) *with difficulty*.

[6] The other person were siblings, child-minders, and a homework tutor.

[7] The type of activities parents initiated were: home economics, games (scrabble, jig-saws, board games), reading together, writing, music, picture naming, number work and computers.

[8] All five attended special schools designated for students with moderate learning disability. Two were eight years old, two were twelve years old, one was sixteen. Two had long school bus trips and parents found that they were too tired to do any more work when they got home.

[9] One item was slightly modified. (Item 94 n.) It had originally been stated: Uses complex phonics: digraphs, sound blends, etc. This was changed to: Uses complex phonics: e.g., shoe, clown, swing.

Attainments Checklist was reviewed.[10] In this instance, teachers *or* special needs assistants had completed the checklists. The authors had found the checklist "to be particularly useful for accessing the knowledge that teachers and assistants have about a child that may not perform to their best ability in a simple test situation."[11] The fact that classroom assistants had been successful in completing the checklists supported this researcher's evaluation that to do so did not require professional training. Also, as the interview schedule was interviewer-administered, the researcher could explain items when necessary.[12]

The Academic Attainments Checklist

The *Academic Attainments Checklist* consisted of three sub-scales: reading and use of written information; number skills; writing skills. The tasks were listed in order of increasing difficulty. The reading and use of written information list consisted of seventeen levels from *matches pictures of common objects* to *reads with understanding to get information, e.g., newspapers, brochures.* The number skills list consisted of twenty-two levels which ranged from *discriminates between largest and smallest group of objects* to *does simple division sums.* The writing skills list consisted of nineteen levels which ranged from *holds pencil or crayon and attempts to*

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[10] Nye, J., Clibbens, J. and Bird G. (1995). Numerical ability, general ability and language in children with Down syndrome. *Down's Syndrome: Research and Practice*, vol. 3, no. 3, pp. 92-102.

[11] Nye, J. *et al.* (1995), p. 101.

[12] Parents frequently showed the researcher students' work which confirmed the parents' assessments.

scribble to *writes imaginative pieces, creative writing* (Appendix 15).[13] Following the procedure established by Sloper *et al.*, each level within the checklists was scored as 1 = *can't do*; 2 = *can do with help*; and 3 = *can do*. Separate scores were computed for the three different areas and totalled to create an *Academic Attainments Index.* The possible range of scores was 15 to 54 for reading; 22 to 66 for number skill, 19 to 57 for writing, and 56 to 174 for the total index.

Internal consistency reliability was assessed for the three sub-scales and for the index, and was found to be satisfactory. Alpha values were: reading .9275, number skill .9362, writing .9408 and *Academic Attainment Index* .9545.[14] The scores on the three sub-scales were highly correlated: reading with number skill ($r=.859$, $p<.001$); reading with writing ($r=.888$, $p<.001$); and number skill with writing ($r=.913$, $p<.001$). Because of this high correlation, it was decided that the total scores could be used as an outcome measure.[15]

The *Academic Attainment Checklist* is descriptive and not standardised. While the skills are ordered by probable difficulty, differences between items are not consistent. Skills at the beginning of the sub-scales increase in difficulty less quickly than those towards at the end of the scales. The final item on each scale is an inclusive category with no upper limit. The mean scores obtained on the three sub-scales for the study group by age of student and type of school attended are reported in table 12.1.

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[13] Appendix 15. Academic Attainments Checklist.

[14] These values are coherent with that of Sloper *et al.* (1990) which were: .91 reading, .93 number, .89 writing and .97 Academic Attainments Index.

Table 12.1. *Parent-reported attainments of mean reading, number and writing scores on Academic Attainments Index by sex of student and type of school attended.*

	Total	Male [16]	Female	Sp school /class Mod LD	Sp school /class Mild LD	Main-stream schools	*Anova sig. by school type*
Reading							
1982							
N [17]	Score range 18-54						
Mean	20	12	8	13	1	3	
Std. dev.	*42.95*	*40.64*	*46.38*	*42.08*	*52.00*	*54.00*	*p<.05*
1986	9.88	9.08	10.64	7.90	-	.00	
N	Score range 20-51						
Mean	28	14	14	18	4	6	
Std. dev.	*36.64*	*33.76*	*39.50*	*32.89*	*41.50*	*44.67*	*p<.001*
1990	8.16	8.95	6.36	6.45	9.75	3.72	
N [18]	Score range 22-44						
Mean	30	14	16	14	3	12	
Std. dev.	*33.73*	*33.43*	*34.00*	*30.07*	*36.00*	*38.42*	*p<.001*
	6.00	6.90	5.30	5.28	.00	2.64	
Number skills							
1982							
N	Score range 22-66						
Mean	20	12	8	13	1	3	
Std. Dev.	*48.25*	*46.92*	*50.25*	*46.46*	*64.00*	*62.00*	*p<.005*
1986	10.91	9.92	12.68	7.02	-	5.29	
N	Score range 23-63						
Mean	28	14	14	18	4	6	
Std. Dev.	*41.18*	*39.57*	*42.76*	*35.94*	*47.75*	*52.50*	*p<.001*
1990	10.15	12.88	6.54	7.40	6.95	7.40	
N	Score range 22-46						
Mean	30	14	16	14	3	12	
Std. Dev.	*34.37*	*34.79*	*34.00*	*29.79*	*38.33*	*39.75*	*p<.001*
	7.42	7.65	7.45	5.09	5.69	5.67	
Writing							
1982							
N	Score range 23-57						
Mean	20	12	8	13	1	3	
Std. dev.	*43.70*	*41.50*	*47.00*	*42.08*	*57.00*	*56.33*	*p<.05*
1986	10.10	8.89	11.49	8.04	-	.58	
N	Score range 24-55						
Mean	28	14	14	18	4	6	
Std. dev.	*36.32*	*34.79*	*37.86*	*32.50*	*42.75*	*43.50*	*p<.005*
1990	8.30	9.55	6.85	5.79	8.38	8.29	
N	Score range 21-39						
Mean	30	14	16	14	3	12	
Std. dev.	*30.60*	*30.93*	*30.31*	*27.79*	*32.00*	*34.08*	*p<.005*
	5.07	5.44	4.88	3.91	4.00	4.36	

[15] These values are also similar to those of Sloper *et al.* which were: reading with number r=.87, p<.001, reading with writing, r= .86, p<.001; and number with writing, r= .89, p<.001.

[16] Difference by sex of student was not significant for any age group in any subject.

[17] There were twenty students in the study who were born in 1982. However, only seventeen of them were enrolled in school at time of interview.

[18] There were thirty students in the study who were born in 1990. However, only twenty-nine of them were enrolled in school at time of interview.

Reading and use of written language

Mean reading scores increased with age of students. For the eight-year-olds it was 33.73, for the twelve-year-olds it was 36.64 and for the sixteen-year-olds it was 42.95. The difference by age of student was statistically significant. (Anova p<.001). Girls obtained higher reading scores than did the boys, but the differences were not statistically significant either for the entire study group or for any of the age groups (Appendix 16).[19]

Differences of mean reading scores by type of school attended were statistically significant for all age groups and for the study group (table 12.1). For all age groups, and for the study group as whole, the mean reading score was highest for students in mainstream schools. The difference between students in mainstream schools and special schools/classes designated for pupils with mild learning disability was small. The mean score for students in special schools/classes designated for pupils with moderate learning disability was considerably lower in each case. Eight-year-olds in mainstream schools had a higher mean reading score than twelve-year-olds in special schools/classes designated for pupils with moderate learning disability. Twelve-year-olds in mainstream schools also had a higher mean reading score than sixteen-year-olds in special schools designated for pupils with moderate learning disability.

Examples of mean levels of attainment are helpful to interpret this data. There were variations within each age group for each type of school

[19] Appendix 16. Reading scores.

placement. The description is of the mean level of academic skill for the group and should be considered to be a very general benchmark of the performance of the group. [20]

Eight-year-olds who attended special schools designated for pupils with moderate learning disability had a mean reading score at the level of: *recognises and picks out labels, trade names, e.g., brand names for soft drinks, chocolate bars, breakfast cereals*, and *recognises up to twenty-five sight words.* Those in special schools designated for pupils with mild learning disability were reading at the level of: *reads simple books, e.g., early readers* and were beginning to *build simple words through knowledge of letter sounds.* Students in mainstream schools were reading at a similar level and more of them were able to sound out words.[21]

Twelve-year-olds who attended special schools/class designated for pupils with moderate learning disability were reading at the level of: *reads simple sentences;* and *knows most letter sounds of the alphabet.* Students of the same age who were in special schools/class designated for pupils with mild learning disability had attained reading levels of: *builds simple words through knowledge of letter sounds,* and *reads and acts appropriately to signs giving directions, e.g. street names, directories in shops.* Those who attended mainstream schools had continued on to the next levels: *reads and follows a*

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[20] Attainment patterns of individual students and groups of students were reviewed. Students' attainments frequently did not follow the order of the tasks as listed. This was taken into consideration when describing the mean level of student skills. The researcher's intention was to identify the tasks at the juncture of what the groups of students were reported to be able to do and those they were able to do with help.

line of instructions, e.g., 'cut along dotted line', and *uses complex phonics, e.g., shoe, clown, swing.*

Sixteen-year-olds in special schools designated for pupils with moderate learning disability had a mean reading score at the level of: *builds simple words through knowledge of letter sounds,* and *reads and acts appropriately to signs giving directions, e.g. street names, directories in shops.* The reading levels of the one student in a secondary special class designated for pupils with mild learning disability and of those in a secondary school were similar. They had attained the level of: *reads with understanding to get information, e.g., newspapers, brochures.* All three students in mainstream secondary schools could *do more advanced language work.* One female student who attended a special school designated for pupils with moderate learning disability was also reading at this advanced level.

Number skills

Similar patterns of attainment were found for number skills. Mean number scores increased with age of students. For the eight-year-olds it was 34.37, for the twelve-year-olds it was 41.18, and for the sixteen-year-olds it was 48.25. The difference by age of student was statistically significant (Anova $p<.001$). The girls in the study had a slightly higher mean number score than the boys. Boys in the youngest group had a higher mean number score than the girls of the same age. For the older two groups, female students had

[21] Few of this age group were able to *recognise and acts appropriately to written signals, e.g., 'Danger', 'Bus stop', 'Exit'.* Parents frequently commented that this was not part of the children's daily experience so there had been no opportunity to learn it.

higher mean number scores. These differences were not statistically significant (Appendix 17).[22]

Differences of mean number scores by type of school attended were statistically significant for all age groups and for the study group (table 12.1). For all age groups and for the study group as a whole, students in mainstream schools had the highest mean number score.[23] Differences in mean number score between students in mainstream schools and special schools/classes designated for pupils with mild learning disability were small. The mean score for students in special schools/classes designated for pupils with moderate learning disability was substantially lower in each case. Again, the same pattern emerged of students in mainstream schools obtaining higher mean number scores than students four years older in special schools/classes designated for pupils with moderate learning disability. Examples of the mean level of attainment are useful in interpreting the data. It should be again emphasised that these are descriptions of mean level of group attainment and that individual differences are not represented.

Eight-year-olds who were in special schools designated for pupils with moderate learning disability had attained the skill required to *make a group of nine objects*, and most could *name and match symbols 0 to 9* with help. Those in special schools designated for pupils with mild learning disability could *name and match symbols 0 to 9* and were working on *adding numbers*

[22] Appendix 17. Number skills scores.

[23] There was one exception to this. There was only one sixteen-year-old student in a special class designated for pupils with mild learning disability. His score was slightly higher than the

up to 10 with materials. Those in mainstream schools could *write numbers 0 to 20* and were working on *subtracting numbers up to 10 with materials.*

Twelve-year-olds who attended special schools/class designated for pupils with moderate learning disability had mean number skills scores at the level of *writes symbols 0 to 9;* and *writes symbols 10 to 20.* Students of the same age who were in special schools/class designated for pupils with mild learning disability had attained number skill levels of *subtracts written numbers up to 10 with materials.* Students in mainstream schools were working at the level of *subtracts from written numbers up to 9 without materials,* and *adds two numbers up to 20 with materials.*

Sixteen-year-olds in special schools designated for pupils with moderate learning disability were working at the level of *adds written numbers up to ten without materials*, and *subtracts from written numbers up to nine with materials.*[24] The student in the special secondary school class and those in mainstream secondary schools were doing *simple multiplication sums* and *simple division sums.*[25] Three of the four were reported to be doing more advanced number work. This included percentages, profit and loss, problem-solving, and Junior Certificate maths at pass level.[26]

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mean score for students in mainstream schools. However, two of the three students in mainstream schools had the same or higher scores than he had.

[24] One student in this type of school had more advanced number skills.

[25] The student in the special class always used a calculator. Those in mainstream schools used calculators, but usually to check answers.

[26] One student who attended a special school designated for pupils with moderate learning disability had attained similar levels of number skills.

Writing skills

A similar pattern was observed for writing skill scores. Mean scores increased with age of students. For eight-year-olds it was 30.60, for twelve-year-olds it was 36.32, and for sixteen-year-olds it was 43.70. Differences by age of student were statistically significant ($p<.001$). Eight-year-old boys and girls were writing at the same level. However, the two older groups of girls had higher mean scores. Differences by sex of student were not statistically significant (Appendix 18).[27]

Differences in mean writing scores by type of school attended were statistically significant for all age groups and for the study group (table 12.1). Students of all ages who attended mainstream schools had higher mean scores in writing than their age peers in other types of school.[28] Students in mainstream schools had higher mean scores in writing than did students in special schools designated for pupils with moderate learning disability who were four years older.

Eight-year-olds in special schools designated for pupils with moderate learning disability were able to *copy letters* and *copy their first name*. Those in special schools designated for pupils with mild learning disability had skills to *write first name and family name independently* and *copy a simple sentence of four or more words*. Those in mainstream schools were copying sentences and beginning to write independently.

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[27] Appendix 18. Writing scores.

[28] Again, a similar situation arose as was reported in the previous footnote.

Twelve-year-olds who attended special schools/class designated for pupils with moderate learning disability were writing with the skill required to *write first name and family name independently* and *copy a simple sentence of four or more words.* Those in special schools/class designated for pupils with mild learning disability had attained the level of *writes simple sentences when dictated* and *writes more than one sentence on their own.* Students in mainstream schools had skills to *write more than one sentence on their own* and *write short notes.*

Sixteen-year-olds in special schools designated for pupils with moderate learning disability had attained the skills necessary to *write own name, address and telephone number* and *write simple sentences when dictated.* The student in a secondary school special class and those in mainstream secondary schools were able to *write short descriptive passages* and *write imaginative pieces, creative writing.* Two students in special schools designated for pupils with moderate learning disability were also writing with this level of skill.

Academic Attainments Index

The scores for the three sub-scales were totalled to give an *Academic Attainments Index*. This measure was used to explore relationships between academic attainment and other variables. A summary of *Academic Attainments scores* is given in table 12.2.

Table 12.2. Mean Academic Attainments Index, by sex of student and type of school attended.

	Total	Male [29]	Female	Sp school /class Mod LD	Sp school /class Mild LD	Main-stream schools	*Anova sig. by school type*
Academic Attainments Index							
1982	Score range 63-177						
N [30]	20	12	8	13	1	3	
Mean	*134.90*	*129.08*	*143.63*	*130.62*	*173.00*	*172.33*	*p<.01*
Std. dev.	29.51	26.18	33.78	20.55	-	5.69	
1986	Score range 69-167						
N	28	14	14	18	4	6	
Mean	*113.14*	*108.14*	*120.14*	*101.33*	*132.00*	*140.67*	*P<.001*
Std. dev.	25.34	30.21	18.54	18.38	22.85	17.77	
1990	Score range 22-44						
N [31]	30	14	16	14	3	12	
Mean	*98.70*	*99.14*	*98.31*	*87.64*	*106.33*	*112.25*	*P<.001*
Std. dev.	17.62	19.30	16.64	13.20	7.77	11.99	
Study group	Score range 63-177						
N	78	40	38	45	8	21	
Mean	*113.53*	*111.28*	*115.89*	*105.53*	*127.50*	*128.95*	*P=.001*
Std. dev.	27.59	27.85	27.49	24.33	27.21	25.54	

As the three individual sub-scales that made up this index all followed the same pattern, a similar configuration was obtained when they were combined. Overall, girls had slightly higher mean scores. The youngest boys scored slightly higher, but this was reversed for the two older age groups. The difference increased with age. Differences by sex of student, regardless of age, were not statistically significant. Students of all ages who attended mainstream schools had the highest scores for their age group.[32] Students attending special schools/class designated for pupils with moderate learning disability obtained mean scores that were consistently the lowest. Differences

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[29] Difference by sex of student was not significant for any age group.

[30] There were twenty students in the study who were born in 1982. However, only seventeen of them were enrolled in school at time of interview.

[31] There were thirty students in the study who were born in 1990. However, only twenty-nine of them were enrolled in school at time of interview.

[32] The same qualification applies. There was only one sixteen-year-old student in a special class designated for pupils with mild learning disability. His score was slightly higher than the

by type of school attended were statistically significant for all ages and for the study group as a whole.

- ***Family variables***

In this study, bivariate analysis of *Academic Attainment Index* scores with county of residence, number of siblings, order of birth and both parents living in the family home were all found not to be statistically significant. Mean attainment scores for students whose mothers had completed second or third level education were higher (mean=117) than for those whose mothers had lower levels of education (mean=108). This difference was not significant. Mean attainment scores by level of father's education were almost identical for fathers who had second or third level education and those who had some secondary or primary education only. Neither father's nor mother's employment status was statistically significant nor was socio-economic status as defined by father's employment.[33]

- ***Student variables***

Differences in *Academic Attainments Index* scores by students age were statistically significant (Anova, $p<.001$). Sex of student was not a significant variable for any of the three age groups, nor for the study group as a whole. Aspects of students' health were considered. *Present* health concerns were

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mean score for students in mainstream schools. However, two of the three students in mainstream schools had higher scores than he had.

[33] The mean attainment scores by SES category were: Professional (mean=130); managerial (mean=118); non-manual (mean=112); skilled manual (mean=107); semi-skilled (mean=114); unskilled (mean=96)

associated with lower attainment scores ($p<.005$).[34] Mean attainment scores were lower for those whose health had interfered with their education (mean=110) compared with those whose health had never interfered (mean=118). This difference was not statistically significant. Differences in mean attainment scores by the presence of a heart condition or an ear/hearing condition were not significant, but were by the presence an eye/vision condition.

Students who had been diagnosed with an eye/vision condition had significantly higher mean attainment scores than those who had not (with eye/vision condition, mean=118, n=52; without eye/vision condition mean=105, n=25; $p<.05$). This unexpected finding may mean that some students have undiagnosed/untreated sight difficulties. Such a conclusion would be supported by another finding that students who wore glasses had significantly higher mean attainment scores (mean=120) than those who did not (mean=105, $p<.05$).The age of student may contribute to this finding. Older students had higher attainment scores. Seventy percent of sixteen-year-olds, sixty percent of twelve-year-olds, and fifty percent of eight-year-olds wore glasses at the time of interview.[35]

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[34] Parents had been asked: *Does your son/daughter presently have health concerns?* The mean attainment score for those who did was 105; for those who did not it was 122.

[35] For each of the three age groups, the mean Academic Attainments Index was higher for those who had been diagnosed with a vision/eye condition than for those who had not been. When the mean Academic Attainments Index scores for a single age group were compared by vision/eye condition or not, differences were not statistically significant. When the mean Academic Attainments Index of those who wore glasses and those who did not of the same age were compared again scores were higher for those who wore glasses. This difference increased with age of student. Differences were not statistically significant.

- ***Preschool experience***

Significant differences in mean *Academic Attainment Index* scores by type of last preschool attended were observed. The mean attainment score for students who had attended special or a combination of special/mainstream preschools was lower (mean=105) than those who had attended mainstream preschools or neighbourhood playgroups (mean=123). This difference was statistically significant (Anova p<.005)

Academic Attainments Scores were also associated with *preschool benefit scores* (r=.260, p<.05). Two items on the *preschool benefit scale* were noteworthy. The mean attainment score for the twelve students for whom preschool had not been beneficial for *language development* was 107; for the thirty-nine students for whom it was beneficial it was 108 and for the twenty-two students for whom it was very beneficial it was 130 (Anova p<.005). The mean attainment score for the fifteen students for whom preschool had not been beneficial for *pre-academic skills* was 100; for the thirty-two students for whom it had been beneficial it was 116; and for the twenty-six students for whom it had been very beneficial it was 122 (Anova p<.05).

- ***School variables***

Differences in mean academic attainment by type of school attended were statistically significant. The mean score for the forty-five students who attended special schools/class designated for pupils with moderate learning disability was 105; for the eight who attended special schools/classes designated for pupils with mild learning disability it was 127; and for the twenty-one who attended mainstream schools it was 129.

There appeared to be no relationship between parental reporting of sufficient in-school learning support and student academic attainment scores. The mean scores for those who believed there was sufficient learning support for their sons/daughters and those who did not were the same (mean=115).

Academic attainments were associated with the amount of time spent on homework. For all age groups and for the study group, students who spent more time on homework had higher attainment scores. The differences were statistically significant (Anova p.<01).

Summary

Relationships between academic attainments and other factors were explored.

The measure selected for use to record student attainment was the *Academic Attainments Checklist*. This measure consisted of three sub-scales: reading and use of written information; number skills; and writing. Internal consistency reliability was assessed for the three sub-scales and for the index. The scores were highly correlated: reading with number skills (r=.859); reading with writing (r=.888) and number skills with writing (r=.913). Because of this high correlation, the total scores (*Academic Attainments Index*) was used as an outcome measure.

On all three sub-scales, mean attainment levels increased with age of student. Although mean scores were higher for girls than boys, differences by sex of student were not statistically significant.

Mothers' level of education was observed to be higher for students who had higher academic attainment scores. However, all differences by family variables were not statistically significant.

Present health concerns were significantly associated with lower attainment scores. Mean attainment scores were lower for those whose health had interfered with their education.

Significant differences in attainment scores by type of preschool attended and *preschool benefit scores* were observed. Students who had attended mainstream preschools or neighbourhood playgroups had higher attainment scores than students who had attended special preschools or combined special/mainstream preschools. The items of language development and pre-academic skills on the *preschool benefit scale* were also associated with subsequent higher academic attainment. Both these relationships were statistically significant.

Differences in mean attainment scores by type of school attended were statistically significant for all age groups and for the study group on all three sub-scales. Students in mainstream schools received the highest mean *Academic Attainments Scores* and also the highest overall mean *student accommodation score*. Students in special schools/class designated for pupils with moderate learning disability scored the lowest mean ratings on both measures.

The final aspect of this study will be parental evaluation of the advantages and disadvantages of the students' present school placement. Their responses will be considered in the next section.

Chapter 13: Parental Evaluation of Present School Placement

Parents were asked two questions. *What are the advantages of your son's/daughter's present school placement?* and *What are the disadvantages of your son's/daughter's present school placement?* The parents' responses were not prompted. The responses represented what was uppermost in the parents' minds at the time of the interview, and other advantages or disadvantages might also have emerged if specifically enquired about.

Common themes were identified and responses coded. Parents often gave multifaceted responses. If a parent's response belonged to more than one category, it was recorded in each category. The main point made was then identified and highlighted.[1] When the central point was mitigated or qualified by another element in the response, the complete response was quoted.

The disadvantages identified by parents were grouped into five categories. They were: *no disadvantages*; *inadequate resources*; *lack of social involvement*; *distance and time spent travelling*, and *lack of learning opportunities*. The advantages identified were also grouped into five categories. They were: *aspects of social development*; *structures for learning*; *extra-curricular activities*; *convenience and continuity*, and *student contentment.*

In order to gain insight into how the advantages and disadvantages were counter-balanced, parents' responses by type of school attended were

explored. A summary of themes of parents' responses by type of school attended is given in 13.1.

Table 13.1. Parent reported advantages and disadvantages of students' present school placements by type of school attended. [2]

	Sp schools / class Moderate LD	Sp schools / classes Mild LD	Mainstream	Total
	N=45	N=8	N=21	N=74
Disadvantages				
No disadvantages	11 *22.4%*	2 *25.0%*	4 *19.1%*	17 *23.0%*
Inadequate resources	4 *8.9%*	1 *12.5%*	11 52.4%	16 *21.7%*
Lack of social involvement	17 *37.8%*	2 *25.0%*	6 *28.6%*	25 *33.8%*
Distance and time spent travelling	17 *37.8%*	1 12.5%	0 *0%*	18 *24.3%*
Lack of learning opportunities	8 *17.8%*	3 *37.5%*	1 *4.8%*	12 *16.2%*
Advantages				
Social development	6 *13.3%*	4 *50.0%*	20 *95.2%*	30 *40.5%*
Structures for learning	20 *44.4%*	6 *75.0%*	12 *57.1%*	38 *51.4%*
Extra-curricular activities	9 *20.0%*	0 *0%*	0 *0.0%*	9 *12.2%*
Convenience and continuity	14 *31.1%*	1 *12.5%*	0 *0.0%*	15 *20.3%*
Student contentment	20 *44.4%*	1 *12.5%*	4 *19.1%*	25 *33.8%*

Special schools/class designated for pupils with moderate learning disability

Forty-five students attended special schools/class designated for pupils with moderate learning disability.[3] There was a higher proportion of the older two groups than the youngest age group in this school placement.

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[1] The researcher and the same two independent raters reviewed parents' responses. Inter-rater consensus was again obtained for categories of responses and priority of parent response.

[2] Percentages of parents of students in this school placement who included this theme in their response.

[3] Sixty-five percent of those born in 1982; sixty-four percent of those born in 1986 ; and forty-seven percent of those born in 1990 attended special schools/class designated for pupils with moderate learning disability.

Disadvantages

Nearly a quarter (22%) of parents of students who attended special schools designated for pupils with moderate learning disability reported no disadvantages to their son's or daughter's school placement. The students were in all three age groups and lived in the seven counties studied.

- ***Inadequate resources***

Four parents (9%) believed that there were inadequate resources available to the student. Two parents referred to the buildings.

> *The physical building may be difficult for the teachers.*

> *The school is very dreary. It is on an awful hill.*

One noted differences in facilities between two special schools in the same locality.

> *There are not as many facilities as in ...* [other special school]. *There is not enough supervision at break time.*

The fourth parent, aware of support services in another country, believed that the family's move to Ireland had prevented her son being included part-time in a local school with adequate support.

> *If we had stayed in ...* [another country] *he would have been part-time in an ordinary school with a full-time specialist teacher assigned to him. He won't have the chance to do that here.*

- ***Lack of social involvement***

Seventeen parents (38%) of students who attended special schools/class designated for pupils with moderate learning disability believed that a lack of friendships and appropriate role models were disadvantages of the school

placement. The lack of opportunities for friendships was most frequently mentioned. Thirteen parents specifically mentioned the lack of out-of-school contact with age peers. Lack of opportunities for social contact affected all age groups, but it was a more frequent issue for the two older groups. Five sixteen-year-olds had few out-of-school friendships. Typical comments included:

> *It would be lovely if she could go to a local school and be as well cared for and content as she is now. Summers are very long and lonely as she then only has her Dad and me.*
>
> *He has little contact with others his age outside of school.*
>
> *She is too far away from everyone else. There are not enough opportunities for her to mix with her age group.*

Lack of friends was also seen to be a disadvantage of the school placement for five twelve-year-olds.

> *He does not have friends from school. He is the only one who lives out here.*
>
> *I can't see any disadvantages with the school, but she has no friends outside school, only her younger brother's friends.*
>
> *He misses out on friends. His school friends live too far away and there is no opportunity for him to get to know the local children.*

Parents of two of the eight-year-olds believed the lack of opportunity to develop friendships with local children was a disadvantage of special school placement.

> *He is not learning to mix with local children. Some of them are afraid of him and run away whenever he approaches them.*
>
> *At school very few* [friends]. *I would still love it if he could get to know the other children in his own locality.*

The other aspect of this category was the effect of the student's in-school isolation from typically-developing students of their own age.

The behaviour and the speech. There are not many in his class who would have good speech. His teacher is the only one he would learn from regarding speech. Some of the class, and I know that it is not their fault, do things I don't want him to copy. I would be very particular about how he carries himself, behaves himself, and I see it going to the wayside in class. But, I'll just have to re-double my efforts at home.

Every summer holiday her speech comes on. When she goes back to school it disimproves. This is the big disadvantage. Also contact with school friends is very limited as they are living too far away.

It was not only the absence of typical behaviour, but the effect of gathering together students, all of whom have learning difficulties, that was seen to limit students' opportunities to acquire adequate social skills.

He may be imitating the behaviours of the other students who are less able than he is himself. If I take him out of the school, there is nowhere else one can send him to at this point

There is a lack of social inclusion. I would think there should be a division between primary and secondary ages. I do not think that it is right that four-year-olds and eighteen-year-olds are in the same school. The older students sometimes have behaviours – language and gestures, which the younger ones copy and they are not appropriate. Also they should not be on the same buses as the older ones who can be very rough. Toileting is very bad. There is no excuse. It should be better.

- ***Distance and time spent travelling***

Additional time travelling to school was a disadvantage that was inherent in the school experience of most students who attended special schools. Seventeen parents (38%) of students who attended special schools designated for pupils with moderate learning disability saw distance to school and time spent travelling as a disadvantage of the school placement. The large differences in time spent travelling to and from school by students attending different types of schools has been reported. Most of the comments regarding time spent travelling were non-specific.

It is a long day for him because of the long bus route. He is tired when he gets home.

Other aspects of the effect of the required bus schedules on school experience and family life were also reported.

He will finish his school day at 2:30 until he is eighteen. This is to facilitate bus schedules. It is a very short day, it should be longer. There could be many more activities at school especially as he gets older.

The distance is harder on me than him as we are out of the catchment area and I drive him.

The distance and the time he spends travelling. There is no contact in school with his friends on the block. If R has a half-day it is very awkward as I am working. I have to arrange for someone to meet the bus and on half-days it is very uncertain what time it might arrive at the house.

- ***Lack of learning opportunities***

Eight parents (18%) of students in special schools designated for pupils with moderate learning disability believed that there were insufficient learning opportunities for their sons/daughters at school. The reported academic level of these eight students was at, or above, the mean level for students of their age in special schools designated for pupils with moderate learning disability; three were considerably higher than the norm. There were five males and three females. Three parents believed the methods, materials, and expectations could be improved.

They don't seem to do more up-to-date activities. They seem to do a lot of repetitive, rather meaningless things. They could spend more time on reading. The computers should be used more.

There doesn't seem to be a structure to their teaching of reading, writing and number work. All that he had learned before he went there seems to have gone out the door.

I feel she, and others, are definitely underachieving. A positive attitude towards the importance of reading and writing is only beginning to surface.

Another three believed that the schoolwork was not sufficiently challenging to their son/daughter.

There is insufficient challenge academically and mentally. She is not reaching her potential level of development.

They are going a bit slow for him and he does not seem challenged.

A mother who had worked hard with her son at home until he started school, felt that things had not progressed since then. He had a long bus journey to school and was too tired after school to do much school work.

I had expected more progress in reading, writing and sums.

A mother found the school policy of not assigning homework frustrating. She wanted to help her daughter at home and did, but she would have liked to have been involved with what was being taught at school.

No homework. The school policy is not to give homework so the teacher can't. I don't know what she is doing at school so I cannot help her at home.

Advantages

All the parents of students who attended special schools/class designated for pupils with moderate learning disability reported at least one advantage of the school placement.

- ***Social development***

Six parents (13%) believed that placement in a special school designated for pupils with moderate learning disability had contributed towards their son's/daughter's development of social competencies. Two mothers felt that

the schools' programmes had been important initiatives, another that the school programme reinforced experiences the family already provided.

> *I feel that he is learning in a very caring school. The teacher he has is fantastic. The social skills programme is very good. He is learning to use money, take public transport, order a meal. He is becoming familiar with the post-leaving training centre.*
>
> *He is getting the individual attention that he does need. It is not all academic. They work on social skills as well. He is learning about money. He knows he has to have money when he goes into a shop.*
>
> *It did help with his social skills, but it was never anything that he had not already done with his family.*

Although most students who attended special schools travelled considerable distances to school, a few did not. One mother of a twelve-year-old found the fact that the special school was a local school was an advantage.[4]

> *It is local, he is happy. He is part of the things that are going on at the school and he is not left out.*

That fact that her son was with others who had learning disabilities was important to one mother.

> *He is not different from the other students in his school. He doesn't stand out. He will learn survival skills, which are simple little things, but important. He will be encouraged to be independent.*

- ***Structures for learning***

Twenty parents (44%) of students attending special schools designated for pupils with moderate learning disability believed that the structures for learning in the schools were an advantage. Some of the comments were general evaluations of the learning opportunities the students received.

Two parents spoke of the buildings and equipment at the schools.

The new school is a very nice building and they seem to have good equipment. In general it is a good school.

The playground, the learning facilities, the teachers and the equipment.

The fact that the teachers in the schools had special training was mentioned as an advantage by five parents.

She is in the school for the handicapped. She is getting special education. The teachers have special training. They have their own way of teaching handicapped children.

The teachers are trained and able to meet his needs. There is an emphasis on social skill development. The small class-size is an advantage, but the class is larger now than it had been.

If he was in a regular school, he would fall too far behind. They bring him along. They have the patience and training to do so.

Two parents mentioned speech therapy. One student had therapy as a regular part of the curriculum, for the other it was the major flaw in a positive curriculum.

They get speech therapy as part of the curriculum.

Except for speech therapy, she is getting the type of education she needs.

An individual teacher was seen to be a positive influence on a student's educational experience.

The present teacher is very progressive and would like to see change. She is very open and supportive.

The parent of the student in a special class attached to a primary school praised the high standard of education there.

It is an inventive pioneer scheme and they are proud of their special classes. She is getting a good education.

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[4] This special school was on the same campus as a national primary school.

- ***Activities***

The variety of activities offered by the special school were reported to be advantageous by nine (20%) of the parents. They considered that the diversity of the school activities contributed to the students' development and enjoyment of school.

> *It is not all school, school, school. They bring them on all kinds of activities. She has come on in leaps and bounds in reading and writing. Socially she is happy and has friends. She communicates well.*
>
> *The amount of extra things – music and sport. He loves both and they put him in everything that is going.*

Some students were introduced to new activities such as swimming and horse riding, and brought to restaurants and cinemas as part of their social education.

> *The sports are good – his swimming has come on great – he had a real fear before, but now in the pool he is in control and enjoying it.*
>
> *They take him places I would be wary of, like the cinema, which widens his experience. He gets his dinner every day. They introduce him to new activities such as swimming, which initially he did not like.*

- ***Convenience and continuity***

Fourteen parents (31%) believed that enrolment in special schools designated for pupils with moderate learning disability made their lives less stressful. Although many parents had been critical of the existing bus service, the fact that transport was provided was seen by some to be an advantage. [5]

> *He is collected and brought home. I am happy with the service. They have always been helpful and courteous to me.*

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[5] Parents' opinion that school buses without escorts allowed for bullying and behaviour problems has been reported in the section on student well-being. Parents had also frequently mentioned the need for seat belts on the school buses.

There is transport from door to door. I know she is well looked after and will be given every opportunity to learn. I know that from nine to three I don't have to worry about her.

Knowing that he is secure and getting an education. He is picked up in the morning and dropped off in the afternoon.

Other, sometimes small, services provided were important to parents. Several mentioned that the students had a hot meal at lunchtime.

The fact that she is collected, that she gets her dinner, that she is learning, that she will come on.

One found that a credit union facility in the school was helpful.

They look after her well. There is a credit union in the school, so when it comes to school tours they just ask if I want to take it out of the book.

Concern for the future was expressed by parents of all age groups.[6] However, there were subtle differences in their concerns. The parents of the sixteen-year-olds were concerned about training or employment positions in the near future.

There will be a place for R in a workshop or training course after school has finished.

He likes going and it is the only place open to him. When he finishes the evaluation board will get him into a workshop.

For parents of the eight-year-olds concern for the future was more nebulous, a sense of *"what would happen if...? would anyone...?"* The services of the non-statutory agencies were seen to be safety nets available to those who attended schools under the auspices of those organisations.

The agency will continue to provide services, training and employment which makes me feel more secure about his future.

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[6] Ten were parents of male students, four of female students. Five were sixteen-year-olds, three were twelve year olds, and six were eight-year-olds.

The fact that once you are in with an agency they look after you if and when the need arises. We are thinking about this a lot, as his father has not been well lately, he has heart trouble.

- ***Student contentment***

Twenty parents (44%) of students in special schools designated for pupils with moderate learning disability believed that the main advantage of the school placement was that their sons/daughters were content in the schools. That students were occupied and active and *'not just being left there'* was considered to be a positive feature of the school placement.

She has something to do, somewhere to go. It keeps her occupied and active. She is content. There seems to be a decent amount of variety in her school day.

Not being over-pressurised, but being able to work within his/her own abilities was considered to be important.

He has been given everything he needs to put him out in the world and to make him independent. He is not being over-pressurised to compete with others. There is enough pressure on him to do his best.

I find that she is not put under a lot of academic pressure that she is not able to keep up with. She goes at her own pace in a class that she is happy to be in.

School ethos and atmosphere were judged to be homely and good.

The environment of the school is very homely. It is safe although the building has been condemned by the Department of Education.

It is near home, she is learning, she is happy. The atmosphere in the school is good. She helps all the others in the school.

The student feeling comfortable, in familiar surroundings, was seen as an advantage of the school placement.

They give him every care they can. He feels that they are his friends. It is a second home to him.

She is around the same people and is familiar with them.

Special schools/classes designated for pupils with mild learning disability

As there were only eight students in special schools/classes designated for pupils with mild learning disability, proportions of responses that fell into the different categories are less meaningful. With this in mind, the parents' responses were reviewed.[7]

Disadvantages

Two parents reported that there were no disadvantages to their son's/daughter's school placement. Both students were twelve-year-olds.

One parent believed that the school had inadequate resources to provide the desired education.

> *There is a lack of funding. The school needs to be upgraded physically, needs books and materials. The teachers are sent on training courses during the school term which means no school that day. This is difficult because I am working full-time.*

Two parents believed that the social context of this type of school placement was a disadvantage. One parent found that there was no opportunity to know the other parents and this placed a barrier on possible friendships.

> *She is mixing with more socially disadvantaged students. Some of them can be very rough. Many of them have a lot of problems and language and behaviour which I would rather that she did not imitate. She really has no suitable friend at school so far. The students come from near and far and I don't know their parents.*

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[7] Five percent of those born in 1982; fourteen percent of those born in 1986; and ten percent of those born in 1990 attended special schools/classes designated for pupils with mild learning disability.

The other mother regretted that there was little opportunity for her daughter to meet neighbourhood age peers.

> *I would like her to be in a school in her own area so that she would have contact with the girls in the neighbourhood and they would know her for who she is. She does not have an opportunity to get to know them either.*

The amount of time spent travelling to and from school was a disadvantage of the school placement for one student.

> *It is so far away. They are driving around the country for hours on the bus. She leaves the house at 7:40 and gets home between 4:10 and 4:30 depending on the traffic. It is a very long day for a small child.*

Three of the eight parents of students in this placement believed the schools' approach to learning was inadequate. For them, even with the small class-size, learning programmes were not sufficiently individualised or progressive. One boy had a specific reading difficulty. This is reflected in his parent's comments.

> *Everyone has to do the same thing. There is no allowance for individual problems.*

The parent of another student, who attended a special class in a secondary school, reported that progress was stymied by a lack of progression in the learning materials and programmes used.

> *They go back to the same place in the same books each September. They are still using the same books he had three years ago. Every year new ones come into the class and they go back to the beginning in history, geography and reading. They never finish, never move on. He has moved on in maths. They each get their own work in maths.*

Advantages

The two main categories of advantages of placement in special schools/classes designated for pupils with mild learning disability were social development and supportive learning structures. All parents identified at least one advantage to the school placement.[8]

The mother of a sixteen-year-old reported that the school had fostered her son's maturity and independence.

> *He has become more independent and makes decisions for himself. But he is not very sociable, but that's the way he is.*

The abilities of the other students in the school were seen to be an advantage by two parents.

> *He is with 'ordinary' children even though they are slow learners.*
>
> *Trained teachers, small classes, a social mix within the student body.*

Speech and language development of two eight-year-olds had improved. Students in special schools designated for pupils with mild learning disability were the type of schools with the highest level of speech therapy.

> *The school is very good. She is very happy. Her speech is coming on. She can read a bit, writing is slow. She can count, knows numbers.*
>
> *I feel that she is learning at her own pace. Her speech and vocabulary are improving. It has helped her confidence. She is comfortable there.*

---

[8] For students enrolled in special schools/classes designated for pupils with mild learning disability one response fell within the category of *convenience and continuity*, another within *student contentment*. These are included in the parents' responses that primarily fell into the two categories of *social development* and *structures for learning* and will not be discussed separately. No parents mentioned a variety of activities as an advantage of special schools designated for pupils with mild learning disability.

The broad curriculum and specialist teaching staff of the special school were noted as an advantage.

> *Small classes, specialist tuition, extra subjects – cookery, pottery, gardening.*

High expectations and standards also were seen to contribute to the benefit of this type of school placement.

> *They work very hard and have high standards both academically and socially. Long term, she will be eligible for the ...* [agency] *system into adult training and employment possibilities.*

The mother of a student who was in a special class of this designation identified parents' involvement in homework as advantageous to her daughter's development.

> *I feel that she gets everything she needs at the moment. The teachers are very good. They keep her up to scratch. They involve me in her homework.*

Mainstream schools

Twenty-one students were in mainstream school placement. Three were in secondary schools; eighteen were in primary schools. The highest proportion by age group were the youngest students.[9]

Disadvantages

Four parents (19%) of students in mainstream school placement believed that there were no disadvantages for their sons/daughters. One of these mothers

[9] Fifteen percent of those born in 1982; twenty-one percent of those born in 1986; and forty percent of those born in 1990 attended mainstream schools.

recognised that supports and services were not uniformly available to all students in mainstream schools. She felt that she had been very fortunate.

> *I can't really think of any* [disadvantages]. *Sometimes I feel slightly guilty when I hear how others are struggling and being turned down. I really have had wonderful support.*

One of these four students had originally lacked the specialist supports she had needed, but the situation had improved.

> *She has fitted in quite well and we are now getting the supports she needs.*

- ***Inadequate resources***

Eleven parents (52%) of students in mainstream schools believed the resources to support their sons'/daughters' learning were not adequate. Class-size and support for classroom teachers were cited as the main resource issues. The issues are inter-related: the larger the class, the more supports the teacher will need to meet the needs of all the students he/she is responsible for. A mean primary school class-size of twenty-eight students was reported earlier in this study with more than half having over thirty students. In nine of the eleven cases where parents believed class-size to be a disadvantage, there were thirty or more students in the class.

> *There are not enough specialist supports and back-up for the classroom teacher.*
>
> *She does need more individual attention. The school needs more resources and teacher back-up. We live in a rapidly expanding area so classes are very large.*
>
> *Class-size. She was the first child with Down syndrome in the school. They had no experience, materials or confidence. They have been frustrated with the lack of support from the Department of Education.*

At the time of the interview, a policy of entitlement to supports and services for students with disabilities in mainstream schools had recently been initiated.[10] Prior to this it frequently had fallen to parents to petition the Department of Education on behalf of their sons/daughters. Three parents related the effort they had made to obtain support services.

> *In the beginning there was no extra help at all. I worked with two other mothers who had children with special needs and we have been able to get a resource teacher and computers. I hope the resource teacher will be a help now.*
>
> *I have to initiate all communication. All the work outside that I had to do to get the Department of Education to provide the supports she needs. You have to be fighting, to be a spokesperson for everything. You have to have so many clashes with so many people before you get what she needs.*
>
> *It is a struggle, a real struggle.*

- ***Lack of social involvement***

Six parents (29%) found that aspects of social inclusion were difficult in mainstream schools. The attitudes of classmates' parents were mentioned. It was not that the attitudes were negative, but the other parents did not reach out and include.

> *Friends. The children will play with her, but it is more difficult with the mothers. Most of the mothers are much younger than I am.*
>
> *Acceptance of a child with learning disabilities takes time. The children seek him out in public places – the beach, church, shops, but he is not asked back to anyone's house.*

It also can be difficult for a parent to observe increasing differences between their son/daughter and other children of the same age.

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[10] See Appendix 13, Press release from the Minister for Education and Science, M. Martin T.D. November 5, 1998.

I don't know if it is a disadvantage for her or for me. I can see the others progressing past her. I can see that she is not part of the group who are moving on to other things. But this is reality and would not change whatever.

All three girls in mainstream secondary schools were reported to have some difficulty with friendships. It was not rejection by peers, but friendships had not developed. A mother of one of the girls described her daughter's positive, but circumscribed, social relationships.

Whenever there is a difference, there may be a difficulty in having a close friend. They are very nice to her, and she has friends to do things with, but she does not have a 'soul mate'.

- ***Distance and time spent travelling***

Distance and time spent travelling were not reported as a disadvantage by any parent of a student who attended a mainstream school.

- ***Lack of learning opportunities***

Only one parent believed that there were insufficient learning opportunities in mainstream placement.

I don't think she is being taught as much as she should be.

Advantages

All parents of students in mainstream schools identified at least one advantage of the school placement.[11]

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[11] For students enrolled in mainstream schools, no response fell within the category of *convenience and continuity;* four were within *student contentment.* These are included in the parents' responses that primarily fell into the two categories of *social development* and *structures for learning* and will not be discussed separately. No parents mentioned *activities* as an advantage of mainstream schools.

- ***Social development***

Twenty parents (95%) of students who attended mainstream schools mentioned the opportunity for social development as an advantage of the school placement. Many of their responses belonged to both this category and that of *structures for learning*. For this narrative, they were delineated according to the main emphasis of the response.

The fact that the students were part of, and not segregated from, their community was an important element of parents' responses. Examples were:

> *It is local. He knows some of the children from the area. It is within walking distance.*
>
> *She is part of the fabric of the school. She has friends, is known by everyone, there is a positive attitude towards her, by the teachers, pupils and parents.*
>
> *She is close to home. The teachers are local or live close by. She is with the local children. She does not have to spend a long time on the school bus.*
>
> *She is going to a local school. She is fitting in. The social aspects are positive. She is well able to mix, to get on with and play with the others.*

The attitude of the school, the *naturalness* of the teaching staff in dealing with the students, was reported as a positive contribution to the learning experience.

> *The attitude of the school towards him is very accepting, very natural.*
>
> *She is immersed in normal behaviour which is a huge advantage. The concern for her well-being from all the teachers, particularly the principal is very supportive. Academically, personally and socially she is doing well.*

The effect of role models of normative behaviour was seen to have a positive effect on students developing behaviour which allowed them participate in social activities.

Socially. You can take A anywhere. Her behaviour is good. She is quite independent.

Her speech is very much improved. Her behaviour is fine. She just toes the line and is no different from the others in her behaviour. She is definitely learning. It has been a learning experience for them all – B, the teachers, and the other students.

Although friendships were considered to have been a difficulty for some of the students in mainstream school, none of the parents of this group of students referred to the type of isolation reported by parents of students in special schools. They were known in their communities, knew others and had age-peers for shared activities. Eight parents specifically referred to their sons'/daughters' *friends.* Perhaps some of their companions will become *soul mates.*

He is in his own community. He knows all the children and is great friends with them and can communicate with them. He is learning.

It is local, she is included. Her friends on the road go to the school. She is known and liked. There is a nice atmosphere in the school. She is very happy there.

- ***Structures for learning***

Twelve parents (57%) of students in mainstream schools indicated that learning opportunities were an advantage of the school placement. The effects of learning in the company of typically developing students were highlighted. Three parents spoke of the motivational effect of mixed ability groups.

He is mixing with 'ordinary' children which is a huge plus. It makes him strive more to keep up with them. He is taking part in the national school curriculum – following it the same as everyone else.

Socially she has learned what is acceptable and unacceptable. Academically she has realised that there are certain goals that can be aspired to.

He is socially mixing with other children from the community in a 'normal' environment. Being there makes him want to think and push himself more. It is a challenge and is interesting.

The effect on speech and language development was also considered to be an important benefit of mainstream school placement.

He has developed very good social skills. Everyone in the community knows him and accepts him. He has developed a very good vocabulary.

I am glad that they are giving him a chance as he is very bright. He has friends nearby and goes to their homes. He is learning a lot and his speech has really come on.

Her social development and interaction with the other kids. She has made great progress academically. Her language development is good as a result of being in an ordinary environment.

Only one parent reported that she believed her daughter could be learning more. Regardless of difficulties of class-size, lack of material and specialist supports, no other parent reported that they believed their son/daughter was not learning. Several noted their progress in specific subjects and indicated that a good, if not perfect, learning programme was being implemented.

Overall he is not doing too badly. He is well integrated in the group which is important. His language – speech, understanding and vocabulary are very good. He is becoming independent and trustworthy. His reading is excellent. His writing is coming on nicely. He is good at spelling and likes his spelling test every week. Maths are more difficult.

She is learning and she is happy.

She has a good learning programme. They have high expectations of her and high results. There is an interested staff. Her presence increases the understanding and acceptance of her disability by her peers.

Summary

In this section, parent-identified advantages and disadvantages of their son's/daughter's school placement were explored. For the study group as a whole, a *lack of social involvement* was the most frequently reported negative dimension of school experience. The school *structures for learning* were the most frequently reported advantage offered. There were differences by type of school attended.

Thirteen parents (22%) of students in special schools/class designated for pupils with moderate learning disability, two (25%) of those in special schools/classes designated for pupils with mild learning disability, and four (19%) of those in mainstream schools, believed that there were no disadvantages to their son's/daughter's school placement.

Lack of social involvement, distance and time spent travelling, and *lack of learning opportunities* were more frequently identified as disadvantages of the school placement by parents of students in special schools than by parents of students attending mainstream schools.[12]

Seventeen parents (38%) of students in special schools designated for pupils with moderate learning disability believed that a lack of opportunity for friendships and the absence of appropriate role models were disadvantages of the school placement. Thirteen specifically mentioned the lack of out-of-school contact with age peers. In-school isolation from typically-developing

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[12] Because of the small number of students who attended special schools/classes designated for pupils with mild learning disability, the emphasis on this summary will be on the other two types of school placement. Table 13.1 gives full comparative data.

peers, and the effect of gathering together students, who all had learning difficulties, were seen as negative influences which hindered the students' acquisition of social skills.

Seventeen parents (38%) of students in special schools designated for pupils with moderate learning disability also reported *distance to school and time spent travelling* as negative aspects of the school placement. This group of students spent an average of ninety-six minutes travelling.

Lack of learning opportunities were reported by eight parents (18%) in this group. These parents believed that methods, materials and expectations could be improved and that learning programmes were not sufficiently challenging to the students.

Inadequate resources were more frequently identified as a disadvantage of mainstream placement than special placement. Eleven parents (52%) of those in mainstream schools believed that inadequate resources were negative features of the school placement. Class-size and support for the classroom teacher were cited as the main resource issues.

All parents, regardless of type of school the student attended, identified at least one positive aspect of the school placement.

Most of those who identified *convenience and continuity*, *student contentment* and *extra-curricular activities* to be positive elements of the school placement were parents of students in special schools designated for pupils with moderate learning disability.

Fourteen parents (31%) of students in this type of school reported that an advantage of the school placement was the *convenience and continuity* it provided. Supports and services, which made family life less stressful and demanding of parents' time, were welcome. Continuity of service into adult life was also seen to be an advantage of the school placement.

Twenty parents (44%) of students in special schools designated for pupils with moderate learning disability stated that the main advantage of the school placement was their sons'/daughters' *contentment.* The students were occupied and active, not being *over-pressurised,* and the school atmosphere was considered homely and good.

Nine parents (20%) of students in this type of school reported that the variety of activities offered by the special school were advantageous. The diversity of school activities contributed to the students' development and enjoyment of school. They also reported that the schools introduced students to activities they might not otherwise have experienced.

Nearly all the parents of students in mainstream schools identified opportunities for *social development* as a major advantage of mainstream placement, and more than half of them also identified *structures for learning* as a positive aspect of the school placement.[13]

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[13] Most parents of students in special schools or in classes designated for pupils with mild learning disability also identified *structures for learning* and *social development* to be positive elements. Fewer parents of students in special schools designated for pupils with moderate learning disability did so.

Twenty parents (95%) of students in mainstream schools mentioned *opportunity for social development* as an advantage of the school placement. The fact that the students were part of, and not segregated from, their community was an important element. The positive attitude of the school and the acceptance of the student by the teaching staff were important considerations. The presence of role models of normative behaviour was reported to contribute to the students' learning experience. Although friendships were a difficulty for some students in mainstream school, none of their parents referred to the type of out-of-school isolation reported by parents of students in special schools.

Twelve parents (57%) of students in mainstream schools indicated that *structures for learning* were an advantage of the school placement. The effects of learning in the company of typically developing peers, especially on speech, were highlighted. Only one parent believed that her daughter could be learning more. Regardless of difficulties of class-size and inadequate supports and services, no other parent of a student in mainstream schools believed that their son/daughter was not learning. They indicated that a good, if not perfect, learning programme was being implemented.

Chapter 14: Discussion, Implications for Policy, Conclusion

In the course of the previous chapters, a range of findings was examined and analyzed in an attempt to describe the educational experiences of a group of Irish students who have Down syndrome. There was a specific attempt to identify the basis for the parents' decisions regarding their sons'/daughters' education, and to elicit the beliefs which underpinned those decisions. In this final chapter it is proposed to summarise the main findings and to interpret them in light of the literature review and the conceptual framework which influenced the formation of the study questions. On the basis of the findings of the study, implications for education policy will be considered.

The review of literature demonstrated that students who have Down syndrome experience impairments in some, but not all, domains of learning and development. Their development is frequently asynchronous and language difficulties frequently impinge on other cognitive skills. Although some impairments appear to be syndrome specific, growth within each domain of learning, although delayed, is characterised by expected patterns.

The literature also supported the contention that some learning deficits are caused by sensory, attentional, instructional, environmental and expectational factors, and not solely by the developmental delays.

Several trends emerged from the review of literature regarding international patterns of school placement for students who have Down syndrome. There has been a reported increase in the number of students initially enrolled in mainstream education, and an increase in the proportion who remained there

throughout their education. However, there was evidence that entry did not guarantee continued placement in mainstream settings. Changes in placement, usually to a more restrictive educational placement, occurred at transition stages, such as at the end of the infant cycle or at the end of the primary cycle.

The literature also provided evidence that students who have Down syndrome attending mainstream schools developed academically and socially at least as well as students who attended special schools. There is some evidence to suggest that students in mainstream placements made more progress.

The review of Irish educational documents over the past thirty-five years revealed changes of attitude towards students who have learning disabilities. In 1965, the basis for special education was the belief that the student was incapable of benefiting from the education provided in the ordinary classroom and the belief that mainstream education was unable to accommodate his/her learning needs. In recent years, the concept of special educational need has been framed in terms of equality and participation. The 1998 Education Act seeks to "promote equality of access to and participation in education and to promote the means whereby students may benefit from the education provided".[1]

The interviews that formed the basis of the present study took place between February and May 1999, at a point that marked the transition between the

[1] Education Act, 1998, Part I, Sec. 6 (c).

special system established by the 1965 Commission of Inquiry on Mental Handicap and the entitlements under the Education Act, 1998.

The study sample consisted of the parents of seventy-eight students who had Down syndrome. At time of interview, the students were sixteen, twelve and eight years old. These age groups were chosen to represent various stages in the students' education.

The families lived in seven counties in the Republic of Ireland: Dublin, Meath, Kildare, Limerick, Galway, Cork and Kerry. These families lived in urban and rural areas, in several health board areas, and received services from various non-statutory agencies. By using these clusters it was intended that a representative sample would be included.

In-depth interviews with parents were used to explore the multiple contexts of the students' educational experience from early childhood to the present time. The study sought to elucidate the experiences of the students in the multiple contexts which had influenced their development. Bronfenbrenner's *ecological systems model* was useful as a framework for the investigation, because it requires the researcher to enquire beyond student performance and to consider the experiences and contexts, past and present, which may have influenced student development. [2]

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[2] Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (ed.), *Six Theories of Child Development: Revised Formulations and Current Issues.* London: Jessica Kingsley, pp. 187-249.

Families

The families whose experience forms the basis of the present study reflect the wide variations that exist in Irish society. The presence or absence of parents and siblings are especially important in the life of a person who has Down syndrome. Family members provide learning opportunities, facilitate social contacts and ensure the life-long natural supports which flow from being a member of a community. Descriptive family variables were analysed to examine their influence on the educational decisions made for the students in this study.

The study found few statistically significant relationships between educational experience and specific family variables. Geographical location was observed to influence early and preschool services and affect school enrolment. The findings suggest that it may be the availability of services and educational opportunities, rather than specific inter-family differences, which determine participation in developmental programmes and influence educational decisions.

Early services

The study found that the multi-disciplinary early service teams recommended by the Department of Health in 1990 had not generally been available. Overall, support services improved during the period 1982-1993. However, the amount of support available depended more on county of residence than on year of birth. There was little evidence that multi-disciplinary developmental programmes had been provided for the young children or that parents had been involved in the planning of developmental programmes.

Early services failed to provide adequately for the children's need for speech therapy. The lack of speech therapy does not mean that the parents did not actively encourage their son's/daughter's language development. However, it might have been easier, and their efforts more effective, if there had been professional help.

Physiotherapy needs were better addressed. The difference between the parents' evaluation of speech and physiotherapy may be partially explained by the tasks involved in the two domains. The skills required to help a child roll, sit or walk are visible and easier to demonstrate. Parents may be more confident in approaching such tasks.

Support from home teachers during the students' first three years was found to have a positive effect on the children's development and readiness for preschool. The evidence of this study indicates that the model of Visiting Teacher support, provided by the Department of Education to children who have visual or hearing impairments, should be extended to children who have Down syndrome. Unfortunately, the recent *White Paper on Early Childhood Education* made no such recommendation.[3] The positive role of the home teacher in supporting the development of young children who have Down syndrome or other learning disabilities deserves further investigation.

There was little continuity of service between early services and preschool. The role of early services teams in helping parents identify a preschool and supporting children throughout their preschool years, is often delimited by

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[3] Department of Education and Science (1999). *Ready to Learn: White Paper on Early Childhood Education.* Dublin: Stationery Office, pp. 86-88.

funding considerations, job descriptions, and local arrangements between non-statutory service providers and local health boards. As more parents choose to send their children to local preschools, flexible arrangements providing continuity of support from early services to preschool, need to be established and implemented.

Preschool

Ninety-four percent of the children in the study attended preschool. Sixty percent began their preschool education in mainstream preschools or neighbourhood playgroups and fifty-four percent finished preschool in a non-special preschool. The fact that most did not attend special preschools has implications for the allocation and delivery of specialist supports and services to preschool children.

Children began special preschool at a significantly younger age than they did mainstream preschools. The children who attended special preschools were also younger when they left preschool.

The amount of time spent in preschool ranged from one to six years. A preschool experience of one year only seemed to constrain options for primary school placement. Longer periods spent in preschool provided time for the children to develop, and parents, teachers and other professionals to observe the children's abilities.

This is in line with the findings of Cunningham, who observed that children may be moved out of preschool too soon. Experience led him to believe that the fourth year of life may be a "plateau period and often just before the child

has reached the stage to interact more fully with his/her peers."[4] At that time, because the child may not be getting involved and tending to be bypassed by the other children, a recommendation of special provision may be made. However, it was his impression that, "had the decision been delayed for just a few months, the staff and parents would have seen some dramatic changes for many of the children."[5] This aspect of preschool experience deserves further investigation.

Overall, preschool experience was rated in this study by parents to have been most beneficial for the development of play skills and social skills and least beneficial for their development of friendships and language development. It may be that the latter skills are related. Verbal interaction between children becomes increasingly important in peer negotiations and relationships at this age. This finding identifies language and peer relationship skills as specific aspects of development that should be supported by specialist interventions during preschool.

Parents of children who attended mainstream preschools rated the experience higher on every item than did those whose children attended special preschools. Significant differences were found for the items of language development, social skills and pre-academic skills by type of preschool attended.

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[4] Cunningham, C. (1996). *Understanding Down Syndrome: An Introduction for Parents* (3rd ed.). Cambridge, Mass: Brookline Books, p.176.

[5] Cunningham, C. (1996), p.176.

Some preschool children who have Down syndrome are able to accomplish pre-academic tasks typical of preschool such as drawing, painting, colouring, counting, recognising names in print, naming and matching pictures, learning songs and poems.[6] The *Report of the National Forum for Early Childhood Education* recommended that in integrated settings "careful structuring of curriculum, and planned and systematic teaching" was necessary if positive outcomes were to be achieved.[7] This recommendation might be applied to all preschools, be they special or mainstream.

Dual enrolment in special and mainstream preschools made little difference to parental rating of their children's preschool benefit when compared with the rating given by parents of children in mainstream preschool only. This would suggest that delivery of specialist supports and services in mainstream preschools might be of equal or greater benefit to the children. There was evidence of good practice, where specialist support personnel had worked effectively with preschools. The evidence also suggested that more specialist co-operation would benefit preschool children who have learning disabilities.

Ninety-five percent of the parents believed that their sons and daughters had needed speech therapy during their preschool years. However, one-third of them had not received *any* speech therapy. Difference by type of preschool attended was not significant. Attendance at a special preschool did not increase the probability that the child would receive adequate speech therapy.

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[6] Bird, G. and Buckley, S. (1994). *Meeting the Educational Needs of Children with Down's Syndrome.* Portsmouth: University of Portsmouth, pp.17-22.

[7] National Forum Secretariat, Coolahan, J. (ed.) (1998). *Report on the National Forum for Early Childhood Education.* Dublin: Stationery Office, p. 101.

Sixty-four percent of the parents believed that their sons and daughters had not needed physiotherapy during their preschool years. This would again suggest that parents were more confident in their ability to encourage physical development. However, of the forty-nine children who were reported not to have needed physiotherapy, twenty-four had serious health concerns, and seven of these had more than one health concern. It would seem that some of them would have benefited from physiotherapy during their preschool years. Even for the group of children whose parents considered physiotherapy to have been adequate, physiotherapy was more often a response to a medical crisis than a developmental support.

The preventative and developmental aspects of speech and physiotherapy often received less attention than they deserve. This may because, as scarce resources, they were used predominately to remedy obvious problems.

Nearly all who had attended special preschools went on to special schools designated for pupils with moderate learning disability. Half of the students who either attended a mainstream preschool or a combination of mainstream and special preschool went on to mainstream schools.

The benefit of preschool, as reported by parents on the preschool benefit scale, was also an indicator of the type of primary school the students would attend. The mean preschool benefit scores for those who were enrolled in mainstream schools were significantly higher than for those enrolling in special schools/classes.

Psychological Assessment

The role of psychological assessment in Irish education has been poorly defined. Department of Health psychologists have usually carried out assessments for the purpose of education *placement*, but these assessments have had little effect on educational *processes*.[8]

Nearly all parents reported that their sons/daughters had been assessed by a psychologist prior to enrolment in primary school. Few of them, however, reported that the assessment had been *constructive*. Half reported that the assessment had only been *somewhat helpful.* Some parents reported that the testing had been *unhelpful* and had not reflected the children's abilities. A quarter of the parents voiced negative opinions regarding their experience of preschool assessment. Their comments typically started with words such as: *upsetting, painful*, *discouraging*, *unfair*, *disappointing*, *puzzling*, and *a waste of time*.

Given that the study found that most students continued their education in the type of school in which they were initially enrolled, the influence of the psychologist in helping parents determine initial enrolment was examined. Only thirty percent of parents indicated that the psychologist's assessment had influenced initial school enrolment decisions.

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[8] The Education Act, 1998 empowered psychologists, appointed as Department of Education Inspectors, to assess the needs of students in recognised schools and to advise in relation to the educational and psychological development of the students. (Education Act, 1998, Part I, Sec. 2, Part III, Sec. 13, ss. 2, ss. 4 (a), ss. 5.) In January 2000, the Minister for Education and Science had announced the inauguration of the National Educational Psychological Service Agency.

An indication of whether parents were full participants in decisions concerning their children's education, would be whether they received a copy of pre-enrolment psychological assessment reports. Seventy-two percent reported that they had never received a copy of an assessment report. The finding that so few parents were given copies of reports raises the question whether the assessments were intended to inform parental decisions.

Although most students had been assessed prior to initial school enrolment, only half knew whether their sons/daughters had been assessed since enrolment. The findings also indicated that students in mainstream schools were more likely to be assessed during school years than students who attended special schools/classes.

There was evidence of the positive role the psychologist might play as a trained observer of classroom interaction. This role requires particular attention as more students are included in mainstream classrooms.[9]

While some parents reported positively about psychological assessment, it was not the universal experience. It appeared that infrequent contact with psychologists, and lack of communication with them, may have been reasons for their negative responses. The recent establishment of the National Educational Psychological Service and its co-ordination with the Department of Health and Children may improve the amount and quality of support parents, teachers and students receive from psychologists.

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[9] Englebrecht, P., Eloff, I. and Newmark, R. (1997). Support in inclusive education: the Down syndrome projects. *South African Journal of Education*, vol. 17, no. 2, pp. 81-84, p. 82.

Pattern of school placement

Fifty-three percent of the students were initially enrolled in special schools/classes designated for pupils with moderate learning disabilities, twelve percent in special schools/classes designated for pupils with mild learning disabilities and thirty-five percent were enrolled in mainstream primary schools. [10]

When asked whether the first primary school enrolment of their son/daughter had been their first choice, one-third responded that it had not. There were three themes to their responses: there had been no practical alternative; there had been insufficient resources to support their first choice, and the school of their first choice had refused enrolment to their sons/daughters.

The finding that one-third of the students were first enrolled in schools that were not their parents' first choice raises the issue of whether the students have enjoyed equality of access to education and whether their parents' Constitutional rights have been respected. It is unclear whether there is an obligation on a school to accept a child whose parents apply for enrolment, or whether the principal and/or board of management may refuse admission.

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[10] N=75. Although not explicitly stated policy, it has sometimes been the practice of the non-statutory agencies who administer special schools that students who have Down syndrome should not attend special schools designated for pupils with mild learning disability. Some schools of this designation have never enrolled a student who had Down syndrome. A required, arbitrary IQ score range of 50-75 has been the overt explanation given. However, other reasons have been given to parents. The presence of students in special schools of this designation is evidence that the exclusion is no longer rigidly enforced.

The grounds on which a student may be denied admission to any publicly-funded school have not been articulated, even in recent legislation.[11]

Some transfers from initial school enrolment occurred. It was the experience of this group that, with one exception, all transfers were towards *more restrictive* learning environments. Ninety-three percent of parents whose children had continued in mainstream schools, believed that the students were in the right school, compared with only forty-nine percent of those in special education placement. This analysis is important in considering policy proposals that students might transfer from one type of placement to another.[12]

While parents placed different emphasis on what they thought important in selecting a school for their sons/daughters, they frequently expressed shared desires and expectations, regardless of the type of school their children attended. School enrolment decisions were based on a variety of parental priorities and situations. Class size and individualised activities, the happiness and protection of the student, the attitude of the teachers and school ethos, social inclusion, and curriculum issues were cited as important considerations.

Profile of the schools and in-school learning support personnel

At the time of interview, fifty-five percent of the students were attending special schools designated for pupils with moderate learning disability; one was in a special class of that designation, and one was in a special residential

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[11] Education Act, 1998. Part IV, sec. 21 (2) requires schools to "state the objectives of the school relating to equality of access to and participation in the school".

school. Eight percent were in special schools designated for pupils with mild learning disability and two were in special classes of that designation. Twenty-seven percent were in mainstream schools. Five percent were not enrolled in any school programme; two of them were attending care units.

There was a marked difference in class size between special education and those in mainstream schools. This difference was observed across all age groups but was most pronounced for the youngest age group. For sixteen-year-olds, class size in mainstream school was twice as large as in special schools. For eight-year-olds it was more than three times as large.

This difference should be considered in conjunction with the reported number of classroom assistants. Nearly eighty percent of the parents of students in special schools/classes reported that there were classroom assistants, compared with only forty-three percent of those whose sons/daughters were in mainstream schools. Only one-third of the eight-year-olds in mainstream schools had the support of a classroom assistant.

Additional teaching support for students in mainstream primary schools was either from a resource/visiting teacher or from remedial teachers. The amount of specialist teacher help the parents reported ranged from 720 minutes to just seven minutes per week.

The manner in which support teaching was delivered should also be considered. Nearly all visiting/resource teachers worked with the students

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[12] Department of Education (1995). *Charting our Education Future: White Paper on Education*. Dublin: Stationery Office, p. 24.

individually outside the classroom. Only half of these co-ordinated specialist teaching with the class programme.

Ineffective co-ordination between specialist and classroom teacher may have the effect of reducing teacher confidence in her/his ability to teach the student and decreasing teacher perception that the student is in a suitable placement. This practice may also fragment the student's curriculum.[13] The appropriate deployment of resource personnel requires further investigation.

Inadequate speech therapy during school years concerned parents of students in all types of schools. Less than twenty percent of students in the study had received what their parents believed was adequate speech therapy. Attending a special school did not guarantee speech therapy.

Parent reported speech intelligibility for the study group confirmed that there was a need for improved speech therapy services. While most were understood at home or school, only thirty percent were understood by strangers. A direct intervention programme aimed at the remediation of speech intelligibility problems of students who have Down syndrome, carried out at the School of Clinical Speech and Language studies, Trinity College Dublin, has shown that "positive changes can be brought about in speech intelligibility through direct intervention".[14] Collaborative approaches, with parents and teachers guided and coordinated by therapists, are needed to

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[13] Ward, J. and Center, Y. (1990). The integration of children with intellectual disabilities into regular schools: results from a naturalistic study. In W. Fraser (ed.), *Key Issues in Mental Retardation: Proceedings of the 8th Congress IASSMD.* London: Routledge, p. 361.

[14] Ní Cholmáin, C. (1998). Managing Intelligibility in Individuals with Down Syndrome: A summary report on the project undertaken by the School of Clinical Speech and Language

provide more adequate support. The shortage of training places and unattractive conditions of employment may contribute to the lack of adequate speech therapy services. While there has been a slight increase in the number of training places for speech therapists in the past few years, it would be beneficial if more were sanctioned.

There was limited use of computers by students in both special and mainstream schools. Less than thirty percent of the students used computers on a daily basis. In-service training for teachers and classroom assistants might increase computer use.

Student well-being

The pressure on schools arising from the diversity within their student populations was an issue highlighted in a *Report on Discipline in Schools* (1997).[15] While it primarily addressed discipline in mainstream schools, the Report has application for all schools, including special schools. The responsibility of schools to accommodate student diversity was posed as a challenge. Balancing the conflicting demands of a diverse student body was seen as a dilemma that required skill, patience and tact in great measure.

When assessing the suitability of a school placement, the focus is frequently placed solely on the student's academic performance and social behaviour. However, school policy, practice and resources may influence the extent to which a student will become a member of the school community and the

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Studies, Trinity College in association with the Eastern Health Board and the Down Syndrome Association Ireland (Dublin) October 1993 – May 1995. Unpublished, p. 19.

degree to which his/her learning needs will be accommodated. The degree to which schools accommodate diversity and encourage a sense of belonging and participation in the school community will influence academic and social development.

While most of those attending mainstream schools were *delighted to go* to school, a smaller proportion attending special schools/classes had this positive attitude towards schools. Distance to school and time spent on school transport were negative features of school experience for the majority of students in special education placement

The differences in distance to school may have influenced not only how the students spent their time, but also the amount and quality of communication between school and family. Approximately one-third of the parents of students who attended special schools/classes of any designation reported that communication with the school was *very good*, compared with nearly two-thirds of those who attended mainstream schools.

Differences in distance and mode of transportation may also have affected levels of parental knowledge of, and participation in, the implementation of school policies. Only forty-five percent of parents of students attending special schools/classes of any designation knew of a school policy on bullying compared with over eighty percent of the parents of students in mainstream schools.

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[15] Martin, M. (1997). *Discipline in Schools.* Report to the Minister for Education, Niamh Bhreathnach, T.D., p. 16.

Student behaviour affects learning opportunities. Understanding and conforming to social expectations, and predicting the consequence of actions, are skills which increase participation in communal life. Student behaviour that was considered to be difficult, the conditions under which the behaviour occurred, and family/school responses to problem behaviour, were considered to be relevant to this study.

It is recognised that what constitutes *problem* behaviour is a subjective judgement. The context in which the behaviour occurs determines its social acceptability. The availability of peer role models of normative behaviour in the student's learning environment may influence his/her development of positive social skills and behaviour patterns. Limitations in language ability may restrict the range of reactions available to a person in a given situation. The ability to negotiate, verbally or otherwise, an acceptable position within a given context does influence behaviour. Non-verbal behaviour is frequently an attempt to communicate.

Most of the students did not exhibit problem behaviour either at home or in school. Very few of the problems reported were major or continuous.[16] Some which had occurred when the student was younger, had disappeared. Several were related to language difficulties and the resultant frustration. Some in-school problem behaviours for students in mainstream schools might have been prevented or ameliorated with additional support. Interventions to

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[16] Freeman, S. and Hodapp, R. (2000). Educating children with Down syndrome: linking behavioral characteristics to promising intervention strategies. *Down Syndrome Quarterly*, vol. 5, no. 1, pp. 1-9, p. 2.

encourage their inclusion in classroom routines and unstructured play activities during break-time, might yield positive results.

Other behaviour difficulties for students in special schools were precipitated by unsatisfactory school transport arrangements. Long bus journeys must be considered a negative feature of special school placement. The frequency of reference to behaviour problems on school transport would indicate that the responsibility of the special educational system for the students' well-being on school transport has not been addressed.

A scale developed to measure parental assessment of school accommodation of student educational and social needs was measured by eight criteria: learning environment, curriculum, learning goals, expectations, activities, friendships, role models, and individual interests. *Student accommodation scores* were totalled. As a group, the parents rated the schools highly and gave especially positive rating to the item *provides him/her with a safe and caring environment.* The item that received the lowest rating was *provides him/her with individualised learning goals.*

Special schools/classes designated for pupils with moderate learning disability received the highest rating on one item only: *provides a safe and caring environment.*

Special schools/classes designated for pupils with mild learning disability received the highest ratings on four items: *provides a broad and balanced curriculum; provides individualised learning goals; holds high, but realistic expectations for him/her;* and *encourages individual interests and talents.*

Mainstream schools received the highest ratings on three items: *includes the student in a variety of activities; encourages friendships;* and *provides role models of acceptable behaviour.* Mainstream schools also received the highest mean *student accommodation score.*

For the entire study group, out-of school contact with friends was infrequent. Parents of students in mainstream schools rated the schools' encouragement of friendships higher than did parents of students who attended special schools. The question of friendship for students who have learning disabilities deserves consideration beyond the scope of this study.[17] Students who attended mainstream schools had significantly more contact with friends than did students who attended other types of school.

Academic attainment

The importance of traditional academic skills to students who have Down syndrome or other significant learning disability has been the subject of considerable debate.[18] Given the value placed on these skills in society, and the evidence that many can attain useful levels of literacy and numeracy, arguments against providing the students with adequate opportunities to learn and use these skills cannot be sustained. This is not to give exclusive

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[17] Falvey, M. and Rosenberg, R. (1995). Developing and fostering friendships. In M. Falvey (ed.), *Inclusive and Heterogeneous Schooling: Assessment, Curriculum, and Instruction.* Baltimore: Paul H. Brookes, pp. 267-283.

[18] Buckley, S. (1985). Attaining basic educational skills: reading, writing and number. In D. Lane and B. Stratford (eds.), *Current Approaches to Down's Syndrome.* London: Holt, Rinehart and Winston, pp. 315-345; Brennan, W. (1991). Profoundly mentally handicapped young people – why educate them? *Reach, Journal of the Irish Association of Teachers in Special Education,* vol. 5, no. 1, pp 9-14; Hocutt, A. (1996). Effectiveness of special education: is placement the critical factor? *The Future of Children,* vol. 6, no. 1, pp. 77-102; Carr, J. (1988). Six weeks to 21 years old: a longitudinal study of children with Down's

privilege to such learning, but rather to argue that no student should be precluded from participating in it.

Although some students who have Down syndrome may experience real problems and difficulties in all areas of learning, and all some difficulty in some areas, their ability to learn and build on acquired knowledge has frequently been underestimated. Students who have Down syndrome are now attaining higher levels of academic accomplishment than previous generations of students with this disability.[19] This study and earlier studies have all found a considerable range in the academic attainments of students who have Down syndrome. [20]

Present levels of student attainment should not be interpreted as maximum potential, but rather as baseline achievement which may be improved by developments in curriculum and educational practice. The wide range of observed differences between young people who have Down syndrome cannot be adequately accounted for. It has been suggested, however, that learning increases their capacity to learn.[21] Educational research that

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syndrome and their families. *Journal of Child Psychology and Psychiatry,* vol. 29, no. 4. pp. 407-431, p.425.

[19] Nadel, L. (1992). Learning and Cognition in Down Syndrome. In I. Lott and E. McCoy, (eds.), *Down Syndrome: Advances in Medical Care*. New York: Wiley-Liss, pp. 37-39.

[20]Casey W., Jones, D., Kugler, B. and Watkins, B. (1988). Integration of Down's syndrome children in the primary school: a longitudinal study of cognitive development and academic attainments. *British Journal of Educational Psychology,* vol. 58, pp. 279-286; Sloper, P., Cunningham, C., Turner, S. and Knussen, C. (1990). Factors related to the academic attainments of children with Down's syndrome. *British Journal of Educational Psychology,* vol. 69, pp. 284-298; Cunningham, C., Glenn, S., Lorenz, S. and Cuckle, P. (1998). Trends and outcomes in educational placements for children with Down's syndrome. *European Journal of Special Needs Education,* vol. 13, no. 2, pp. 225-237.

[21] Freeman, S. and Hodapp, R. (2000), p. 7.

contributes towards a greater understanding of the students' attainments and the conditions which nurture their development is useful and timely.

Parent-reported academic attainment levels were obtained for the students and compared by age and type of school attended. Neither psychological assessments nor school records were available to the researcher for comparison.

For the study group, similar patterns of attainment were found for reading, number skills and writing. Mean scores increased significantly with age of student. Girls obtained higher scores in all three areas than boys. There were significant differences by type of school attended. For all age groups and for the study group as a whole, students in mainstream schools had the highest mean scores.

The findings of the present study were compared with two other studies that have used the *Academic Attainment Index*.[22] The similarity of the scores, and the patterns of the scores between the three studies, support the contention that the parent-reported academic attainments of their sons and daughters in this study were credible.

Evidence of the relationship between ability levels for students who have Down syndrome and family variables is limited and inconsistent. Carr noted that highly educated families may have severely impaired children with Down syndrome, just as families who have limited education may have children with

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[22] Nye, J., Clibbens, J. and Bird, G. (1995). Numerical ability, general ability and language in children with Down's syndrome. *Down's Syndrome: Research and Practice*, vol. 3, no. 3, pp. 92-103, pp. 95-97; Sloper, P. *et al.* (1990), pp. 297-298.

mild impairment.[23] Sloper, *et al.* investigated the impact of multiple student and family variables on academic attainment. They found that most of the variables lost significance after the entry of mental age. Only type of school, gender, fathers' locus of control scores[24] and chronological age of student remained significant.[25]

In the present study, bivariate analysis of *Academic Attainment Index* scores with county of residence, number of siblings, order of birth and both parents living in the family home were all found not to be significant. In contrast with Sloper *et al.*, sex of student was not a significant variable for any of the three age groups, nor for the study group as a whole.

Academic Attainments Scores were associated with *preschool benefit scores*. Adequate support given during the preschool experience may improve children's skills and influence the attitudes of parents, with the result that parents were more likely to pursue mainstream placement and students were more able to function in mainstream schools.[26]

Some reservations must be stated regarding the findings. There may have been differences between the groups of students which were not accounted for in the present study. Difference in reported attainments could arise from

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[23] Carr, J. (1985). The development of intelligence. In D. Lane, D. and B. Stratford, (eds.), *Current Approaches to Down's Syndrome*. London: Holt, Rinehart and Winston, pp.167-186, p.179.

[24] *Fathers' locus of control scores* were used to measure the extent to which "the father's view that events or outcomes were within his influence rather than external to it." (See Sloper, P. *et al.* (1990) p. 289 citing Lumpkin, J. (1983). Validity of a brief locus of control scale for survey research. *Psychology Reports,* vol. 57, pp.655-659.

[25] Sloper, P. *et al.* (1990), p. 293.

differences in students' abilities, parental perceptions and aspirations, and/or differences in school practices.

However, this study did not find a systematic process of assessment prior to or during school. While more able children, who had more positive preschool support, were more likely to be enrolled in mainstream schools, it would seem that there was overlap of student abilities in the various school placements.

Sloper *et al.* suggest that one reason for the greater progress of children in mainstream schools in the traditional academic skills may lie in the emphasis placed on the teaching of such skills in the different types of schools.[27] A comparison of the Irish primary school curriculum[28] and the existing curriculum for students in special schools designated for pupils with moderate learning disability[29] shows marked differences in the curricular emphasis between categories of schools.

The National Council for Curriculum and Assessment in the process of developing curriculum guidelines for students with learning disabilities.[30] The guidelines state that "although some students will require detailed, individualised programmes of work, these programmes should not isolate

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[26] Ludlow, J. and Allen, L. (1979). The effect of early intervention and pre-school stimulus on the development of the Down syndrome child, *Journal of Mental Deficiency Research*, vol. 23, pp. 29-44, p. 42.

[27] Sloper, P. *et al.* (1990), pp. 292-293.

[28] Department of Education (1999). *Primary School Curriculum Introduction.* Dublin: Stationery Office; Department of Education (1971). *Curaclam Na Bunscoile.* Dublin: Stationery Office.

[29] Department of Education (1976-1982). Curriculum Guidelines for Schools for the Moderately Handicapped. Dublin: Department of Education.

students from the class group, from the benefits of co-operative learning, or from the educational opportunities available to their mainstream peers."[31] Curricular goals, linkages with national curriculum, and age/ability-appropriate materials will be necessary if these guidelines are to be implemented. The usefulness of the guidelines will be determined by how effectively they enable students to be part of the school learning community; by how closely they meet the students at their present level of attainment, and how well they provide opportunity and stimulus for the student to move towards his/her *zone of proximal development*.[32]

Parent's choice of school placement

There is a perception that parents of students who have Down syndrome or other disability do not agree on what type of educational provision should be made for their sons/daughters. It often appears that parents are polarised into competing, conflicting camps: those who wish their sons/daughters to be educated in special education, and those who wish them to be educated with their brothers and sisters in their community.

The evidence of this study suggests that individual parents assessed the strengths and weaknesses of their son/daughter, the resources of their family,

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[30] Under the terms of the Education Act, 1998, (Sec. 41.1 and Sec. 42.2.g) the NCCA, as a statutory body, has the function of advising the Minister for Education and Science regarding the curriculum and syllabuses for students with a disability or other special educational needs.

[31] National Council on Curriculum and Assessment (NCCA) (1999). *Special Educational Needs: Curriculum Issues Discussion Paper.* Dublin: NCCA, p. 18.

[32] Bruner, J. (1986). *Actual Minds, Possible Worlds.* Cambridge, Mass: Harvard University Press, pp. 70-78. In this chapter Bruner provides an introduction to Vygotsky's conception of *zone of proximal development.* I wish to thank a colleague, Ursula Coleman, who pointed me in this direction.

the conditions found in the local school and in the available special school, and made tactical decisions based on what was available to them.

Some parents were influenced by the existence of a special system. They believed that it was a system designed to meet the specific educational needs of their sons and daughters. Others felt that, because the special system existed, they were expected to take part in it and were not given alternative choices. For some, there was concern that if they removed themselves from the special system, they would not be welcomed back into it.

The parents were aware of the extra time and effort required to nurture their sons'/daughters' development. Supports and services, which made family life less stressful and less demanding of parents' time, were welcome. There were also underlying insecurities about how to prepare the students for adult life and obtain further education and employment. There was a perception that special school enrolment was a prerequisite to eligibility to adult supports in the future.

Some parents, who would have preferred to have their sons/daughters educated in their community, believed the ordinary education system was unprepared, under-resourced, or unwilling to include them. They believed that they could not change the system. Others felt that segregation into special education was inherently wrong and that specialist provision could not compensate for the inevitable social isolation. In the pursuit of this objective, some parents met serious obstacles, others found willing support from principals, teachers and psychologists.

The concept of parental choice is often spoken of as the determining factor in school placement decisions. Until recently, there was often no real choice. Necessary supports and services were not available except in specialised situations.

However, the recent policy of *automatic entitlement* to special teaching and childcare in ordinary schools, may lead to more realistic options for parents. The effect of these policy changes on school enrolment patterns will need to be closely monitored.

Interpretation

The findings of this study need to be interpreted judiciously. The reservations expressed in the methodology regarding the selection of the sample are recognised and remain valid. Due to the lack of a comprehensive sampling frame, the sample upon which this study was based could not have been chosen as a comprehensive, representative national sample. However, it is considered that the use of purposive, cluster sampling, and the high response rate have maximised the potential for making inferences on the basis of the study's findings.

It is also accepted that the sample is small. This is inevitable, given the need for detailed observations based on the face-to-face interview method and the limited resources of the researcher. However, at every stage of the analysis, the findings have been evaluated in comparison to findings from the wider international literature. Indeed, by comparison with many of the studies of the education of children with Down syndrome carried out in other countries, the sample here is of good size.

Implications for Education Policy

Further research is required to increase the understanding of the educational needs of students who have Down syndrome. It is also necessary that the effectiveness of interventions be systematically evaluated.

On the basis of the present study, the following implications for education policy have been identified.

Early Services

- The preventative and developmental aspects of speech and physiotherapy for young children who have Down syndrome have often received insufficient attention. Parents require more professional assistance and support during their children's first three years.

- Young children who have Down syndrome would benefit if the model of Visiting Teacher support, provided by the Department of Education and Science to children who have visual and hearing impairments, were to be extended to them.

Preschool

- Flexible arrangements for providing continuous support from early childhood through preschool need to be established and implemented.

- Since most of the children attended mainstream preschools, the allocation of support services to mainstream preschools would benefit the children.

- Language development and peer relationship skills were identified as specific aspects of development that should be supported by specialist interventions during preschool.

- Careful structuring of preschool curriculum, and planned, systematic teaching of pre-academic skills, are needed in all types of preschools.

School placement decisions

- Deferring school placement decisions until the age of five, or after at least two years of preschool, would allow for a more valid evaluation of the children's abilities.

- Parents did not generally have access to psychological assessment reports. If parents are to make informed decisions, all assessment information should be available to them.

- The implications of the provision in the Education Act, 1998, that "schools state the objectives of the school relating to equality of access to and participation in the school" need to be articulated.

School Experience

- When students are enrolled in mainstream schools, adequate support personnel should be available from the time of enrolment.

- Where a student who has a disability is enrolled in a mainstream school, the student's additional needs should be taken into account for staffing purposes.

- The variation in the amount of specialist support available to students in mainstream schools requires further investigation, as does the appropriate deployment of resource personnel.

- The effect of the National Educational Psychological Service in supporting students with disabilities and their parents and teachers should be evaluated, particularly with regard to differences in the type and amount of support received by students in different types of educational placement.

- The positive role of the psychologist as a trained observer of classroom and informal peer interaction deserves attention.

- There is a need for improved speech therapy services for students attending all types of schools. The provision of therapy supports should be an *automatic entitlement* if the therapy is needed to enable a student to develop his/her abilities.

- The amount of time some students spend travelling to special schools, and the associated behaviour problems on school transport, need to be examined.

- Interventions that would increase age-peer contact, especially for those who attend special schools, should be designed and implemented.

- Curriculum initiatives and material resources are needed for students in both mainstream and special schools.

- Further study of differences in academic attainment and social involvement by type of school attended is required. The reasons for these differences need to be explored further.

- The effect of interaction with typically developing age peers on the academic attainment and social development of students who have Down syndrome or other learning disability requires further investigation.

- School based research in both special and mainstream schools is necessary to complement the findings of this study, particularly with regard to students' academic and social development, the allocation of resources, and teachers' identification of the additional supports the students require.

- Students who are unable to attend school because of health problems should have education provided at home or in hospital.

- The effect of the Education Act, 1998 should be evaluated. Changes in patterns of school placement as a result of the initiative to give automatic entitlement to support services and childcare assistance, should be monitored to ensure that specialist teachers are available, that classroom assistants receive adequate training, and that curricular adaptations and materials are provided.

Availability of services and educational choices

- The availability of services and educational opportunities was found to influence participation in developmental programmes and educational decisions. Families living outside major urban areas had less access to services and fewer educational choices. These inequities need to be addressed.

Linkages between special and mainstream schools

- There is a need for co-operation and co-ordination between special and mainstream schools at all levels including the inspectorate, principals, and teaching staff.

- Closer curriculum linkages between specialist and mainstream schools and joint planning of individual student's educational programmes would benefit students with special educational needs.

- There is a need for a systematic plan to develop a clear specialist role for special schools. Work done in specialist schools should be innovative and capable of dissemination to the wider educational community and should be aimed at facilitating greater levels of inclusion for students with learning disabilities.

Linkages between the Department of Education and Science and the Department of Health and Children

- The lack of efficient co-ordination between these two Departments and of clearly defined departmental responsibilities for the delivery of educational supports and services to students who have disabilities remains a concern. There is evidence that this is being addressed by the National Educational Psychological Service. Similar co-operation is required in other areas particularly early childhood services, speech therapy and physiotherapy.

Teacher education and qualifications

- Knowledge of, and practice in, providing for the educational needs of students who have disabilities should be part of initial teacher education programmes.

- In-service courses for teachers should be available to provide the enabling skills necessary for successful inclusion of students who have learning disabilities.

- Procedures and structures for the recognition of specialist teacher qualifications and previous teaching experience by mainstream schools need to be established.

School Management

- Boards of Management of mainstream and special schools should be given incentives and supports to enable them to develop programmes and support structures to increase the social inclusion of students who have disabilities.

Database

- The National Intellectual Disability Database[33] should record aetiologies where known and not rely solely on global categorisation by degree of learning disability. This would allow for aetiology-based research. It would also help to assess syndrome-specific needs in order to make adequate provision for meeting those needs.

Recommendations for research at a national level

- The Research and Development Committee of the Department of Education and Science should support research to identify and implement practical measures towards the development a clear specialist role for special schools.

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[33] *National Intellectual Disability Database: Annual Report of the National Intellectual Disability Database Committee, 1996.* Dublin: The Health Research Board.

- Seminars between researchers in the field of special needs education would allow them to share knowledge, compare findings and co-operate in designing further research. Such seminars may need funding and technical support.

- Research findings should be made easily accessible to the Department of Education and Science, teacher education colleges, non-statutory agencies, teachers and parents.

Conclusion

The educational experience reported in this study for a group of Irish students who have Down syndrome gives positive evidence of their attainments. There is also evidence of advances in many aspects of their education. However, there were indications that some students' needs were not being met. Detailed analysis of student experience is important to ensure that the school experience offered goes towards meeting their needs, not adding to them.

The provision of education to students who have learning disabilities has evolved and will continue to change. The general principles which underlie special education will remain valid and relevant. However, the extent to which the educational needs of students who have disabilities can be adequately met in separate, special locations needs to be examined further. If a child or young person is to be removed from his/her community, there must be good reason for doing so.

This study found little evidence to suggest that attending special schools was more beneficial than attending mainstream schools. In keeping with the findings of other studies, there was evidence that students in mainstream

settings had higher academic attainment levels and that their parents evaluated their experience more positively.[34]

Moreover, the presence or absence of typically developing peers in the learning environment may have a major influence on student development. Students' perception of themselves and their position in the community are not acquired solely from interaction with the teacher or the learning task. Other people, particularly the students' age-peers, are an inextricable part of the total learning experience.

When designing educational provision for students who have Down syndrome, or other learning disability, the goal must be to provide them with rich inclusive learning environments which provide stimulating experiences

> ... that make the world appear to be an interesting place to explore. If the school approaches inclusive education in terms of humanizing the teaching process, if it exposes the student to forces that will contribute to self-fulfilment in the broader sense, then the individual with Down syndrome will be given the opportunity to develop optimally.[35]

The process necessary to attain this goal is a dynamic one that requires the members of the wide school community to pool their resources in creative combinations. By doing so, both students and teachers should experience greater educational success and satisfaction of their basic human needs, in a learning environment that is more inclusive for all concerned.

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[34] Freeman, S., Alkin, M. and Kasari, C. (1999). Satisfaction and desire for change in educational placement for children with Down syndrome: perceptions of parents. *Remedial and Special Education*, vol. 20, no. 3, pp. 143-151; Cunningham, C. *et al.* (1998), p. 235.

[35] Pueschel, S. (2000). Down syndrome at the beginning of the new millennium. *Down Syndrome Quarterly*, vol. 5, no. 1, pp.10-11, p.10.

Appendices

Appendix 1. Reported proportion of students identified by member states as having special educational needs and the proportion for whom provision was made in special schools and special classes and the proportion outside the education system.[1]

Country	% of pupils with SEN for whom provision is made	% Outside education system	% In special school	% In special class	Total % outside mainstream
Australia	*5.22*	nil	0.63	0.92	1.55
Austria	*2.55*	<0.1	2.55	<0.1	2.55
Belgium	*3.08*	<0.1	3.08	n.a.	3.08
Canada [2]	*10.79*	nil	n.a.	.98	n.a.
Denmark	*13.03*	nil	0.65	0.98	1.63
Finland	*17.08*	0.14	1.85	0.83	2.82
France	*3.54*	1.38	1.26	0.64	3.28
Germany [3]	*7.00*	nil	3.69	n.a.	3.69
Greece	*0.86*	0.18	0.20	0.48 [4]	0.38
Iceland	*15.71*	nil	0.58	0.71 [5]	1.29
Ireland	*1.45*	0.22	1.04	0.41	1.67
Italy	*1.27*	n.a.	n.a.	n.a.	n.a.
Japan	*0.89*	nil	0.37	0.52	0.89
Netherlands	*3.63*	<0.1	3.63	nil	3.63
Norway [6]	*6.00*	<0.1	0.60		<0.70
Spain	*2.03*	n.a	0.80	0.23	1.03
Sweden	*1.06*	nil	1.03		1.03
Switzerland	*4.90*	nil	4.90		4.90
Turkey [7]	*0.74*	n.a.	0.28	0.33	0.61
United Kingdom [8]	*1.85*	nil	1.3	n.a.	1.3
United States	*7.00*	nil	n.a	n.a.	2.90 [9]

[1] OECD (1995). *Integrating Students with Special Needs into Mainstream Schools*. Paris: OECD, p. 39.
[2] This figure relates to the only to New Brunswick, Canada. The figures given include gifted students.
[3] Former Federal Republic of Germany only (1989). The 7% is an estimate.
[4] Part time only. Other-wise in ordinary class.
[5] Part time only. Other-wise in ordinary class.
[6] Many more than the 6% quoted have individualised help for minor disabilities.
[7] An estimated 14% of children between 0 and 18 years are handicapped.
[8] England and Wales only.
[9] This figure was derived by adding together children who were receiving a good to fair proportion of their education outside the mainstream, that is more than 79% of the time.

Appendix 2. OECD-reported proportion of school population with special educational needs by country and proportion of students in the three categories of learning disability.[1]

Country	% students who had special educational needs of any type	Category 1 mild learning difficulties, learning disabilities, specific learning disabilities, subject related disabilities	Category 2 moderate learning difficulties, educable mentally retarded, educable mental handicap, general learning disabilities, moderate mental retardation.	Category 3 severe learning difficulties, severe mental retardation, severe mental handicap, trainable mental handicap, profound mental handicap.	1+2+3	2+3
Australia	5.22%					
Austria	2.55%		1.66%	0.42%	2.08%	2.08%
Belgium	3.08%	1.26%	0.88%	0.19%	2.33%	1.07%
Canada [2]	10.79%					
Denmark	13.03%					
Finland	17.08%	1.43%	1.43%	0.42%	3.28%	1.85%
France	3.54%	1.13%	0.41%	0.13%	1.67%	0.54%
Germany	7.00%	2.04%		0.56%	2.60%	0.56%
Greece	0.86%	0.48%	0.13%	0.09%	0.70%	0.22%
Iceland	15.71%		0.26%	0.16%	0.42%	0.42%
Ireland	1.45%	0.67%	0.27%	0.02%	0.96%	0.29%
Italy	1.27%					
Japan	0.89%		0.37%	0.21%	0.58%	0.58%
Netherlands	3.63%	1.50%	1.15%	0.25%	2.90%	1.40%
Norway	6.00%	n/a	n/a	n/a		
Spain	2.03%	0.73%	0.24%	0.16%	1.13%	0.40%
Sweden	1.06%			1.10%	1.10%	1.10%
Switzerland	4.90%	2.56%		0.99%	3.55%	0.99%
Turkey	0.74%		0.32%	0.02%	0.34%	0.34%
United Kingdom	1.85%					
United States	7.00%	3.17%		0.82%	3.99%	0.82%

[1] OECD (1995) pp. 44-45.
[2] Canadian figures are only for New Brunswick, Canada.

Commission of Inquiry (1965)	*SERC Report (1993)*
Students who have mild learning disability	
an inability to benefit from the ordinary school curriculum due to general immaturity - intellectual, emotional, social and physical.	*significantly below-average general intellectual functioning associated with impairment of adaptive behaviour reflected in a slow rate of maturation, reduced learning capacity and inadequate social adjustment.*
	general learning difficulties which prevent or hinder them from benefiting adequately from the education which is normally provided in ordinary classes for pupils of the same age.
lags far behind other children in mental ability as manifested in language, natural inquisitiveness, understanding and purposeful activity.	
progress in ordinary classroom virtually impossible for him because of marked difficulty in concept formation, limited vocabulary, defective speech, weak memory and inattentiveness and lack of perseverance.	*limited intellectual ability manifested in delayed conceptual development, slow speech and language development, limited ability to abstract and generalise, limited attention span, poor retention ability.*
emotional instability and inadequate self control may give rise to unacceptable behaviour in classroom and on playground.	*may display poor adaptive behaviour inappropriate or immature personal behaviour.*
difficult for him to achieve equality of play because of limited command of language, slowness in understanding and poor muscular co-ordination.	*general clumsiness and lack of co-ordination and of gross and fine motor skills.*
failure to learn and to win acceptance in school community tends to destroy any self-confidences the child might possess and leads to the growth of emotional disturbance - aggressiveness/ timidity and withdrawal.	*low self-esteem.* *emotional disturbance.*
those emotionally stable and from good home conditions may not cause any trouble but learn very little.	
when leave school, some are marginally employed, the majority are unemployed and unemployable, many require care in residential centres.	*they are capable of achieving vocational and social adequacy with proper education and training, but will need support and guidance when under serious social or economic stress.* *may maintain themselves independently or semi-independently in the community.*
insofar as an intelligence quotient can be used as a measure of mild mental handicap, the persons concerned would generally have intelligence quotient from 50-70.	*insofar as an Intelligence Quotient may be used as an indicator of mild mental handicap, such pupils would line within the I.Q. range 50 to 70.*

Commission of Inquiry (1965)	SERC Report (1993)
Students who have moderate learning disability	
at best only a very limited educational potential cannot be disputed.	only limited academic and vocational skills.
unable to benefit from the type of education provided for normal children or for children of less marked intellectual defect.	
	a heterogeneous population
at 6 years, m.a. = 1 1/2 - 3 years at 16 (when m.a. has reached limit) m.a. = 4-8 years.	significant delay in reaching developmental milestones.
very limited ability to maintain attention, to transfer learning, to understand relationships to form simple judgements.	
very marked retardation in speech and language.	serious deficits in language development.
in all these inferior even to the mildly handicapped child to an extent which has a decisive effect on his educational potential and needs.	
high proportion suffer from one or more physical, sensory, or neurological handicaps.	many will have accompanying disabilities such as physical, hearing or visual impairment, autistic tendencies, and emotional or communication disorders.
frequently low vitality, poor motor co-ordination, defects of hearing and vision, emotional instability, hyperactivity, which aggravate learning difficulties caused by intellectual deficiencies.	
due to physical and mental immaturity, slow to become competent in everyday personal needs.	
limited understanding and awareness of environment; difficulties of communication; poor motor ability; make it difficult for him to establish normal relationships with other children or adults.	may have impaired development and learning ability in respect of language and communication, social and personal development, motor co-ordination, basic literacy and numeracy, mobility and leisure and aesthetic pursuits.
complexity and intensity of his learning difficulties set narrow limits to his educational advancement, but they need not be regarded as insuperable.	severe degree of apathy rather than a curiosity in relation to his surroundings.
small improvements in physical well-being, muscular co-ordination, sensory acuity, language and speech, social competence can materially reduce his dependence on his family and on the community.	such persons usually can learn self-help, communication, social and simple occupational skills. as an adult, inability to live an independent life.
special form of education essential to achieve these improvements should be provided to all who are capable of benefiting from it generally those with I.Q. 35+.	within an I.Q. range 35-50 insofar as an Intelligence Quotient may be used as an indicator of mental disability.
	estimated that 50% of children in special schools and classes for pupils with moderate mental handicap have Down's Syndrome.

Education and Training of Severely and Profoundly Handicapped Children in Ireland (1983)	SERC Report (1993)
Students who have severe learning disability	
heterogeneity is their most common characteristic.	a most heterogeneous population.
descriptions lay most stress on those areas where they deviate from normality.	impaired in their function in respect of basic awareness and understanding of themselves, of the people around them and of the world they live in.
limited development in most fields of growth.	
an inability to learn spontaneously from reasonable exposure to the experiences of everyday life.	a severe degree of apathy relative to their environment.
total dependence on adults to initiate new learning	
behaviour varies from total passivity to marked hyperactivity; from consistent to highly inconsistent.	emotional disturbance, challenging behaviours.
vocalisation varies from random noises to well articulated speech, language from no response to comprehension and meaningful expression	most will have little or no communication skills
in some, hard to discern development of associations, simple concepts and skills, others may progress slowly through the earliest stages of normal child development.	very significant delay in reaching developmental milestones. dependence on others to satisfy basic needs.
some have sensory impairments, motor impairments, specific disabilities in perception and communication	most will have other impairments - physical, hearing / visual impairment, autistic tendency, epilepsy.
	a person with severe mental handicap will have Intelligence Quotient in the range 20-35, insofar as an intelligence quotient may be used as an indication of mental disability.
	also known as "dependent retarded"
	inability to live without support and supervision at any stage of life, often has other handicaps.
	a person with profound mental handicap will have and Intelligence Quotient under 20.
	will require total life-support systems for maintenance.

The Irish Education Act, 1998 was signed into law on December 23, 1998. While all sections of the Act apply to every citizen, the following are the sections that have particular relevance to students with special educational needs. The purpose of the Act is:

TO MAKE PROVISION FOR THE EDUCATION OF EVERY PERSON IN THE STATE INCLUDING ANY PERSON WITH A DISABILITY OR WHO HAS OTHER SPECIAL EDUCATIONAL NEEDS.

Section 6: the objects of the Act include:

- to give practical effect to the constitutional rights of children, including children who have a disability or who have other special educational needs, as they relate to education;
- to promote equality of access to and participation in education and to promote the means whereby students may benefit from education;
- to promote opportunities for adults, in particular adults who as children did not avail of or benefit from education in schools, to avail of educational opportunities through adult and continuing education;
- to promote the right of parents to send their children to a school of the parents' choice having regard to the rights of patrons and the effective and efficient use of resources;

Section 7 requires the Minister to:

- ensure that there is made available to each person resident in the State, including a person with a disability or who has other special educational needs, support services and a level and quality of education appropriate to meeting the needs and abilities of that person.

Section 9 requires that schools :

- provide education to students which is appropriate to their abilities and needs;
- ensure that the educational needs of all students, including those with a disability or other special educational needs, are identified and provided for;
- establish and maintain an admissions policy which provides for maximum accessibility to the school.

Section 15 requires that Boards of Management:

- publish the policy of the school concerning admission to and participation in the school, including the policy of admission to and participation by students with disabilities or who have other special educational needs; and,
- ensure that as regards that policy principles of equality and the right of parents to send their children to a school of the parents' choice are respected.

Section 29 provides for an appeals procedure:

- where a board or a person acting on behalf of the board
  - excludes a student from a school,
  - or suspends a student
  - or refuses to enrol a student in a school,

the parent of the student may appeal that decision to the Secretary General of the Department of Education and Science.

Section 33 provides for the Minister to make regulations regarding:

- access to schools and centres for education by students with disabilities or who have other special educational needs, including matters relating to reasonable accommodation and technical aid and equipment for such students;
- procedures for the promotion of effective liaison and co–operation by schools and centres for education with:
  - other schools and centres for education;
  - local authorities;
  - health boards; and
  - voluntary and other bodies which have a special interest in education, in particular, education of students with special educational needs.

Appendix 5

Letters to parents from DSI and researcher and refusal form

Pages 428-430

Syndrome Ireland 41 Lower Dominick St. Dublin 1 Telephone 01 873 0999 or 873 3199
Fax 01 873 3612 Email dsi@tinet.ie

Patron Mary McAleese *President of Ireland*

down syndrome
IRELAND

(Date)

Dear (names of parents)

Learning and education are major concerns for families who have a son or daughter with Down syndrome. Families who are members of *Down Syndrome Ireland* have a wealth of knowledge and experience about the abilities and needs of their sons and daughters and what they require from schools.

If this information can be gathered and shared among parents and professionals, it can then be acted upon by families and schools to promote good, helpful practices. It can also be used to advocate for better support services. Shared knowledge is one of the most powerful tools a parent group, such as *Down Syndrome Ireland,* has at its disposal for improving the lives of people with Down syndrome.

To this end, I wish to introduce Mercedes Egan, who is undertaking a doctoral programme in Education at NUI Maynooth. The purpose of her study is to document where Irish students with Down syndrome are receiving their education, to identify the type and amount of support services they receive, and to elicit parents' views of the schooling and specialist services their son or daughter has received. The findings of the study will be available to the Association. Enclosed you will find a letter from Mercedes further explaining her research.

I ask that, if at all possible, you take part in this study. Members of the Association have continually shown great generosity in giving of their time to improve our knowledge of how we might best develop the varied talents of persons with Down syndrome. Moreover the experience of each different family is important. The broader and more complete the study is, the more accurate and useful the knowledge obtained will be. However, if you feel it is not possible to take part in the study, please complete the enclosed form and your name will not be released. If we do not hear from you we will give your name and telephone number to Mercedes and she will contact you.

Thank you for your time and co-operation.

Sincerely yours,

Pat Clarke, National President
Down Syndrome Ireland

If you are willing to take part in the study you do not need to return this form.

If you are not willing to take part in the study please complete and return to the office by (two weeks after date of letter).

To: Mr. Pat Clarke
Down Syndrome Ireland,
41 Lower Dominick Street
Dublin 1.

I do **not** wish to take part in the study. Please do **not** give my name to Mercedes Egan.

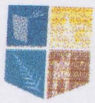
Name: _____

Address: _____

_____

_____

National University of Ireland, Maynooth
Maynooth, Co. Kildare, Ireland



NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

Department of Education

Dear Parents,

I am writing to invite you to take part in a study regarding the education of your son or daughter. The aim of the study is to collect information about the education experienced by students with Down syndrome in Ireland, the services that they have received, and the support provided to them and their families. This research will provide valuable information, which will be useful to parents, educators and service providers. This information is necessary in order to advocate for better educational opportunities and services. The findings of the study will be made available to *Down Syndrome Ireland*. This study is being conducted as part of a doctoral programme at the National University of Ireland, Maynooth, Department of Education.

As you will understand, available resources do not allow me to interview all families who have a son or daughter who has Down syndrome. In order to obtain as representative a group of families as possible, I have chosen clusters of students who live in different parts of the country. I have also chosen students who were born in 1982, 1986 and 1990. Students born in 1982 will be in the second stage of their education. Students born in 1986 will be well into the first stage of their education and their parents will be considering the second stage. Students born in 1990 will have begun formal education. By choosing these three age groups it will be possible to evaluate whether there have been changes and improvements in the patterns of education and support services over time. It is very important that the chosen sample be as complete as possible.

Participation in the study involves an interview, which takes about an hour. The interview will be conducted in your home or other convenient location. I will be asking questions about your son/daughter who has Down syndrome; where he/she goes to school; the amount of supports and services he/she receives; and, your evaluation of his/her education experience.

No names or identifying information will ever be released. All research findings that are published will be in a form that does not allow identification of any individual. Further information about the research study can be obtained by phoning me at 045 860121. I welcome your call.

f you are willing to take part in the study, your name and telephone number will be given o me by the *Down Syndrome Ireland* head office. I will contact you in the near future to rrange an interview at a time and place that would be convenient to you.

hank you for your interest. I greatly value your participation in this study.

ours sincerely,

rcedes Egan, BA, MA Sp. Ed.

The Province, the County, the number of students by year and sex identified on the DSI data base (1998) who were born during the years 1982, 1986 and 1990.

COUNTY	TOTAL	M	F	1982	M	F	1986	M	F	1990	M	F	PROVINCE
GALWAY	7	4	3	1	1	0	0	0	0	6	3	3	CONNAUGHT
MAYO	6	4	2	3	3	0	1	0	1	2	1	1	CONNAUGHT
LEITRIM	1	0	1	0	0	0	0	0	0	1	0	1	CONNAUGHT
ROSCOMMON	1	1	0	1	1	0	0	0	0	0	0	0	CONNAUGHT
SLIGO	1	1	0	1	1	0	0	0	0	0	0	0	CONNAUGHT
DUBLIN	36	19	17	7	5	2	14	7	7	15	7	8	LEINSTER
MEATH	8	2	6	2	1	1	4	0	4	2	1	1	LEINSTER
KILDARE	7	3	4	1	1	0	3	2	1	3	0	3	LEINSTER
WICKLOW	3	2	1	0	0	0	2	1	1	1	1	0	LEINSTER
KILKENNY	2	2	0	1	1	0	1	1	0	0	0	0	LEINSTER
LOUTH	2	1	1	0	0	0	1	1	0	1	0	1	LEINSTER
OFFALY	2	2	0	0	0	0	0	0	0	2	2	0	LEINSTER
WESTMEATH	2	1	1	1	0	1	1	1	0	0	0	0	LEINSTER
LONGFORD	1	1	0	0	0	0	0	0	0	1	1	0	LEINSTER
WEXFORD	1	0	1	0	0	0	0	0	0	1	0	1	LEINSTER
CORK	19	12	7	3	2	1	6	4	2	10	6	4	MUNSTER
LIMERICK	9	4	5	3	1	2	3	1	2	3	2	1	MUNSTER
KERRY	7	3	4	4	1	3	3	2	1	0	0	0	MUNSTER
TIPPERARY	6	5	1	2	1	1	3	3	0	1	1	0	MUNSTER
CLARE	2	0	2	1	0	1	1	0	1	0	0	0	MUNSTER
WATERFORD	1	1	0	0	0	0	1	1	0	0	0	0	MUNSTER
CAVAN	4	2	2	1	0	1	0	0	0	3	2	1	ULSTER
MONAGHAN	2	2	0	0	0	0	0	0	0	2	2	0	ULSTER
DONEGAL	1	1	0	1	1	0	0	0	0	0	0	0	ULSTER
	131	73	58	33	20	13	44	24	20	54	29	25	
				25.19%			33.59%			41.22%			

Source: DSI database (1998)

The total population born in the years 1982,1986 and 1990 living in the selected counties, the expected number of students with Down syndrome in that population, the number born in those counties in those years, listed on the DSI database and the percent of the expected number that were listed.

COUNTY	total in age groups in counties	expected number in age groups in counties	total on DSI database in counties born 1982,1986 1990	% on DSI database	total number born 1982 in counties	expected number born 1982 in counties with DS	number on DSI database in counties born 1982	% on DSI database	total number born 1986 in counties	expected number born 1986 in counties with DS	number on DSI database in counties born 1986	% on DSI database	total number born 1990 in counties	expected number born 1990 in counties with DS	number on DSI database in counties born 1990	% on DSI database
DUBLIN	49603	74.43	36	48.4%	17806	26.72	7	26.2%	16126	24.20	14	57.9%	15671	23.52	15	63.8%
CORK	21251	31.89	19	59.6%	7979	11.97	3	25.1%	6959	10.44	6	57.5%	6313	9.47	10	105.6%
LIMERICK	7771	11.66	9	77.2%	3203	4.81	3	62.4%	2794	4.19	3	71.6%	1774	2.66	3	112.7%
MEATH	6388	9.59	8	83.5%	2410	3.62	2	55.3%	2154	3.23	4	123.8%	1824	2.74	2	73.1%
GALWAY	9566	14.35	7	48.8%	3683	5.53	1	18.1%	3208	4.81	0	0.0%	2675	4.01	6	149.5%
KERRY	6650	9.98	7	70.1%	2464	3.70	4	108.2%	2240	3.36	3	89.3%	1946	3.00	0	0.0%
KILDARE	7652	11.48	7	61.0%	2841	4.26	1	23.5%	2554	3.83	3	78.3%	2257	3.39	3	88.6%
	108881	163.39	93	56.9%	40386	60.60	21	34.7%	36035	54.07	33	61.0%	32460	48.71	39	80.1%

Note:	The Department of Education and Science does not publish data regarding the number of students by year of birth by county.
	The Central Statistics Office does not report the numbers of the population by year by county - only in five year age bands.
	Small Area Population Statistics derived from the 1996 Census of Pupulation for Dublin (Dublin Borough, South Dublin, Fingal and Dun Laoghaire-Rathdown) Kildare, Meath, Limerick (Limerick Borough and Limerick County), Galway, (Galway Borough and Galway County), Cork (Cork Borough and Cork County)and Kerry were obtained from the Central Statistics Office and are the basis for these estimates.

Percent of estimate population of DS on DSI database

Appendix 7

Parents' Interview Schedule

Students who have Down Syndrome

A Study of their School Placement
Educational Supports
and
Parental Evaluation Of Their Education

Students who have Down syndrome: ***A study of their school placement, educational supports and parental evaluation of their education.***

date☐☐ ☐☐ ☐☐ ID☐☐☐☐

Introduction: I appreciate you giving your time to take part in this study.

The purpose of this study is to obtain more information about the educational experience of Irish students who have Down syndrome. I will be asking questions about your son/daughter who has Down syndrome; where he/she goes to school; the amount of supports and services he/she receives; and, your evaluation of his/her education experience. This information has the potential to help improve the educational opportunities and support services for all students who have Down syndrome.

I can assure you that strict confidentiality and anonymity will be maintained with regard to all of your answers.

1. The interview was conducted with:
   Mother☐[1] Father☐[2] Both☐[3] Other☐[4] *(please specify)* _____

A. Family members: I will start with a few questions about your family. These questions are asked because individual family situations may influence the choices you make about the education of your son/daughter who has Down syndrome.

2. Please list the family members and their year of birth and whether or not they live in the family home or are away at school.

Family members	Year of birth	At home	Not at home	Away at school
Mother				
Father				

Just to make sure that I have it correctly. Your **son/daughter** who has Down syndrome is:

3. Sex: male ☐[1] female ☐[2] Date of birth: month ☐☐ year19☐☐

4. He/she is the ☐☐ of ☐☐ children in the family.

B. Location: These questions are asked because location may influence the type of choices you are able to make for your son/daughter who has Down syndrome.

5. Could you tell me the approximate size of the place where you live?
   City ☐[1] *(enter 0 in 6)*
   Large town ☐[2] *(enter 0 in 6)*
   Village ☐[3]
   Rural area ☐[4]

6. Distance to nearest city or large town is approximately ☐☐ miles.
   Nearest city or large town is _____.

7. Which Health Board Area do you live in? _____

8. What agency is presently your local service provider? _____

C. Health concerns: The next questions are about the health of your son/daughter. These questions are asked because the health of your son/daughter who has Down syndrome may be a factor in determining the choices you make for him/her.

Does your son/daughter	Yes	No
9. **Presently** have serious health concerns?		
Specify:		
Has your son/daughter ever been diagnosed with a	**Yes**	**No**
10. **Heart condition?**		
Had surgery because of heart condition?		
Age at surgery ☐☐		
Have any current problems because of the heart condition?		
Receive continued treatment because of the heart condition?		
11. **Hearing or ear condition?**		
Have any current problems because of the hearing or ear condition?		
Receive continued treatment because of the hearing or ear condition?		
Use a hearing aid?		
Age hearing aid introduced ☐☐		
12. **Vision or eye condition?**		
Have any current problems because of the vision or eye condition?		
Receive continued treatment (other than glasses) because of the vision or eye condition?		
Wear glasses?		
Age when started to use glasses ☐☐		
13. **Thyroid condition?**		
Have any current problems because of the thyroid condition?		
Receive continued treatment because of the thyroid condition?		
14. **Bowel or bladder condition?**		
Have any current problems because of the bowel or bladder condition?		
Receive continued treatment because of the bowel or bladder condition?		
15. **Other significant health problems** not already mentioned?		
Specify:		
Have any current problems because of this condition?		
Receive continued treatment because of this condition?		
16. **Mobility problems?**		
Specify:		

D. Early services: These questions are about the support services you and your son/daughter received during the **first three years**. These questions are asked because the type and amount of support a child and his/her family receives in the early years may influence later educational options for him/her.

17. Was there an early services *team* available to you during the first three years of your son/daughter's life? yes ☐[1] no ☐[2]
*(if **no**, go to 19)*

18. What professionals made up the early services *team*? *(check as many as relevant)*

Psychologist	☐
Doctor	☐
Nurse	☐
Speech therapist	☐
Physiotherapist	☐
Teacher	☐
Mother and baby group leader	☐
Other (*please specify*)	☐ _____

19. Did your son/daughter receive speech therapy and physiotherapy during his/her first three years?

	did not need	received adequate therapy	received some therapy needed more	needed but did not receive therapy
speech therapy	☐[1]	☐[2]	☐[3]	☐[4]
physiotherapy	☐[1]	☐[2]	☐[3]	☐[4]
	(go to21)	*(if 2 or 3, go to 20)*		*(go to 21)*

20. How often did your son/daughter receive these specialist services?

	Frequency of specialist service
speech therapy	_____
physiotherapy	_____

21. How helpful did you find the early services were for your son/daughter?

very helpful	☐[1]
helpful	☐[2]
more trouble than help	☐[3]

22. How well did early services help prepare your son/daughter for pre-school?

_____
_____
_____
_____
_____
_____
_____

E. **Pre-school**: The next questions are about your son's/daughter's pre-school experience. Pre-school is sometimes difficult to define for children with Down syndrome. What is meant is the child regularly taking part in an educational or play programme outside the home with other children before beginning primary school. *Do we both mean the same thing? (verify)* These questions are asked because pre-school experience may influence subsequent educational choices for your son/daughter.

23. Did your son/daughter go to pre-school? yes ☐[1] no ☐[2]
*(If **no**, go to 27)*

24. What age was he/she when first attended pre-school? ☐☐ months

25. On the grid below check the type of pre-school attended for each year.
(The age of the student in September is the age to be used.)

Age	1	2	3	4	5	6	7
Type of pre-school:							
Special							
Mainstream (including Montessori)							
Special/mainstream							
Neighbourhood play group							
Other *(specify)*							
Went on to primary school							

26. Overall, how beneficial was pre-school for your son/daughter in the following areas?

	very beneficial	beneficial	not beneficial
language development	☐[3]	☐[2]	☐[1]
social skills	☐[3]	☐[2]	☐[1]
friendships	☐[3]	☐[2]	☐[1]
play skills	☐[3]	☐[2]	☐[1]
toilet training	☐[3]	☐[2]	☐[1]
independence	☐[3]	☐[2]	☐[1]
pre-academic skills	☐[3]	☐[2]	☐[1]
following class routine	☐[3]	☐[2]	☐[1]
following teacher instructions	☐[3]	☐[2]	☐[1]

27. Did your son/daughter receive speech therapy and physiotherapy during his/her pre-school years?

	did not need	received adequate therapy	received some therapy needed more	needed but did not receive therapy
speech therapy	☐[1]	☐[2]	☐[3]	☐[4]
physiotherapy	☐[1]	☐[2]	☐[3]	☐[4]
	(go to 29)	*(if 2 or 3, go to 28)*		*(go to 29)*

28. How often did your son/daughter receive these specialist services during his/her pre-school years?

	Frequency of specialist service
speech therapy	
physiotherapy	

29. How well did pre-school prepare your son/daughter for formal schooling?

F. **Psychological assessment:** These questions are asked in order to explore the role that psychological assessments have played in assisting your decisions about the education of your son/daughter.

30. Did a psychologist assess your son/daughter before beginning primary school?

Yes.	☐[1]
It was not offered.	☐[2] *(go to 35)*
We chose not to have our child assessed.	☐[3] *(go to 35)*
other *(please specify)*	☐[4]

31. What age was he/she at pre-school psychological assessment(s)?

first ☐ second ☐ third ☐

32. Overall, how did you feel about the pre-school assessment(s)?

The assessment(s) was (were):

constructive for the parents.	☐[1]
somewhat helpful for the parents.	☐[2]
unhelpful to parents.	☐[3]
other *(please describe)*	☐[4]

33. Were you given a copy of the pre-primary school assessment report(s)?

first ☐ second ☐ third ☐

34. Did the psychologist's assessment(s) influence your decision about to which primary school you would send your son/daughter? yes☐[1] no☐[2]

(Please describe)

35. Did a psychologist assess your son/daughter since he/she started primary school?

Yes.	☐[1]
It was not offered.	☐[2] *(go to 39)*
We chose not to have our child assessed.	☐[3] *(go to 39)*
Other *(please specify)*	☐[4]

36. What age was he/she at (school) psychological assessment(s)?
first ☐☐ second ☐☐ third ☐☐

37. How did you feel about the (school) assessment(s)?
The assessments were:
constructive for the parents. ☐1
somewhat helpful for the parents. ☐2
unhelpful to parents. ☐3
other *(please describe)* ☐4
_____
_____

38. Were you given a copy of the (school) psychologist's report(s)?
first ☐ second ☐ third ☐

39. At **any** time, has a psychologist given you an IQ score or an ability range for your son/daughter? yes☐1 no☐2

40. **Overall**, have the psychological assessment(s) influenced your decisions about your son's/daughter's education? yes☐1 no☐2
(Please describe) _____
_____
_____
_____
_____
_____

G. Schooling: I am now going to ask questions about your son's/daughter's school experience. The questions asked in this section are to obtain information regarding the pattern of school placement for students who have Down syndrome; to obtain information regarding the decision-making process; and to obtain information regarding the amount of specialist support students receive.

a. School placement: This question is to get a summary of your son's/daughter's school placement.

41. Is your son/daughter presently enrolled in school? *(Include residential school placement as **yes**, even if son/daughter is **not** in school program.)* yes☐1 no☐2
*(if **yes**, go to 42)*

*(if **no**)* Is your son/daughter **not** in school because:
he/she is benefiting from present pre-school and not ready. ☐1
he/she attends a day-care unit on a regular basis. ☐2
he/she has not been accepted in any school. ☐3
parents are not willing to accept school place offered. ☐4
parents believe that son/daughter is better off not attending school. ☐5
other *(please specify)* ☐6
_____
_____
_____

42. On the grid below please check the type of school your son/daughter attended for each year.

- *The age of the student in September of each year is the age to be used.*
- *Complete for all students including those who are not presently in school.*
- *If student has never attended school, complete grid and then go to **91**. If student had been in school and no longer is, continue using last school attended.*

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TYPE OF SCHOOL*															
Pre-school (all types)															
Special school designation	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mildly MH															
Moderately MH															
Severe/Profound MH															
Residential															
Mainstream	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Primary															
Secondary															
Mainstream/special															
Special class-primary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Moderately MH															
Mildly MH															
Special class-secondary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Moderately MH															
Mildly MH															
Other *(please specify)*															

*The terminology used here is that which is used by the Department of Education and Science.

b. Decision making: Now I am going to ask some questions about how you came to decide which school your son/daughter would attend.

43. In choosing a school for your son/daughter, what do you consider to be most important? _____

_____

_____

_____

_____

_____

_____

44. Was the **first** primary school placement for your son/daughter that of your first choice?

yes☐[1] no☐[2]

*(if **yes**, go to 45)*

*(if **no**)* How was it determined?

_____

_____

_____

45. Has there been a change in the school your son/daughter attended?
yes ☐[1] no ☐[2]
*(if **no**, go to 47)*

*(if **yes**)* Who initiated the change?
(please describe) _____

46. What was the reason for the change? *(more than one factor may be checked.)*

Student required a more academic environment. ☐[1]
Student required a different social environment. ☐[2]
Student was unable to keep up academically with age-peers. ☐[3]
Student was disruptive. ☐[4]

Family moved. ☐[5]
Change occurred between primary and secondary schools. ☐[6]
other *(please describe)* ☐[7]

_____

(go to 48)

47. If there has been **no** change in your son's/daughter's school placement, is this because:

it is the right school for your son/daughter. ☐[1]
unsure that a change would make a difference. ☐[2]
there is no alternative. ☐[3]
other *(please describe)* ☐[4]

_____

48. Have you felt that enrolment and/or class placement decisions made by schools were:

communicated to you in good time. yes☐[1] no☐[2]
communicated to you in a suitable way. yes☐[1] no☐[2]

49. Have you ever disagreed with a decision made by a school regarding the enrolment and/or class placement of your son/daughter? yes☐[1] no☐[2]
*(if **no**, go to 50)*

*(if **yes**)* Did you feel you had a course of appeal? yes☐[1] no☐[2]
(please describe) _____

50. Has your son/daughter ever had behaviour problems? yes☐[1] no☐[2]
*(if **no**, go to 52)*

*(if **yes**, please describe)* _____

51. To the best of your knowledge, did these behaviour problems happen at school?

yes☐[1] no☐[2]

*(if **no**, go to 52)*

*(if **yes**)* To the best of your knowledge, how was this behaviour managed at school? _____

_____

_____

_____

52. Do you know which school your son/daughter will attend next year?

yes☐[1] no☐[2] unsure☐[3]

*(if **yes**, name of school))*_____ *(go to 53)*

*(if **no** or **unsure**, please describe your situation)* _____

_____

_____

_____

c. Student contentment: These questions are asked because a student's happiness in a school may influence his/her academic and social development. These questions are about the school your son/daughter **presently** attends. *(for those who had been, but who are now not in school, use last school attended)*

54. How well do you feel the **present** school meets your son's/daughter's needs in the following areas:

	Very well	Well	Adequately	Poorly	Very poorly
provides him/her with a broad and balanced curriculum.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
provides him/her with a safe and caring learning environment.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
provides him/her with individualised learning goals.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
holds high, but realistic, expectations for him/her.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
includes him/her in a variety of school activities.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
encourages friendships with his/her peers.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
provides him/her with role models of acceptable behaviour.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]
encourages his/her individual interests and talents.	☐[5]	☐[4]	☐[3]	☐[2]	☐[1]

55. How do you think your son/daughter feels about going to school?

Delighted to go.	☐[1]	*(go to 57)*
Agreeable to go.	☐[2]	*(go to 57)*
Insecure about going.	☐[3]	
Reluctant to go.	☐[4]	
Hates going.	☐[5]	

56. If your son/daughter may be unhappy to go to school, what do you think is the reason? _____

_____

_____

_____

_____

57. Is there a school policy on bullying? yes☐[1] no☐[2] unsure☐[3]

*(if **no** or **unsure**, go to 58)*

*(if **yes**)* Do you believe that the policy has been effective in the school? *(please describe)* _____

_____

_____

_____

d. The school: The next questions are to obtain some information about the school your son/daughter **presently** attends. *(for those not in school use last school attended)*

58. What school does your son/daughter attend?

(name) _____

(address) _____

59. What grade/class is he/she in? *(in special schools/classes use designation that school uses if known)* _____

60. To the best of your knowledge, how many students are in his/her class?

☐☐ unsure☐

61. To the best of your knowledge, what ages are the other students in your son's/daughter's grade/class?

Range: ☐☐ to ☐☐ unsure☐

62. Computers:

Is there a computer in the school? yes☐[1] no☐[2] unsure☐[3]

Is there a computer in the classroom? yes☐[1] no☐[2] unsure☐[3]

Does he/she use the computer at school?

☐[1] frequently ☐[2] sometimes ☐[3] seldom ☐[4] unsure

e. In-school learning support personnel: The next questions are about the type and amount of learning support your son/daughter receives in his/her school. I am using the term *in-school learning support personnel* to mean all those people who are involved in learning activities with your son/daughter at school including: teachers, classroom assistants, specialist teachers, nurses and other students. The questions are about the school he/she **presently** attends *(for those not in school use last school attended)*

Verify the type of school the student attends **at present**- go to correct section.

- ☐ Special day school.....go to **63**
- ☐ Special residential school.....go to **67**
- ☐ Special class in mainstream school.....go to **73**
- ☐ Regular class in mainstream school.....go to **80**
- ☐ Other.....go to **91**

For students in **special day schools**

63. At school, in addition to the classroom teacher, what teachers and other learning support personnel are involved with your son/daughter? *(please describe)*_____

64. From what you know about your son's/daughter's present class situation, do you think a classroom assistant is necessary?

yes ☐[1] no ☐[2] unsure ☐[3]

Is there a classroom assistant? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 65)*

Is the classroom assistant full time? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **yes** or **unsure** go to 65)*

If classroom assistant is **not** full time, how many hours per week?

☐☐ unsure ☐

65. Is there contact with other schools? yes ☐[1] no ☐[3] unsure ☐[3]

*(if **no** or **unsure**, go to 66)*

*(If **yes**, please describe)*_____

66. Do you feel there is sufficient in-school learning support personnel for your son/daughter? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **yes**, go to 93)*

*(if **no** or **unsure**)* Are there any other in-school learning support personnel that you believe your son/daughter needs?

_____

(go to 93)

For students in **special residential schools**

67. Is your son/daughter attending the **school**? yes ☐[1] no ☐[2] unsure ☐[3]
*(if **no**, go to 69)*

68. From what you know about your son's/daughter's present class situation, do you think a classroom assistant is necessary?
yes ☐[1] no ☐[2] unsure ☐[3]

Is there a classroom assistant? yes ☐[1] no ☐[2] unsure ☐[3]
*(if **no** or **unsure**, go to 69)*

Is the classroom assistant full time? yes ☐[1] no ☐[2] unsure ☐[3]
*(if **yes** or **unsure**, go to 69)*

If classroom assistant is **not** full time, how many hours per week?
☐☐ unsure ☐

69. To the best of your knowledge, is the nursing staff involved in educational and/or training programmes for your son/daughter?
yes ☐[1] no ☐[2] unsure ☐[3]
*(if **no** or **unsure**, go to 70)*

*(if **yes**, please describe)* _____

_____

_____

_____

_____

70. At school, in addition to the classroom teacher and nursing staff, what teachers and other learning support personnel are involved with your son/daughter? *(please describe)* _____

_____

_____

_____

71. Is there contact with other schools? yes ☐[1] no ☐[2] unsure ☐[3]
*(if **no** or **unsure**, go to 72)*

*(If **yes**, please describe)* _____

_____

_____

72. Do you feel there is sufficient in-school learning support personnel for your son/daughter? yes ☐[1] no ☐[2] unsure ☐[3]
*(if **yes**, go to 93)*

*(if **no or unsure**)* Are there any other in-school learning support personnel that you believe your son/daughter needs?

_____

_____

_____

_____

(go to 93)

For students in **special classes in mainstream schools**

73. At school, in addition to the classroom teacher, what teachers and other learning support personnel are involved with your son/daughter? *(please describe)* _____

74. From what you know about your son's/daughter's present class situation, do you think a classroom assistant is necessary?

yes ☐[1] no ☐[2] unsure ☐[3]

Is there a classroom assistant? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 75)*

Is the classroom assistant full time? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **yes** or **unsure**, go to 75)*

If classroom assistant is **not** full time, how many hours per week?

☐☐ ☐unsure

75. Is there a remedial teacher in the school? yes ☐[1] no ☐[2] unsure ☐[3]

*(If **no** or **unsure**, go to 77)*

*(if **yes**)* Is he/she

full time in school? ☐[1]
full time in school but with other duties? ☐[2]
shared with one other school? ☐[3]
shared with more than one other school? ☐[4]
unsure ☐[5]

76. Does the remedial teacher work with your son/daughter?

yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 77)*

*(if **yes**)* How much time per week? ☐☐☐ minutes unsure ☐

77. Does your son/daughter have contact at school with other students outside of the special class? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 78)*

*(if **yes**, please describe)* _____

78. What percent of the school day does your son/daughter spend in the special class? ☐☐☐ unsure ☐

79. Do you feel there is sufficient in-school learning support personnel for your son/daughter? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **yes**, go to 93)*

*(if **no** or **unsure**)* Are there any other in-school learning support personnel that you believe your son/daughter needs?

_____

(go to 93)

For students in **regular classes mainstream schools:**

80. At school, in addition to the classroom teacher, what teachers and other learning support personnel are involved with your son/daughter? *(please describe)* _____

_____

_____

81. From what you know about your son's/daughter's present class situation, do you think a classroom assistant is necessary?

yes ☐[1] no ☐[2] unsure ☐[3]

Is there a classroom assistant? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 82)*

Is the classroom assistant full time? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **yes** or **unsure**, go to 82)*

If classroom assistant is **not** full time, how many hours per week?

☐☐ ☐unsure

82. Is there a remedial teacher in the school? yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 82)*

*(if **yes**)* Is he/she

full time in school? ☐[1]
full time in school but with other duties? ☐[2]
shared with one other school? ☐[3]
shared with more than one other school? ☐[4]
unsure ☐[5]

83. Does the remedial teacher work with your son/daughter?

yes ☐[1] no ☐[2] unsure ☐[3]

*(if **no** or **unsure**, go to 84)*

*(if **yes**)* How much time per week? ☐☐☐ minutes ☐unsure

84. Does your son/daughter receive help from a visiting/resource teacher?

yes ☐[1] no ☐[2] unsure ☐[3]

*(If **no** or **unsure**, go to 90)*

85. Is he/she a

DoE visiting teacher? ☐[1] DoE resource teacher? ☐[2]
other _____ ☐[3] unsure of category ☐[4]

86. To the best of your knowledge, how often does the resource/visiting teacher work with your son/daughter? _____

total time per week ☐☐☐ minutes unsure ☐

87. To the best of your knowledge, does the visiting/resource teacher

work within the classroom? ☐[1]
take student to another room? ☐[2]
not work directly with student? ☐[3]
unsure ☐[4]

00

88. To the best of your knowledge, does the visiting/resource teacher

work with student on own? ☐[1]
work with a group of students? ☐[2]
unsure. ☐[3]

89. To the best of your knowledge, does the visiting/resource teacher
co-ordinate with the class teacher's lessons? ☐[1]
initiate program that is different from class program? ☐[2]
unsure ☐[3]

90. Do you feel there is sufficient in-school learning support personnel for your son/daughter?
yes ☐[1] no ☐[2] unsure ☐[3]
*(if **yes**, go to 93)*

*(if **no** or **unsure**)*, are there any other in-school learning support personnel that you believe your son/daughter needs?

_____

_____

_____

_____

(go to 93)

For students in other **types of placements:**

91. Please describe your son's / daughter's placement._____

_____

_____

_____

_____

92. Do you feel there is sufficient learning support personnel for your son/daughter?
yes ☐[1] no ☐[2] unsure ☐[3]
*(if **yes**, go to 93)*

*(if **no** or **unsure**)*, are there any other in-school learning support personnel that you believe your son/daughter needs?

_____

_____

_____

_____

_____

f. For all parents: general assessment of school placement

93. What are the advantages of your son's/daughter's present school placement?

_____

_____

_____

_____

What are the disadvantages of the present school placement?

_____

_____

_____

_____

g. Academic attainment: These questions are asked in order to obtain a broad measure of your son/daughter's present academic performance.*(Academic Attainments Checklist* Sloper et al,1990)

94. Reading/use of written information

	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
a	Matches pictures of most common objects.			
b	Matches words of up to five letters.			
c	Recognises his/her own name written down.			
d	Recognises five to ten sight words.			
e	Recognises and picks out labels, trade names etc. (e.g., brand names for soft drinks, chocolate bars, breakfast cereals.			
f	Recognises up to 25 sight words.			
g	Reads simple sentences.			
h	Knows most letter sounds of the alphabet.			
i	Reads simple books, e.g. early readers.			
j	Recognises and acts appropriately to written signals, e.g. 'Danger', 'Bus stop', 'Exit'.			
k	Builds simple words through knowledge of letter sounds			
l	Reads and acts appropriately to signs giving directions, e.g. street names, directories in shops.			
m	Reads and follows a line of instructions, e.g., 'cut along dotted line'.			
n	Uses complex phonics, e.g. shoe, clown, swing.			
o	Reads and follows a sequence of instructions, e.g. recipes, rules of a game.			
p	Reads books, magazines for pleasure.			
q	Reads with understanding to get information, e.g. newspapers, brochures.			
r	Can do more advanced language work. *(Please specify.)*			

95. Number

	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
a	Discriminates between largest and smallest groups of objects.			
b	Identifies groups with the same number of objects.			
c	Makes a group of five objects.			
d	Makes a group of nine objects.			
e	When given a group of objects, adds one.			
f	When given a group of objects, takes one away.			
g	Names and matches symbols, 0 to 9.			
h	Writes symbols, 0 to 9.			
i	Writes symbols, 10 to 20.			
j	Adds written numbers up to 10, with materials, e.g., fingers, counting apparatus.			
k	Adds written numbers up to 10 without materials.			
l	Subtracts from written numbers up to 9 with materials.			
m	Subtracts from written numbers up to 9 without materials.			
n	Adds two numbers up to 20 with materials.			
o	Adds two numbers up to 20 without materials.			
p	Subtracts from numbers up to 20, with materials.			
q	Subtracts from numbers up to 20. Without materials.			
r	Adds numbers, 20+ without materials.			
s	Subtracts from numbers up to 50.			
t	Does simple multiplication sums.			
u	Does simple division sums.			
v	Can do more advanced number work. *(Please specify.)*			

96. Writing

	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
a	Holds pencil or crayon and attempts to scribble.			
b	Scribbles purposefully with pencil or crayon.			
c	Copies a circle.			
d	Copies letters.			
e	Copies first name.			
f	Writes first name independently.			
g	Writes first name and family name independently.			
h	Copies a simple sentence of four or more words.			
i	Writes a simple sentence of four or more words.			
j	Writes own name, address and telephone number.			
k	Writes simple sentences, when dictated.			
l	Writes more than one sentence on own.			
m	Writes short notes, e.g. messages, shopping list.			
n	Writes a short personal letter.			
o	Fills in printed forms, coupons.			
p	Writes and addresses personal letters.			
q	Writes short factual statements, e.g. accounts of events.			
r	Writes short descriptive passages.			
s	Writes imaginative pieces, creative writing.			

h. Specialist therapies: The next questions are about the specialist services that son/daughter has received during school years.

97. Did your son/daughter receive speech therapy and physiotherapy during his/her school years?

	did not need	received adequate therapy	received some therapy needed more	needed but did not receive therapy
speech therapy	☐1	☐2	☐3	☐4
physiotherapy	☐1	☐2	☐3	☐4
	(go to 99)	*(if 2 or 3 go to 98)*		*(go to 99)*

98. How often did your son/daughter receive these specialist services during his/her school years?

	Frequency of specialist service
speech therapy	
physiotherapy	

99. Is your son's/daughter's **speech** understood?

	usually	sometimes	rarely
at home	☐3	☐2	☐1
at school	☐3	☐2	☐1
by strangers	☐3	☐2	☐1
on the telephone	☐3	☐2	☐1

100. Have health problems interfered with your son's/daughter's education?
always☐1 frequently☐2 occasionally☐3 infrequently☐4 never☐5

i Home/school links

101. School transport is:
car☐[1] school bus☐[2] private mini bus☐[3] on foot☐[4]

102. Distance from home to school ☐☐miles.

103. How long does it take your son/daughter to go to school?☐☐minutes
How long does it take from school to home? ☐☐minutes

104. How would you rate the communication between yourself and your son's/daughter's school?

very good☐[1] good☐[2] fair☐[3] poor☐[4] no communication☐[5]

105. What form does the communication take?
(please describe) _____

j. Homework

106. Does your son/daughter have homework?
usually ☐[1] sometimes ☐[2] never ☐[3]
*(if **never**, go to 109)*

On average, how long does homework take? ☐☐☐ minutes.

On average, do you feel that the assigned homework is:
too much☐[1] a reasonable amount☐[2] not enough☐[3]

107. The assigned homework is:
an integral part of learning.☐[1]
beneficial.☐[2]
could be more useful.☐[3]
a waste of time.☐[4]

The assigned home work is done:
enthusiastically.☐[1]
mostly willingly.☐[2]
with difficulty.☐[3]
always a struggle.☐[4]

108. Does your son/daughter require help with his/her homework?
usually ☐[1] sometimes ☐[2] never ☐[3]
*(if **never**, go to 109)*

Who usually helps with homework? _____

109. Do you initiate "*homework*" activities after school that have **not** been assigned by the teacher(s)? yes☐[1] no☐[2]
*(if **no**, go to 110)*

*(if **yes**, please describe)* _____

H. Social activities

110. Is your son/daughter involved in:

	yes	through school
Special Olympics	☐	☐
other team activities	☐	☐
individual sporting activities	☐	☐
drama activities	☐	☐
dance activities	☐	☐
art activities *(not class work)*	☐	☐
music activities *(not class work)*	☐	☐
scouting	☐	☐
church activities	☐	☐

other *(please specify)* _____

111. On average, how often do your son's/ daughter's friends come to your home? _____

112. On average, how often does your son/daughter visit friends in their homes? _____

I. This last section has questions regarding your family circumstances including questions on education and occupation. This information is important because it will allow us to see if services are equally accessible to everyone or if there are any inequalities in the system.

113. Education: What is the highest level of education you took part in?
(ask respondent first and then ask about spouse)

	Mother	Father
primary	☐[1]	☐[1]
some secondary school	☐[2]	☐[2]
completed secondary school	☐[3]	☐[3]
third level	☐[4]	☐[4]
other *(please specify)*	☐[5]	☐[5]

_____

114. Occupation: *(ask respondent first and then ask about spouse)*
Mother: Are you (Is she) employed outside the home? yes ☐[1] no ☐[2]
*(if **yes**)*, what is your (her) occupation?

_____

Father: Are you (Is he) employed outside the home? yes ☐[1] no ☐[2]
*(if **yes**)*, what is your (his) occupation?

_____

115. When making decisions regarding educational choices for your son/daughter who has Down syndrome

family finances always determine choices. ☐[1]
family finances must be considered. ☐[2]
family finances are not important. ☐[3]
this question is irrelevant. ☐[4]

- May I please contact you again if I need clarification or further information.
  If **yes**,

Name_____

Address_____

_____

_____

Telephone_____ ID☐☐☐☐

Many thanks for your help.

Summary of initial contact with parents.

county	number identified on DSI database born 1982, 1986, or 1990	correction made by branch secretary	1st letter sent	refusal date	refusal at 1st letter stage	agreed interview at first telephone contact.	wrong information or refusal at 1st telephone stage	number not able to contact at telephone number on DSI database	2nd letter sent	refusal 2nd letter stage	no response 2nd letter	agreed interview 2nd letter	total number wrong infor-mation, not found, or refused	total number inter-viewed
Dublin	36	0	Jan-13	Jan-27	0	27	0	9	Mar-03	-2	-4	3	-6	30
										a) refused, working late shifts and not able to find time. b) refused, did not give reason				
Meath	8	-1	Feb-17	Mar-03	0	7	0	0	*	*	*	*	-1	7
		two daughters thought to be twins were sisters born in 1976 and 1986												
Kildare	7	0	Feb-17	Mar-03	-1	6	0	0	*	*	*	*	-1	6
					refused, did not give reason									
Limerick	9	0	Mar-03	Mar-18	0	8	-1	0	*	*	*	*	-1	8
							one date of birth incorrect son born 1970 not 1990							
Galway	7	0	Apr-14	Apr-28	0	5	-2	0	*	*	*	*	-2	5
							a)wrong birth date 1949 not 1990. b) refused, elderly mother-in-law living with them very unwell,							
Cork	19	0	Apr-14	Apr-28	-1	16	-1	2	May-16	0	-1	1	-3	16
					refused, working shifts and would not be possible		refused, mother away from home as caring for elderly mother who was unwell.							
Kerry	7	0	Apr-14	Apr-28	0	6	-1	0	*	*	*	*	-1	6
							refused, did not give reason							

identified	93
number of families who were not found	-5
number of families who were found but information incorrect	-3
number of families who refused to take part in the study	-7
total number of parents who were not found, or wrong information or who refused	-15
total number of parents who were interviewed as part of the study	78

Appendix 9. Mother's employment status

Mother's occupation	Mother's education and % of educational level in that employment status				Total % of total
	Primary	Some secondary	Completed secondary	Third level	
Employed in home	6 66.6%	13 76.5%	18 58.1%	5 25.0%	42 54.5%
Part-time employment	1 11.1%	2 11.8%	2 6.5%	4 20.0%	9 11.7%
housekeeper	1				
clerical		1			
advertisement sales		1			
shop assistant			1		
accounts assistant			1		
secretary				1	
art teacher				1	
display consultant				1	
radiographer				1	
Full-time employment	2 22.2%	2 11.8%	11 35.5%	11 55.0%	26 33.8%
safety instructor	1				
factory production	1	1			
factory supervisor		1			
back to work program			1		
farmer			1		
clerical worker			2		
clerical supervisor			1		
sales rep			1		
bank official/civil serv.			2		
administrator golf club			1		
library assistant			1		
classroom assistant			1		
shop owner				1	
sales assistant				1	
office manager				1	
company director				1	
nurse				4	
teacher				3	
Totals	9	17	31	20	77
% of totals	11.7%	22.0%	40.3%	26.0%	100%

Appendix 9. Father's employment status

Father's occupation	Father's education and % of educational level in that employment status				Total % of total
	Primary	Some secondary	Completed secondary	Third level	
Not employed outside the home	2 18.2%	1 5.9%	1 4.0%	0 0%	4 5.5%
Retired	2 18.2%	0	2 8.0%	2 10%	6 8.2%
Carpenter	1				
Farmer	1		1		
Garda Sargent			1		
Telecommunication				1	
Computer engineer				1	
Secondary teacher					
Part-time employment	0	1 5.9%	0	0	1 1.4%
Full-time employment	7 63.6%	15 88.2%	22 88%	18 90%	62 84.9%
County council maint	1	2			
Painter decorator	1				
Plate layer	1				
Machine operator	1				
Construction manager	1		2		
Factory production		1	1		
Factory supervisor					
Factory manager	1	2	1		
builder		1			
bookbinder		1	2		
Plumber/fitter			1	2	
Electrician		2			
Prison/security officer		2			
Pub/hotel			1		
Golf course employee			1	1	
Golf course manager			1		
Lorry driver				1	
Farmer<50 A	1				
Farmer 50-75A			2	1	
Farmer 75-100A		2	1	1	
Farmer 100+A			2	2	
Company director		1	2		
Welfare officer				3	
County official				2	
Accountant/auditor			1		
Bank manager				1	
Architect			1	1	
Civil service				1	
Clerical superv			1		
Research			1	1	
Machine engineer				1	
Nurse			1		
Publishing			1		
Marketing					
Totals	11 15.1%	17 23.3%	25 34.2%	20 27.4%	73 100%

Appendix 10. Type of preschool first attended by county

first preschool * county of residence Crosstabulation

			county of residence							Total
			Dublin	Meath	Kildare	Limerick	Galway	Cork	Kerry	
first preschool	special	Count	8	2	6	1	1	2	3	23
		% within county of residence	26.7%	40.0%	100.0%	14.3%	20.0%	12.5%	75.0%	31.5%
	mainstream	Count	12	2		6	3	6		29
		% within county of residence	40.0%	40.0%		85.7%	60.0%	37.5%		39.7%
	special/mainstream	Count						5	1	6
		% within county of residence						31.3%	25.0%	8.2%
	playgroup	Count	10	1			1	3		15
		% within county of residence	33.3%	20.0%			20.0%	18.8%		20.5%
Total		Count	30	5	6	7	5	16	4	73
		% within county of residence	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix 10. Type of preschool last attended by county

last preschool * county of residence Crosstabulation

			county of residence							Total
			Dublin	Meath	Kildare	Limerick	Galway	Cork	Kerry	
last preschool	special	Count	9	2	4	1		3	3	22
		% within county of residence	30.0%	40.0%	66.7%	14.3%		18.8%	75.0%	30.1%
	mainstream	Count	17	2		6	4	6		35
		% within county of residence	56.7%	40.0%		85.7%	80.0%	37.5%		47.9%
	special/mainstream	Count	1		2		1	7	1	12
		% within county of residence	3.3%		33.3%		20.0%	43.8%	25.0%	16.4%
	playgroup	Count	3	1						4
		% within county of residence	10.0%	20.0%						5.5%
Total		Count	30	5	6	7	5	16	4	73
		% within county of residence	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Appendix 11. First primary school enrolment by county of residence (n=75**)*

			county of residence							Total
			Dublin	Meath	Kildare	Limerick	Galway	Cork	Kerry	
type of first primary school	special school/classes (mild mh)	Count	4	2 *		2		1		9
		% within county of residence	13.8%	33.3%		25.0%		6.7%		12.0%
	special school/classes (moderate mh)	Count	12	2	4	5	3	8	6	40
		% within county of residence	41.4%	33.3%	66.7%	62.5%	60.0%	53.3%	100.0%	53.3%
	mainstream	Count	13	2	2	1	2	6		26
		% within county of residence	44.8%	33.3%	33.3%	12.5%	40.0%	40.0%		34.7%
Total		Count	29	6	6	8	5	15	6	75
		% within county of residence	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* One student began school in a special school designated for students with mild mental handicap when the family lived in Dublin. When they moved to Meath she transferred to a special school designated for pupils with moderate mental handicap.

**N=75. Three students did not initially attend primary school. One was not in an educational programme for more than a year. Two were in special day care units under the Department of Health.

Appendix 12. Changes in school enrolment giving year of birth, sex of student, age of first enrolment and age of transfer.

Table x. Changes in school enrolment giving year of birth, sex of student and age of change.

Year born	Sex	First primary school placement	Age enrolled	School placement at time of interview	Age transferred
1982	F	Mainstream primary	5	Mainstream secondary	14
1982	F	Mainstream primary	8	Mainstream secondary	14
1982	F	Mainstream primary	6	Mainstream secondary	14
1982	M	Special class primary (mild LD)	8	Special class secondary (mild LD)	13
1982	M	Special school (moderate LD)	4	Not in school [1]	5
1982	M	Special school (moderate LD)	5	Special school (moderate LD) [2]	6
1986	F	Special school (moderate LD)	5	Mainstream primary	9
1990	M	Not in school	6	Special school (moderate LD)	8
1982	F	Special school (mild LD)	6	Not in school [3]	11
1986	F	Special school (mild LD)	5	Special school (moderate LD)	9
1986	F	Special school (mild LD)	5	Special school (moderate LD)	9
1982	M	Mainstream primary	6	Special school (moderate LD)	8
1982	F	Mainstream primary	5	Special school (moderate LD)	7
1986	M	Mainstream primary	5	Special school (moderate LD)	8
1990	M	Mainstream primary	5	Special school (moderate LD)	5
1986	M	Mainstream primary	5	Special school (mild LD)	6
1986	F	Mainstream primary	5	Special class primary (mild LD)	6
1986	M	Jr school (co-ed) mainstream	5	Senior school (boys) mainstream	8

[1] Student was in mainstream primary for a year and then not readmitted. He was at home for a period and then again in the special school designated for pupils with moderate mental handicap for about a year. He was then not in school for three years and then part-time in mainstream primary school, which he attended for two hours a day until he was fifteen. He was then out of school.

[2] Student moved from one school to another under the auspices of another organisation in the same city.

[3] Student due to serious illness (cardiac arrest) has not attended school since the age of eleven. Since that time, no teaching or educational programme has been provided to her at home by the Department of Education and Science.

PRESS RELEASE

Press Release by Minister for Education and Science, Micheál Martin,T.D., Major Initiative in Special Education Services " Move marks breakthrough for integrated education and children with autism" - 5th November 1998.

A major initiative in special education which provides the first ever automatic supports for many children with disabilities was today announced by the Minister for Education and Science, Micheál Martin TD. The initiative in particular marks a breakthrough for integrated education and children with autism.

The measures involved, which have been approved by Government, are aimed at ensuring that all children with a special educational need, irrespective of their location or disability, will receive the support they require to participate fully in the education system.

The measures, which extend across the entire spectrum of special needs will deliver extra teaching and child care services to all special needs children, whether in groups or in individual isolated settings.;

The key measures announced by the Minister include:

- The introduction of a formalised system of special teaching support for all children attending schools on a fully integrated basis who have been assessed as having special educational needs.
- The introduction of a formalised system of child care support for all children with special needs, including those in special schools, special classes and ordinary schools, who have been assessed as requiring such support.
- Formal recognition of the distinct educational needs of all children with Autism whose condition so requires the introduction of a special pupil teacher ratio of 6:1 for such children, together with an automatic entitlement to child care support.

The Minister described today's announcement as a major breakthrough in the development of special education services. The most important element is, he said, that children with special needs attending ordinary schools will, for the first time ever have automatic access to the special teaching support and, if necessary, the child care support they require to enable them to reach their potential within the education system.

While pointing out that he had prioritised special education in his allocation of teaching posts this year, the Minister said "For too long, the needs of many children with disabilities, particularly those in smaller groups or in isolated settings, have been supported in a reactive and entirely unsatisfactory manner. For too long parents have had to campaign tirelessly to give their children the chance to participate in and benefit from education."

"The measures which I am announcing today will address these past inadequacies by ensuring that each child, whether as part of a group or on an individual basis, will have an automatic entitlement to the level of teaching and child care support which their condition requires. Referring to children with

autism, the Minister pointed to a major advance with his Department's formal recognition of the distinct educational needs of many of these children.

The decision means that special and distinct educational facilities will be made available to cater specifically for these children. The facilities in question will operate at a pupil teacher ratio of 6:1 and each group of six children will also have the support of a child care assistant.

It is expected that the measures announced by the Minister will cost almost £4 million in 1999.

In addition to these initiatives, the Minister announced that his Department has begun consultations on a range of other special needs issues.

Key elements of new package

a. **Children in integrated settings.**

*Each child assessed as having a special educational need will have an *automatic* entitlement to a resource to meet that need.

*The resource may take the form of special extra teaching support or child care support or both, depending on the specific needs of the child.

*Where a group of special needs children attend an ordinary school or adjacent schools, the support will take the form of full-time resource teachers or child care posts or both.

The level of response in each case will have regard to the number of children and the severity of the disabilities involved.

*Where individual or small group of children are involved, the support will take the form of part-time teaching hours or part-time child care support or both.

The level of support will have regard to the number of children and their particular needs.

*Where special needs are concerned, flexibility of response is essential. Every case needs to be assessed on its individual merits. The level and type of response will reflect the special need involved.

b. **Children attending special schools.**

*Children with severe or profound mental handicap will have an entitlement to 2 child care assistants per class of 6 children.

(such children already enjoy a PTR of 6:1).

*Children with autism, whose condition so requires, will have access to special dedicated classes at a PTR of 6:1. Each class will also have the support of a child care assistant.

Previously, such children were placed in special facilities for children with emotional disturbance or mild mental handicap.

*All special schools and special classes will have access to child care support in line with the needs of the pupils being catered for.

The level of response would be in line with the recommendations of the special education review committee.

Key beneficiaries of new package

1. **Integrated special needs children.**

For the first time, all such children will have a guarantee of special teaching support and, if necessary, child care support.

In the past only some of these children qualified for a resource teacher service. However, they had no automatic entitlement to such a service and the response was limited to the number of resource posts available at any given time.

As a result, many special needs children, particularly individual and small isolated groups, got no support.

The major development now is that all of these children, wherever their location and however small their number, will have an entitlement to special teaching support and, if necessary, special child care support.

Example 1

A child with a physical disability in an ordinary school in an isolated area. The child needs support with mobility, toiletting etc..

Such a child had no automatic entitlement to child care support and was dependent on the commitment and goodwill of school staff and others.

Under the new measures, child care support will be automatically available in such a case.

Example 2

An ordinary school with, say, 12 special needs children on roll on a fully integrated basis.

In the past, such children had no *automatic* entitlement to a special support teacher. to the extent that such support was provided it was dependent on the availability of teacher posts at any given time. Many schools did not secure a post.

Under the new measures, this school and every other school in a similar position, would have an automatic entitlement to a special support teacher.

2. **Children in special schools and special classes**

*Children with severe/profound mental handicap will have automatic entitlement to 2 child care assistants per class of 6 children.

3. **Children with autism**

Previously, any such children requiring placement in a special facility were placed in special schools or special classes for children with emotional disturbance or mild mental handicap.

There was no formal recognition of the distinct educational needs of many such children.

Under the new arrangements, the distinct educational needs of all children with autism whose condition so requires, is being formally recognised and provided for.

Special separate educational provision will be made for such children on the basis of a PTR of 6:1. each group of 6 children will also have the support of a child care assistant.

Key inadequacies of existing services now being addressed

1. **Inadequate child care support:**

*There was no formal system to address child care needs.

*Responses were ad hoc and the supply of child care posts was intermittent and inadequate.

*In effect, the system failed to recognise the crucial role of child care support in responding to the educational needs of some children.

2. **Inadequate teaching support.**

*Stated policy has been to encourage integration wherever possible. Yet, the system failed to provide any practical means of realising this objective.

*Children who chose to attend special schools or special classes enjoyed special reduced PTR. However, those who chose the integrated route, had no guarantee of special teaching support. This was particularly the case where small groups or isolated individuals were concerned.

*The system lacked the flexibility necessary to respond to the individual requirements of special needs children.

Resource implications.

Ultimately this will be determined by:

- the number of special needs children presenting,
- the nature of their special requirements,
- whether they require placement in a special school; in a special class or in an integrated setting, and
- the extent to which the school in question already has available special support services.

The exact cost of the initiatives announced today are difficult to estimate. This said, over the next year, we would envisage allocations equivalent to an additional 65 teacher posts and some 200 child care posts (almost £4 million in 1999).

Arrangements are being made to develop accurate up-to-date details on all special needs children in the system; their locations; their specific needs etc.. this data will allow for an efficient and accurate targeting of resources under the new measures.

The key points are that:

- Where a child care need is identified, it will be responded to,
- Where a need for special teaching support is identified, it will be responded to,

- In all cases we will have the flexibility to respond on the basis of the need of the child, and
- Up-to-date data will be available to the department to ensure that every special needs child is responded to.

Bivariate correlations between items on student accommodation scale

		curriculum	environment	learning goals	expectations	includes	encourage friendships	role models	individual interests
curriculum	Pearson Correlation	1.000	.351**	.661**	.714**	.391**	.225	.532**	.658**
	Sig. (2-tailed)	.	.002	.000	.000	.001	.054	.000	.000
	N	74	74	74	74	74	74	74	74
environment	Pearson Correlation	.351**	1.000	.201	.254*	.326**	.410**	.270*	.329**
	Sig. (2-tailed)	.002	.	.086	.029	.005	.000	.020	.004
	N	74	74	74	74	74	74	74	74
learning goals	Pearson Correlation	.661**	.201	1.000	.668**	.319**	.218	.339**	.577**
	Sig. (2-tailed)	.000	.086	.	.000	.006	.062	.003	.000
	N	74	74	74	74	74	74	74	74
expectations	Pearson Correlation	.714**	.254*	.668**	1.000	.396**	.208	.427**	.605**
	Sig. (2-tailed)	.000	.029	.000	.	.000	.075	.000	.000
	N	74	74	74	74	74	74	74	74
includes	Pearson Correlation	.391**	.326**	.319**	.396**	1.000	.274*	.415**	.391**
	Sig. (2-tailed)	.001	.005	.006	.000	.	.018	.000	.001
	N	74	74	74	74	74	74	74	74
encourage friendships	Pearson Correlation	.225	.410**	.218	.208	.274*	1.000	.538**	.286*
	Sig. (2-tailed)	.054	.000	.062	.075	.018	.	.000	.014
	N	74	74	74	74	74	74	74	74
role models	Pearson Correlation	.532**	.270*	.339**	.427**	.415**	.538**	1.000	.387**
	Sig. (2-tailed)	.000	.020	.003	.000	.000	.000	.	.001
	N	74	74	74	74	74	74	74	74
individual interests	Pearson Correlation	.658**	.329**	.577**	.605**	.391**	.286*	.387**	1.000
	Sig. (2-tailed)	.000	.004	.000	.000	.001	.014	.001	.
	N	74	74	74	74	74	74	74	74

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Q94. Reading/use of written information

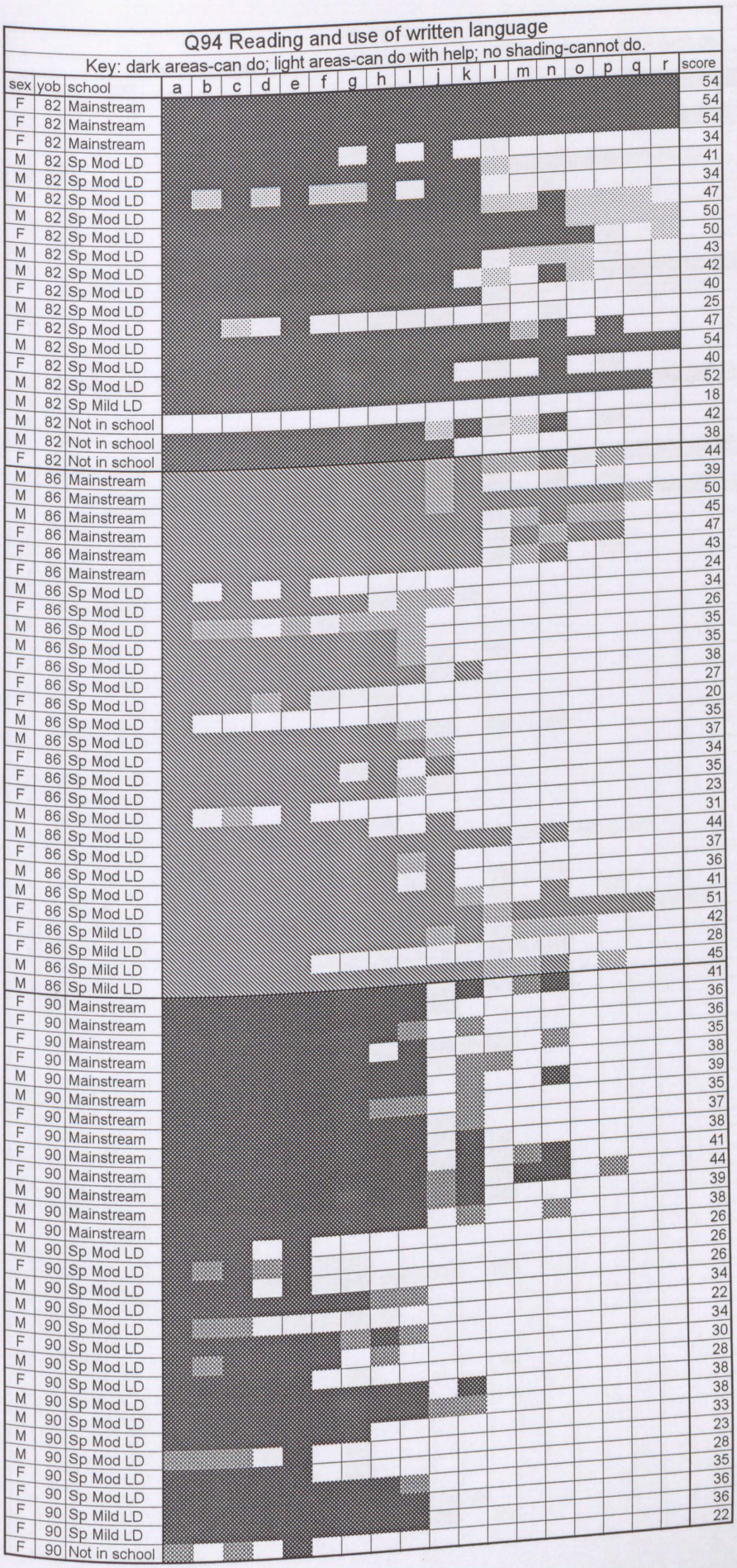
	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
A	Matches pictures of most common objects.			
B	Matches words of up to five letters.			
C	Recognises his/her own name written down.			
D	Recognises five to ten sight words.			
E	Recognises and picks out labels, trade names etc. (e.g., brand names for soft drinks, chocolate bars, breakfast cereals.			
F	Recognises up to 25 sight words.			
G	Reads simple sentences.			
H	Knows most letter sounds of the alphabet.			
I	Reads simple books, e.g. early readers.			
J	Recognises and acts appropriately to written signals, e.g. 'Danger', 'Bus stop', 'Exit'.			
K	Builds simple words through knowledge of letter sounds			
L	Reads and acts appropriately to signs giving directions, e.g. street names, directories in shops.			
M	Reads and follows a line of instructions, e.g., 'cut along dotted line'.			
N	Uses complex phonics, e.g. shoe, clown, swing.			
O	Reads and follows a sequence of instructions, e.g. recipes, rules of a game.			
P	Reads books, magazines for pleasure.			
Q	Reads with understanding to get information, e.g. newspapers, brochures.			
R	Can do more advanced language work. *(Please specify.)*			

Q95. Number

	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
A	Discriminates between largest and smallest groups of objects.			
B	Identifies groups with the same number of objects.			
C	Makes a group of five objects.			
D	Makes a group of nine objects.			
E	When given a group of objects, adds one.			
F	When given a group of objects, takes one away.			
G	Names and matches symbols, 0 to 9.			
H	Writes symbols, 0 to 9.			
I	Writes symbols, 10 to 20.			
J	Adds written numbers up to 10, with materials, e.g., fingers, counting apparatus.			
K	Adds written numbers up to 10 without materials.			
L	Subtracts from written numbers up to 9 with materials.			
M	Subtracts from written numbers up to 9 without materials.			
N	Adds two numbers up to 20 with materials.			
O	Adds two numbers up to 20 without materials.			
P	Subtracts from numbers up to 20, with materials.			
Q	Subtracts from numbers up to 20. Without materials.			
R	Adds numbers, 20+ without materials.			
S	Subtracts from numbers up to 50.			
T	Does simple multiplication sums.			
U	Does simple division sums.			
V	Can do more advanced number work. *(Please specify.)*			

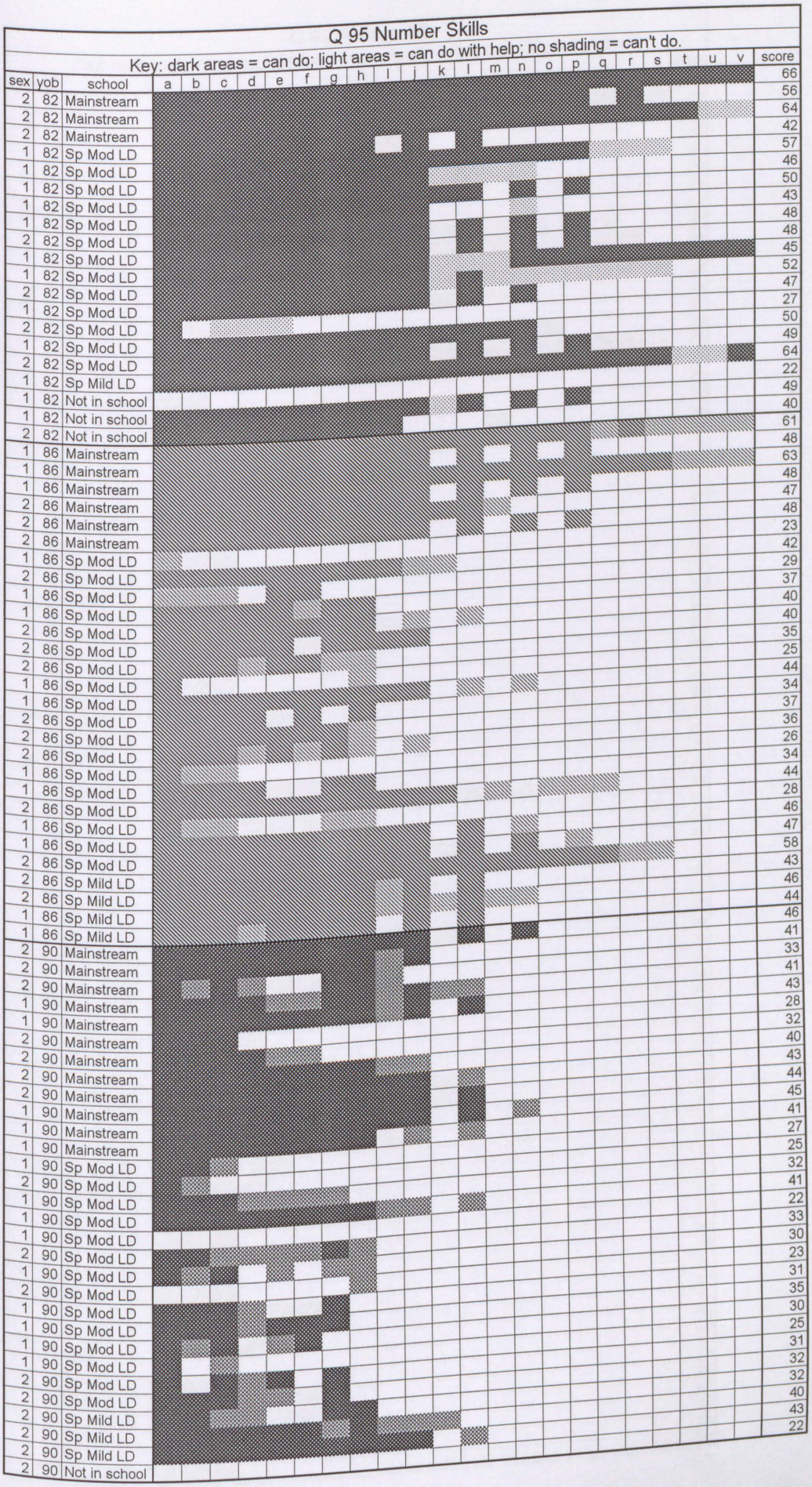
Q96. Writing

	☐ 3 can do ☐ 2 can do with help ☐ 1 cannot do	3	2	1
A	Holds pencil or crayon and attempts to scribble.			
b	Scribbles purposefully with pencil or crayon.			
c	Copies a circle.			
d	Copies letters.			
e	Copies first name.			
f	Writes first name independently.			
g	Writes first name and family name independently.			
h	Copies a simple sentence of four or more words.			
i	Writes a simple sentence of four or more words.			
j	Writes own name, address and telephone number.			
k	Writes simple sentences, when dictated.			
l	Writes more than one sentence on own.			
m	Writes short notes, e.g. messages, shopping list.			
n	Writes a short personal letter.			
o	Fills in printed forms, coupons.			
p	Writes and addresses personal letters.			
q	Writes short factual statements, e.g. accounts of events.			
r	Writes short descriptive passages.			
s	Writes imaginative pieces, creative writing.			


Q94 Reading and use of written language
Key: dark areas-can do; light areas-can do with help; no shading-cannot do.
sex yob school
a b c d e f g h i j k l m n o p q r score
F 82 Mainstream 54
F 82 Mainstream 54
F 82 Mainstream 34
M 82 Sp Mod LD 41
M 82 Sp Mod LD 34
M 82 Sp Mod LD 47
M 82 Sp Mod LD 50
F 82 Sp Mod LD 50
M 82 Sp Mod LD 43
M 82 Sp Mod LD 42
F 82 Sp Mod LD 40
M 82 Sp Mod LD 25
F 82 Sp Mod LD 47
M 82 Sp Mod LD 54
F 82 Sp Mod LD 40
M 82 Sp Mod LD 52
M 82 Sp Mild LD 18
M 82 Not in school 42
M 82 Not in school 38
F 82 Not in school 44
M 86 Mainstream 39
M 86 Mainstream 50
M 86 Mainstream 45
F 86 Mainstream 47
F 86 Mainstream 43
F 86 Mainstream 24
M 86 Sp Mod LD 34
F 86 Sp Mod LD 26
M 86 Sp Mod LD 35
M 86 Sp Mod LD 35
F 86 Sp Mod LD 38
F 86 Sp Mod LD 27
F 86 Sp Mod LD 20
M 86 Sp Mod LD 35
M 86 Sp Mod LD 37
F 86 Sp Mod LD 34
F 86 Sp Mod LD 35
F 86 Sp Mod LD 23
M 86 Sp Mod LD 31
M 86 Sp Mod LD 44
F 86 Sp Mod LD 37
M 86 Sp Mod LD 36
M 86 Sp Mod LD 41
F 86 Sp Mod LD 51
F 86 Sp Mild LD 42
F 86 Sp Mild LD 28
M 86 Sp Mild LD 45
M 86 Sp Mild LD 41
F 90 Mainstream 36
F 90 Mainstream 36
F 90 Mainstream 35
F 90 Mainstream 38
M 90 Mainstream 39
M 90 Mainstream 35
F 90 Mainstream 37
F 90 Mainstream 38
F 90 Mainstream 41
F 90 Mainstream 44
F 90 Mainstream 39
M 90 Mainstream 38
M 90 Mainstream 26
M 90 Mainstream 26
M 90 Sp Mod LD 26
F 90 Sp Mod LD 34
M 90 Sp Mod LD 22
M 90 Sp Mod LD 34
M 90 Sp Mod LD 30
F 90 Sp Mod LD 28
M 90 Sp Mod LD 38
F 90 Sp Mod LD 38
M 90 Sp Mod LD 33
M 90 Sp Mod LD 23
M 90 Sp Mod LD 28
M 90 Sp Mod LD 35
F 90 Sp Mod LD 36
F 90 Sp Mod LD 36
F 90 Sp Mild LD 22
F 90 Sp Mild LD
F 90 Not in school

Q 95 Number Skills

Key: dark areas = can do; light areas = can do with help; no shading = can't do.



sex	yob	school	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	score
2	82	Mainstream																							66
2	82	Mainstream																							56
2	82	Mainstream																							64
1	82	Sp Mod LD																							42
1	82	Sp Mod LD																							57
1	82	Sp Mod LD																							46
1	82	Sp Mod LD																							50
1	82	Sp Mod LD																							43
1	82	Sp Mod LD																							48
2	82	Sp Mod LD																							48
1	82	Sp Mod LD																							45
1	82	Sp Mod LD																							52
2	82	Sp Mod LD																							47
1	82	Sp Mod LD																							27
2	82	Sp Mod LD																							50
1	82	Sp Mod LD																							49
2	82	Sp Mod LD																							64
1	82	Sp Mild LD																							22
1	82	Not in school																							49
1	82	Not in school																							40
2	82	Not in school																							61
1	86	Mainstream																							48
1	86	Mainstream																							63
1	86	Mainstream																							48
2	86	Mainstream																							47
2	86	Mainstream																							48
2	86	Mainstream																							23
1	86	Sp Mod LD																							42
2	86	Sp Mod LD																							29
1	86	Sp Mod LD																							37
1	86	Sp Mod LD																							40
2	86	Sp Mod LD																							40
2	86	Sp Mod LD																							35
2	86	Sp Mod LD																							25
1	86	Sp Mod LD																							44
1	86	Sp Mod LD																							34
2	86	Sp Mod LD																							37
2	86	Sp Mod LD																							36
2	86	Sp Mod LD																							26
1	86	Sp Mod LD																							34
1	86	Sp Mod LD																							44
2	86	Sp Mod LD																							28
1	86	Sp Mod LD																							46
1	86	Sp Mod LD																							47
2	86	Sp Mild LD																							58
2	86	Sp Mild LD																							43
2	86	Sp Mild LD																							46
1	86	Sp Mild LD																							44
1	86	Sp Mild LD																							46
2	90	Mainstream																							41
2	90	Mainstream																							33
2	90	Mainstream																							41
1	90	Mainstream																							43
1	90	Mainstream																							28
2	90	Mainstream																							32
2	90	Mainstream																							40
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2	90	Sp Mod LD																							32
1	90	Sp Mod LD																							41
1	90	Sp Mod LD																							22
1	90	Sp Mod LD																							33
2	90	Sp Mod LD																							30
1	90	Sp Mod LD																							23
2	90	Sp Mod LD																							31
1	90	Sp Mod LD																							35
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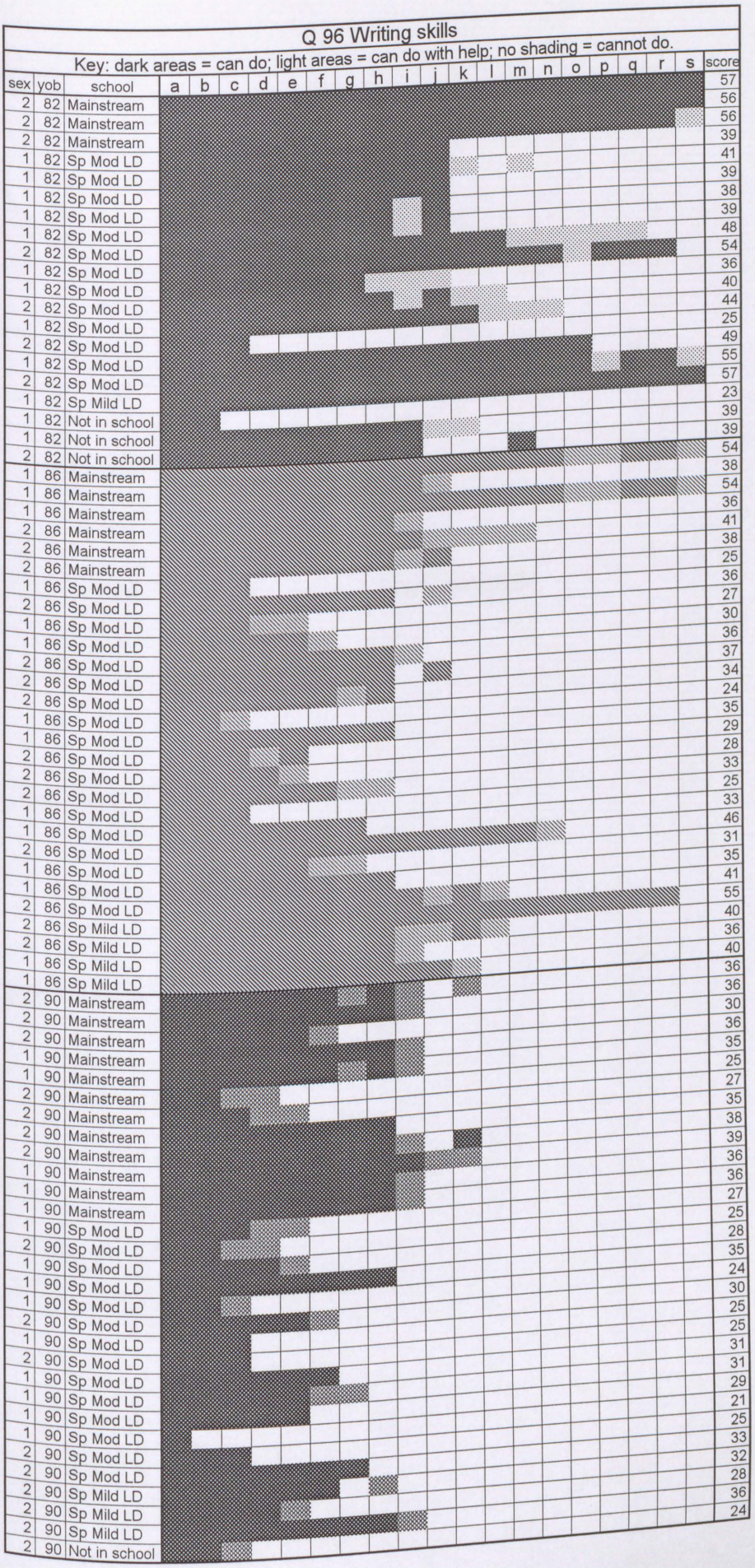
1	90	Sp Mod LD																							31
2	90	Sp Mod LD																							32
2	90	Sp Mod LD																							32
2	90	Sp Mild LD																							40
2	90	Sp Mild LD																							43
2	90	Sp Mild LD																							22
2	90	Not in school																							

Q 96 Writing skills

Key: dark areas = can do; light areas = can do with help; no shading = cannot do.



sex	yob	school	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	score
2	82	Mainstream																				57
2	82	Mainstream																				56
2	82	Mainstream																				56
1	82	Sp Mod LD																				39
1	82	Sp Mod LD																				41
1	82	Sp Mod LD																				39
1	82	Sp Mod LD																				38
1	82	Sp Mod LD																				39
1	82	Sp Mod LD																				48
2	82	Sp Mod LD																				54
1	82	Sp Mod LD																				36
1	82	Sp Mod LD																				40
2	82	Sp Mod LD																				44
1	82	Sp Mod LD																				25
2	82	Sp Mod LD																				49
1	82	Sp Mod LD																				55
2	82	Sp Mod LD																				57
1	82	Sp Mild LD																				23
1	82	Not in school																				39
1	82	Not in school																				39
2	82	Not in school																				54
1	86	Mainstream																				38
1	86	Mainstream																				54
1	86	Mainstream																				36
2	86	Mainstream																				41
2	86	Mainstream																				38
2	86	Mainstream																				25
1	86	Sp Mod LD																				36
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2	90	Sp Mod LD																				32
2	90	Sp Mild LD																				28
2	90	Sp Mild LD																				36
2	90	Sp Mild LD																				24
2	90	Not in school																				

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3. Articles
4. Unpublished material
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   b. theses
   c. conference papers
   d. archive documents

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