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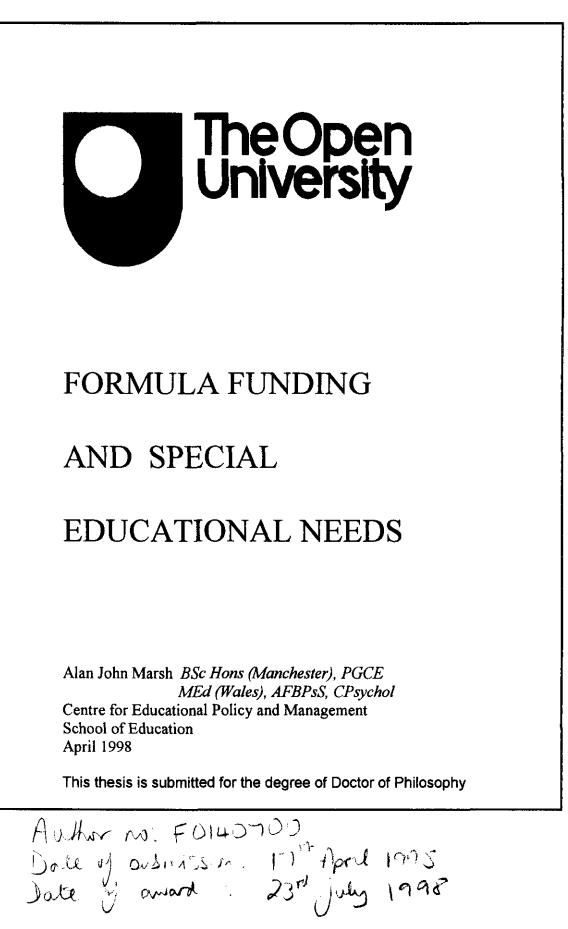
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ABSTRACT

This thesis is based on a six year research study and is set against the implementation of Local Management of Schools and the formula funding arrangements for pupils with special educational needs (SEN). The main aim of the research is to investigate the principles and practice for allocating additional resources to provide for pupils with SEN but without statements. Two theoretical perspectives are used: the 'special needs pupil' discourse and the 'school and teacher effectiveness' discourse (Galloway, Armstrong and Tomlinson, 1994).

The study is in two main parts. First the theoretical component whereby a critical examination is given to the conceptualisation of special educational needs, to the principles or criteria for evaluating a funding formula and to the historical arrangements for funding pupils with SEN. The second part of the thesis is the empirical component consisting of two national surveys, a case study carried out in two LEAs *Mercia* and *Whiteshire*, and computer budget modelling for different funding formulae for all primary and secondary schools in *Whiteshire* (n=690 schools). Evidence is obtained throughout the study relating to the design of an 'improved' SEN formula which is evaluated according to the principles or criteria of simplicity, equity, effectiveness, responsiveness to needs, efficiency, stability of funding, cost containment and accountability.

TABLE OF CONTENTS

ABSTRACT
TABLE OF CONTENTS
LIST OF TABLES AND FIGURES
PUBLICATIONS AND PAPERS ARISING FROM THE RESEARCH
ACKNOWLEDGEMENTS
ABBREVIATIONS
PREFACE
CHAPTER ONE FORMULATION OF KEY RESEARCH QUESTIONS
1.1 AIMS, KEY QUESTIONS AND CHAPTER STRUCTURE
Key Question 1. How does the conceptualisation of special educational needs impact upon policy within Local Education Authorities?
Key Question 2. What contradictions and tensions are apparent when the purposes of providing additional funding for special educational needs are examined?
Key Question 3. What principles or criteria should be considered when evaluating a funding formula and how do they relate to the purpose of the additional funding?
Key Question 4. What have been the historical arrangements for funding pupils with special educational needs?
Key Question 5. What is the current practice in LEAs with regard to resource definition, resource allocation and resource management?
Key Question 6. What is the relationship between special educational needs and resource levels and how does this match professional views?
Key Question 7. Is it worthwhile for LEAs to differentiate financially between different levels of need?
Key Question 8. What are the 'normative' or value questions which are informing decision making about the SEN formula within Whiteshire?
Key Question 9. How can the existing SEN formula in Whiteshire be improved?
Key Question 10. What is the impact on school budgets of using different special educational needs indicators?
Key Question 11. Could National Curriculum Assessments replace other standardised educational tests in the formula on the grounds of validity, dependability and reliability?
Key Question 12. Should recognition be made within the formula for different types of SEN e.g. specific learning difficulties and emotional and/or behavioural difficulties?
CHAPTER TWO RESEARCH METHODOLOGY
2.1 POLICY MAKING AND RESEARCH
2.2 POSITIONALITY
2.2 FOSITIONALIT 1
2.3 THE DATA
2.4 MIXING RESEARCH METHODOLOGIES AND METHODS
CHAPTER THREE THE CONCEPTUALISATION OF SPECIAL EDUCATIONAL NEEDS AND THE PURPOSES OF PROVIDING
ADDITIONAL FUNDING 59
3.1 THE 1944 EDUCATION ACT AND THE ORIGINS OF THE CONCEPT OF SPECIAL EDUCATIONAL NEEDS
3.2 THE 1981 EDUCATION ACT
Formula Funding and Special Educational Needs 3 Table of Contents OU/PhD/AJM/April 1998

3.3 THE 1988 EDUCATION REFORM ACT	66
3.4 THE 1993 EDUCATION ACT AND THE CODE OF PRACTICE	71
3.5 THE DEFINITION, IDENTIFICATION AND MEASUREMENT OF SPECIAL EDUCATIONAL NEEDS	73
3.6 THE RECONCEPTUALISATION OF SPECIAL EDUCATIONAL NEEDS	
3.7 THE PURPOSE OF ALLOCATING RESOURCES TO RAISE EDUCATIONAL ACHIEVEMENT	82
3.8 THE PURPOSE OF COMPENSATORY RESOURCING	
3.9 RESEARCH STUDIES ON SCHOOL AND TEACHER EFFECTIVENESS	
3.9.1 Research on School Effectiveness and School Improvement 3.9.2 Research on Teacher Effectiveness	93 97
3.10 CONCLUSIONS	
CHAPTER FOUR AN INVESTIGATION OF THE PRINCIPLES WHICH LEAS USE TO PROVIDE FOR PUPILS WITH SPECIAL EDUCATION NEEDS	AL
4.1 SIMPLICITY	104
4.2 EQUITY	106
4.3 EFFECTIVENESS	114
4.4 RESPONSIVENESS TO NEEDS	115
4.5 EFFICIENCY	117
4.6 STABILITY OF FUNDING	119
4.7 COST CONTAINMENT AND THE NEED TO REDUCE OR STABILISE THE RATE OF STATEMENTING.	
4.8 ACCOUNTABILITY	124
4.9 SUMMARY	127
CHAPTER FIVE HISTORIC FUNDING OF SPECIAL EDUCATIONAL NEEDS AND THE RELATIONSHIP WITH FORMULA FUNDING	129
5.1 PUPIL TEACHER RATIOS AND CLASS SIZE	131
5.1.1 DES Circular 4/73	
5.1.2 Curriculum based staffing 5.1.3 Activity led staffing	
5.1.4 Literature review on class size	
5.2 STAFFING FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS - THE CONCEPT RESOURCE BANDS OF LEARING DIFFICULTY (DES CIRCULAR 11/90)	
5.3 LOCAL MANAGEMENT OF SCHOOLS (DES CIRCULAR 7/88)	144
5.4 LOCAL MANAGEMENT OF SPECIAL SCHOOLS (LMSS) (DES CIRCULAR 7/91)	149
5.5 SUMMARY	156
CHAPTER SIX FUNDING METHODS USED BY LOCAL EDUCATION AUTHORITIES TO DETERMINE SPECIAL EDUCATIONAL NEEDS	159
6.1 BACKGROUND TO THE ADDITIONAL EDUCATIONAL NEEDS SURVEY	160
6.2 HOW DO LOCAL EDUCATION AUTHORITIES ASSESS THE NUMBERS OF PUPIL WITH ADDITIONAL EDUCATIONAL NEEDS?	
6.3 HOW MUCH EXTRA RESOURCES ARE GIVEN BY LEAS TO PUPILS WITH ADDIT EDUCATIONAL NEEDS?	IONAL
6.3.1 The Total Special Educational Needs Budget	166
Formula Funding and Special Educational Needs Table of Contents	4

OU/PhD/AJM/April 1998

6.3.2 The Total Additional Educational Needs Budget for Pupils with SEN but without State	
6.3.3 The Total AEN Budget Allocations Delivered by the Different Indices	171
6.4 WHAT OPTIONS ARE AVAILABLE FOR THE DISTRIBUTION OF THE EXTRA	
RESOURCES?	172
6.5 CONCLUSIONS FROM THE AEN NATIONAL SURVEY	173
6.6 BACKGROUND TO THE CRITERIA OF NEED SURVEY	176
6.7 LEARNING DIFFICULTIES	179
6.7.1 The Use of Educational Test Information	180
6.7.2 The Use of National Curriculum Assessments	
6.7.3 Summary	
6.8 SPECIFIC LEARNING DIFFICULTIES	
6.8.1 The Use of Ability-Achievement Discrepancies 6.8.2 The Use of National Curriculum Core Subject Discrepancies and Attainment Test Sco	194 ros 196
6.8.3 Summary.	199
6.9 FURTHER COMMENTS	
CHAPTER SEVEN THE RELATIONSHIP BETWEEN THE CONTINUUM SPECIAL EDUCATIONAL NEEDS AND DIFFERENTIATED RESOURG LEVELS : CASE STUDIES FROM TWO LOCAL EDUCATION AUTHORITIES	CE
7.1 THE RELATIONSHIP BETWEEN THE CONTINUUM OF SEN AND DIFFERENTIATE	
RESOURCE LEVELS	
7.1.1 Policies towards Differentiated Funding 7.1.2 Approaches to Differentiated Funding in Two LEAs	
7.2 DESCRIPTIVE COMPARISON OF THE LEVEL OF RESOURCES WITHIN THE TWO	
7.3 CASE STUDIES TO EXPLORE PROFESSIONAL VIEWS ABOUT LEA RESOURCING POLICIES FOR SPECIAL EDUCATIONAL NEEDS	
7.3.1 Data collection instruments and interview procedures	212
7.3.2 Policies for Funding Non-Statemented Special Educational Needs : Audit and Formula	
7.3.3 Delegated Special Provision : Allocation of resources for statements 7.3.4 Learning support assistants or Outreach Teachers	
7.4 INDIVIDUAL PUPIL CASE STUDIES TO EXPLORE PROFESSIONAL VIEWS ABOUT	
MATCH BETWEEN SPECIAL EDUCATIONAL NEEDS AND RESOURCE LEVELS	
7.4.1 Moderate Learning Difficulties	
7.4.2 Specific Learning Difficulties	
7.4.3 Emotional and/or Behavioural Difficulties	
7.5 EVALUATIVE COMPARISON OF THE TWO LEAS	242
7.6 CONCLUSIONS	245
CHAPTER EIGHT THE DESIGN STRUCTURE OF AN IMPROVED SEN FORMULA IN WHITESHIRE	251
8.1 CRITIQUE OF PRESENT SEN FORMULA	251
8.1.1 Description of the Primary Formula	
8.1.2 Description of the Secondary Formula.	
8.1.3 Other Special Needs Allocations	
8.1.4 Evaluation of the SEN Pupil Allocation and Choice of Indicators	
8.1.6 The Primary / Secondary Differential	
8.2 THE DESIGN OF AN IMPROVED SEN FORMULA	
8.2.1 The SENCO Allocation	
Formula Funding and Special Educational Needs Table of Contents	5

OU/PhD/AJM/April 1998

8.2.2 The Social Disadvantage Allocation	277
8.2.3 The SEN Pupil Allocation	
8.2.4 Allocation Model 1	
8.2.5 Allocation Model 2	
8.2.6 Allocation Model 3 8.3 SUMMARY	
8.5 SUMMAR I	
CHAPTER NINE FURTHER CONSIDERATIONS OF THE SEN FORMUI	
9.1 THE POTENTIAL USE OF NATIONAL CURRICULUM ASSESSMENT INFORMATIO	N302
9.1.1 Funding for Key Stage 2 Pupils	
9.1.2 Further concerns over the use of aggregated National Curriculum Assessment Results	307
9.1.3 Funding for Key Stage 3 Pupils	309
9.1.4 Funding for Key Stage 4 Pupils	312
9.1.5 What is the relationship between the National Curriculum Assessments (NCA) of	
Cognitive Abilities Test (CAT)? 9.1.6 An Evaluation of a SEN Index based on National Curriculum Assessments	313 317
9.1.7 Further Research	
9.2 THE DOUBLE FUNDING OF PUPILS WITH STATEMENTS OF SPECIAL EDUCATIO	
NEEDS	
9.3 PUPILS EXPERIENCING SPECIFIC LEARNING DIFFICULTIES	323
9.3.1 The Use of National Curriculum Core Subject Discrepancies and Attainment Test Sco.	
9.4 PUPILS IDENTIFIED AS HAVING EMOTIONAL AND/OR BEHAVIOURAL DIFFICU	
9.5 ALLOCATION MODEL 4	332
9.6 SUMMARY	336
CHAPTER TEN SUMMARY AND CONCLUSIONS	347
10.1 SUMMARY OF THE MAIN POINTS ARISING FROM THE AIMS AND KEY QUESTI	
10.1.1 Kined Subsidiers, Aire	
10.1.1 First Subsidiary Aim 10.1.2 Second Subsidiary Aim	
10.1.3 Third Subsidiary Aim	
10.1.4 Fourth Subsidiary Aim	
10.2 POLICY MAKING AND RESEARCH REVISITED	357
10.3 CONCLUSIONS	365
REFERENCES	368
APPENDIX A	
Headteacher Questionnaire	
APPENDIX B	
SENCO Questionnaire	
APPENDIX C	
SENCO and Head of Department Proforma for audit of resources for pupils with	
educational needs	
APPENDIX D	386
Glossary of Terms	386

LIST OF TABLES AND FIGURES

Table 1.1 Table 2.1	Summary Table to show Aims, Key Questions, Methods and Chapter Structure Working Groups in Whiteshire relating to the development and construction of a special	24
Table 2.2	educational needs formula to be included in the Local Management of Schools scheme The Sample Sizes from the 1996 National Curriculum Assessment Databases in Whiteshin	
	55	
Table 4.1	Percentage of Secondary Pupils with Different Combinations of Characteristics in Verbal	
	Reasoning Band 3 (ILEA, 1982, pp.9,11)	105
Table 4.2	Definitions of equity (Simkins, 1995)	
Table 4.3	Allocation to schools in Kent per pupil with SEN at various levels (Marsh, 1997a)	116
Table 5.1	Staffing recommendations for children with special educational needs taken from Ministry	y of
	Education (1959a) and DES Circular 4/73	132
Table 5.2	A Staffing Model as described in DES Circular 11/90 Annex A	142
Table 5.3	To show the overall LMSS Budget Distribution in Whiteshire	151
Table 5.4	Funding per Planned Place in Whiteshire	
Table 6.1	Number of LEAs which participated in the 1996/97 AEN survey	161
Table 6.2	The Distribution of LEAs in the Survey by High, Mid or Low Pupil Numbers in LEA	
	Maintained Mainstream and Special Schools	162
Table 6.3	1996 Survey : Indicators used by English LEAs for Funding Additional Educational Need	
	(n= 85)	
Table 6.4	1992 Survey : Indicators used by LEAs in England and Wales for Funding Additional	
14010 011	Educational Needs (n=72) (Lee, 1992a)	163
Table 6.5	The Number of Different Indicators used by English LEAs for Funding AEN	165
Table 6.6	Level of Resources by Type of Authority	
Table 6.7	Level of Resources by Size of Authority	
Table 6.8	The Total SEN Expenditure as a Percentage of GSB (1994-95 to 1996-97)	
Table 6.9	AEN Expenditure Ranges by Type of LEA	
Table 6.10	The percentage of the AEN Budget for pupils without statements by Different Indicators.	172
Table 6.11	The use of Key Criteria by LEAs	
Table 6.12	Severity Markers for General Learning Difficulties (Stockport)	
Table 6.12	Mode and Range of National Curriculum Attainment Levels used by LEAs as criteria for	101
	significant levels of need for pupils with general learning difficulties	196
Table 6 14	Results of the 1996 National Curriculum assessments of 7 year olds in England (DfEE,	100
1 2010 0.14		107
Table (16	1997a) Results of the 1996 National Curriculum assessments of 11 year olds in England (DfEE,	10/
Table 6.15		100
T-11- (1 (1997b)	100
1 able 6.16		100
Table 6 17	2227	103
1 able 6.17	Methods used by LEAs to determine significant levels of need for specific learning	104
T-11- C 10	difficulties	194
1 able 6.18	Mean and Range of Attainment Ages used by LEAs as criteria for pupils with specific	107
T 11 (10	learning difficulties	197
Table 6.19	Discrepancies between National Curriculum English subject level and those for Maths and	
	Science (1992 Key Stage 3 results, n=1104)	
Table 7.1	Table to show Non-Statemented SEN Budgets for 1995/96 and Free School Meal Entitlen	nent
	for schools in the two sample LEAs	207
Table 7.2	Differences in Funding Amounts in the Two LEAs for 1994/95	208
Table 7.3	Percentage of pupils in special and mainstream schools in Mercia and Whiteshire at Janua	
	1997	
Table 7.4	The Number of Statements in Whiteshire from 1988 to 1997	
Table 7.5	Percentage of overall statements within Whiteshire by type of learning need as at January	
	1997	
Table 7.6	Resource Levels for Pupils with Statements in Mercia and Whiteshire for 1994/95	229

Table 7.7	Numbers of Pupils at each of the Code of Practice Stages for schools in the two sample LEAs
Table 7.8	Pupils assessed as experiencing moderate learning difficulties
Table 7.9	Pupils assessed as experiencing specific learning difficulties
Table 7.10	Pupils assessed as experiencing emotional and/or behavioural difficulties
Table 8.1	The Amounts distributed under the LMS formula in Whiteshire for non-statemented Additional Educational Needs (1997/98)
Table 8.2	The Percentage School Ranges in Whiteshire for Free School Meals Entitlement, SEN Index
14010 0.2	and Statements at January 1996.
Table 8.3	Matrix to Illustrate Features of Whiteshire's Present SEN Funding Formula against
	Evaluative Criteria
Table 8.4	The Total SEN Expenditure in Whiteshire as a Percentage of GSB
Table 8.5	Percentage of Pupils Eligible for Welfare Benefits at January 1991 to 1996
Table 8.6	The Percentage of Pupils Entitled to Free School Meals and Eligible for Welfare Benefits in Whiteshire Schools at January 1996
Table 8.7	School level correlations between Free School Meals Entitlement and Welfare Benefit
	Eligibility
Table 8.8	Correlations between the Social Disadvantage Indicators and Educational Tests at a School Level
Table 8.9	The Funding of Y6 and Y7 pupils with non-statemented SEN (NSSEN) in Whiteshire
	(1997/98)
Table 8-10	Options for the SENCO Allocation Used in the Three Models
	The Non-statemented SEN Budget Allocated for SENCO, Social Disadvantage and SEN
	Pupils in each of the Three Proposed Models
Table 8 12	Options for the Social Disadvantage Allocation Used in the Three Models
	Illustration of Model 1
	Allocation under Model 1 for a 200 place primary school with 39% WBE and 24% of pupils
1 2010 0.14	
T-1-1-015	identified on the Year 2 Educational Tests
1 2010 0.15	Allocation under present arrangements for a 200 place primary school with 31% identified by the SEN Index
Table 8.16	Allocation under Model 1 for a 750 place secondary school with 36% WBE and 20% of
	pupils identified on the Year 7 Cognitive Abilities Test
Table 8.17	Allocation under present arrangements for a 750 place secondary school with 20% of pupils
	identified on the Year 7 Cognitive Abilities Test
Table 8.18	Illustration of Model 2
Table 8.19	Allocation under Model 2 for a 200 place primary school with 25% FSME and 24% of pupils
	identified on the Year 2 Educational Tests
Table 8.20	Allocation under Model 2 for a 750 place secondary school with 22% FSME and 20% of
	pupils identified on the Year 7 Cognitive Abilities Test
Table 8.21	Proposed Budget Totals for the Different Formula Elements in Allocation Model 3
	Primary and Secondary Pupil led and Non-Pupil led Budget Totals in Allocation Model 3291
	The impact of redistributing £3.3 million from the AWPU budget in Whiteshire for a 200
	place primary school and a 750 place secondary school
Table 8.24	Illustration of Model 3
	Allocation under Model 3 for a 200 place primary school with 25% FSME
	Allocation under Model 3 for a 750 place secondary school with 22% FSME and 20% of
	pupils identified on the Year 7 Cognitive Abilities Test
Table 8.27	NSSEN Budget Allocations under Models 1, 2 and 3 for a 200 place Primary School and a
	750 place Secondary School 297
Table 8.28	Summary of Budget Modelling for all Primary Schools in Whiteshire under Models 1 and 2
	(n=592) compared to the existing SEN Index
Table 8.29	Summary of Budget Modelling for all Secondary Schools in Whiteshire under Models 1 and
	2 (n=98) compared to the existing SEN Index
Table 9.1	1995 and 1996 National Curriculum Assessments : Cumulative Percentage of Pupils with
. –	Low Performance in Whiteshire at the end of Key Stage 1 (1995 n=18,547 pupils, 1996
	n=17,479 pupils)
Table 9.2	1996 National Curriculum Assessments Key Stage 1 : Percentage of Pupils at each
· · · · · · · · · · · · · · · · · · ·	Attainment Level in Whiteshire
Formula Fundi	ng and Special Educational Needs 8

List of Tables OU/PhD/AJM/April 1998 ð

Table 9.3	Key Stage 2 SEN Pupil Allocation Used in Model 4 based on 1996 Key Stage 1 National	
	Curriculum Assessments	309
Table 9.4	1996 National Curriculum Assessments : Cumulative Percentage of Pupils with Low	
	Performance in Whiteshire at the end of Key Stage 2 (n=14,814 pupils)	310
Table 9.5	1996 National Curriculum Assessments Key Stage 2 : Percentage of Pupils with Low	
	Performance for English, Mathematics and Science in Whiteshire	311
Table 9.6	The Key Stage 3 SEN Pupil Allocation Used in Model 4 based on Key Stage 2 National	
	Curriculum Assessments	312
Table 9.7	1996 National Curriculum Assessments : Cumulative Percentage of Pupils with Low	
	Performance in Whiteshire at the end of Key Stage 3 (n=6,083 pupils)	313
Table 9.8	1996 National Curriculum Assessments Key Stage 3 : Percentage of Pupils with Low	
	Performance for English, Mathematics and Science in Whiteshire	314
Table 9.9	The Key Stage 4 SEN Pupil Allocation Used in Model 4 based on Key Stage 3 National	
	Curriculum Assessments	315
Table 9.10	Pupil level correlations between Key Stage 2 National Curriculum Assessments and	
	Cognitive Abilities Test (n=8,251)	316
Table 9.11	Pupil level correlations between Key Stage 3 National Curriculum Assessments and	
	Cognitive Abilities Test (n=4,444)	
Table 9.12	Total Number of Pupils in Whiteshire with either a Final or Proposed Statement at June 1	996
	compared to Low Performance on Key Stage 1 National Curriculum Assessments	321
Table 9.13	Total Number of Pupils with either a Final or Proposed Statement on 1996 Key Stage 1	
	National Curriculum Assessments compared to Funding Bands (n=16,247)	
Table 9.14	The Percentage of Pupils with Statements of SEN by Type of Need in Whiteshire at Marc	
		323
Table 9.15	1996 National Curriculum Assessment Core Subject Discrepancies between Maths or	
	Science and English in Whiteshire	326
Table 9.16	1996 National Curriculum Assessment Key Stage 2 and Key Stage 3 Core Subject	
	Discrepancies between Maths or Science and English by Education Area	327
Table 9.17		
Figure 1	The Relationship between Free School Meals Entitlement and Behaviour (n=1104)	
Table 9.18	Illustration of Allocation Model 4	
Table 9.19	Allocation under Model 4 for a 200 place primary school with 25% FSME	
Table 9.20	Allocation under Model 4 for a 750 place secondary school with 22% FSME	
Table 9.21	Model 4 : Non-Statemented SEN Budget Differences for Primary Schools	
Table 9.22	Model 4: Non-Statemented SEN Budget Differences for Secondary Schools	
Table 10.1	Evaluation of Whiteshire's Present SEN Index and Budget Allocation Model 4	345

PUBLICATIONS AND PAPERS ARISING FROM THE RESEARCH

Publications

- MARSH, A.J. (1995a) The Effect on School Budgets of Different Non-Statemented Special Educational Needs Indicators within a Common Funding Formula. *British Educational Research Journal* 21(1) pp99-115.
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¹ This thesis was written and all the calculations were performed on my first PC bought in 1994. Prior to that I used an Acorn Archimedes A3000 bought in 1991 for £999. The original specifications of the PC, before upgrading, were: Gateway 2000 486 DX2 66MHz with 8Mb RAM and a 424MB hard drive (price £1,499 exc. VAT@17½%), using initially SuperCalc for DOS 5.5, Microsoft Windows 3.1 (later Windows 95), Word 6, Excel 4, Access 2 (later Office 97), and SPSS 6 (later SPSS 7).

ABBREVIATIONS

AEN	Additional Educational Needs	
ASB	Aggregated Schools Budget	
AWPU	Age Weighted Pupil Unit	
CAT	Cognitive Abilities Test	
CATagg	Cognitive Abilities Test aggregated score for the 3 sub tests	
CoP	Code of Practice	
DES	Department of Education and Science	
DFE	Department for Education	
DfEE	Department for Education and Employment	
GSB	General Schools Budget	
KS1/2/3/4	Key Stage 1/2/3/4	
LEA	Local Education Authority	
LMS	Local Management of Schools	
LMSS	Local Management of Special Schools	
LSA	Learning Support Assistant	
NCA	National Curriculum Assessments	
NSSEN	Non-statemented special educational needs	
PDT	Primary Dictation Test	
PRT	Primary Reading Test	
PSB	Potential Schools Budget	
OFSTED	Office for Standards in Education	
SEN	Special Educational Needs	
SSA	Standard Spending Assessment	
TATTagg	Teacher Assessment and Test/Task aggregated score for National Curriculum Assessments in English, Mathematics and Science	

PREFACE

...whose eyes glazed over when the question of funding and finance was raised...²

This thesis is concerned with the allocation of resources by the method of formula funding for pupils with special educational needs but without statements. The research has been conducted in the context of increasing concern about the level and effectiveness of expenditure on special educational needs (SEN). This has manifested itself in a number of ways but a common experience was an inability on the part of Local Education Authorities (LEAs) to contain budgets within previously agreed totals (Coopers and Lybrand, 1996a). A central theme throughout the thesis will be the national and international concern about the escalating costs of providing for pupils with special educational needs (e.g. TES, 1997d; Wolman and Parrish, 1996).

The national concern over the growth in special educational needs expenditure has led many LEAs to direct resources towards budgetary control as well as towards the identification of individual pupil need. Coopers and Lybrand used the term the "SEN time bomb" to describe the escalating budgetary commitments of pupils with special educational needs.

² Quote from Mr Robin Squire, MP who gave evidence as the Department for Education Parliamentary Under-Secretary of State, to the House of Commons Education Committee "A Common Funding Formula for Grant-Maintained Schools", 2 March 1994.

Previous concerns about the management of SEN were voiced by the Audit Commission (1994). During 1993 auditors appointed by the Audit Commission undertook value for money audits in nearly all LEAs. A sample of 61 of the District Audit reports were collated which focused on the "Provision for Pupils with Special Educational Needs" and highlighted deficiencies which related to:

- poor framework of policy and strategy
- lack of clarity about the roles and responsibilities of LEAs and schools
- lack of monitoring and accountability
- poor targeting of resources
- poor management and administration of the assessment process.

In relation to these deficiencies, and in particular to poor framework of policy and strategy, the Audit Commission felt that LEAs, in general, had not been clear about the purpose of their SEN funding. A central point throughout the thesis is that a funding formula can be viewed as a key instrument of policy and can therefore, if properly designed, assist in delivering policy objectives.

The genesis of this research is set against the implementation of the 1988 Education Act and the introduction of Local Management of Schools. At that time I had been employed as a LEA educational psychologist (EP) for four years, having previously taught in primary, secondary and special schools in socially disadvantaged areas. My work as an EP was also mainly with schools from areas of high unemployment and low socio-economic status. I observed from an early stage that the children from these

schools were often doubly disadvantaged from both the standpoints of school and home. Schools in disadvantaged areas were not able to supplement their resources by fund raising activities at the levels seen by schools in more affluent areas. At home those parents who were on welfare benefits e.g. income support, clearly had less to spend than other parents not in receipt of welfare benefits, on supplementing their children's learning and overall development with broadly "educational" activities of their own. I became particularly interested in how to provide an equitable system of educational psychology service delivery to schools which was not based on number on roll. The traditional method of time allocation to schools had been to use the size of the school to determine how many visits would be made in an educational year. This method appeared to me to discriminate against small or medium sized schools with high levels of special educational needs. Details of a proposed alternative time allocation model for an educational psychology service have been reported elsewhere (Marsh et al. 1989; Marsh, 1995b). The model was based on the strong relationship reported in the literature between social disadvantage and learning difficulties which will be explored in greater detail in Chapter Three.

Following on from the initial stages of this work I was then asked by *Whiteshire* to join three separate working groups which looked at the development of SEN funding formula to be included in the LMS scheme. Membership of these working groups provided an invaluable insight into the dynamics of policy formulation within an LEA. Further reference and discussion of the special needs discourses held by members from the different working groups will be made in the thesis. My involvement in this area of

Formula Funding and Special Educational Needs Preface OU/PhD/AJM/April 1998 LEA policy development provides evidence for Corbett and Norwich's (1997) observation of a subtle shift from more passive to active issues.

Since the implementation of the 1988 Education Act, Local Management of Schools (LMS) and Local Management of Special Schools (LMSS), LEAs have been faced with strategic choices in four main areas (Coopers and Lybrand, 1996a). These are:

- resource definition
- resource allocation
- resource management
- resource monitoring and evaluation

Whilst there is a considerable overlap between the four areas, this thesis is mainly focussed on resource allocation by formula funding and its connection with resource definition, resource management and resource monitoring and evaluation. The research has been carried out against the backcloth of changing legislation in the field of special educational needs and Local Management of Schools. During the course of the thesis various sets of guidance have been issued by the government about the implementation of Local Management of Schools i.e. Circular 7/88 (DES, 1988a); Circular 7/91 (DES, 1991) and Circular 2/94 (DFE, 1994b). Additionally the 1993 Education Act and Regulations received royal assent. Essentially the 1993 Act builds on the principles and practices first set out in the 1981 Education Act. It also required the Secretary of State to issue a Code of Practice on the Identification and Assessment of Special Educational Needs which came into effect on 1 September 1994. The 1993 Education Act has since

Formula Funding and Special Educational Needs Preface OU/PhD/AJM/April 1998 been superseded by the 1996 Education Act, however the parts relating to special educational needs were not significantly altered. A Green Paper on Special Educational Needs was published in October 1997 *Excellence for All Children* (DfEE, 1997e) which may lead to a revised Code of Practice in 1999.

Although resourcing special educational provision in the days before LMS was a comparatively simple matter (Fish and Evans (1995), it was not without its own problems e.g. House of Commons (1993) and the Audit Commission (1992a). Formula funding was proposed as part of the policy of Local Management of Schools as an alternative method of resource allocation to the three main systems described by Knight (1993a). These are:

- historic funding
- bidding
- officer discretion

Historic funding describes the case whereby the school receives in a particular year what it spent the previous year modified by a few percentage points. If a formula is well designed then it can be more equitable than historic funding since it can take into account changing needs. Bidding represents the case whereby the school puts forward a proposal for funding based on known criteria, however this can be costly to administer. Prior to LMS, "LEA officer discretion" was used to allocate extra staff to schools where they judged the needs to be greatest. The method of "officer discretion" is not as equitable as formula funding as it can be opaque and open to the personal preferences of

the adjudicating officer. However at the moment of writing this thesis there is still an ongoing debate whether more "complicated" procedures for distributing resources are actually more effective or not and indeed what the notion of effectiveness means in this context. Although a strong case can be put forward to support the use of formula funding over other methods of resource allocation, there is still the problem of accountability for the use of the funds allocated to the school.

Almost all LEAs have considered methods for identifying and funding pupils with special educational needs but without statements within their LMS formulae. Yet the 1988 Education Act gave no mention to how schools should be made accountable for the money that they received from the LEA for non-statemented special educational needs (NSSEN).

It will be for the school to consider how best to deploy its overall resources to offer the necessary provision....(DES, 1989a, para. 12).

This point is illustrative of Coopers and Lybrand's fourth strategic choice for LEAs i.e. resource monitoring and evaluation and also of Chapter 3 *Standards and Accountability* from the White paper *Excellence in Schools* published in July 1997 (DfEE, 1997d). Further discussion of this important issue will take place in the final chapter of the thesis.

It is in the context of these issues that my work, both for *Whiteshire* and for the thesis, has focused on developing an improved funding formula for special educational needs.

Formula Funding and Special Educational Needs Preface OU/PhD/AJM/April 1998

FORMULA FUNDING AND SPECIAL EDUCATIONAL NEEDS

Part I

From Theory to Practice

Formula Funding and Special Educational Needs OU/PhD/AJM/April 1998

CHAPTER ONE FORMULATION OF KEY RESEARCH QUESTIONS

1.1 AIMS, KEY QUESTIONS AND CHAPTER STRUCTURE

The main aim of the thesis is to investigate the principles and practice for allocating additional resources by formula funding, to provide education for pupils with special educational needs (SEN) but without statements within the context of Local Management of Schools (LMS). There will also be four subsidiary aims. The first subsidiary aim is to investigate how the purposes underlying differential funding for special educational needs affect the rules for allocation embodied in a funding formula. The second subsidiary aim is to examine the funding relationship for non-statemented special educational needs and pupils with statements in an attempt to develop a coherent approach to resourcing throughout the continuum of SEN. The third subsidiary aim is to investigate how a SEN funding formula can be best constructed which meets a specified range of principles. Evidence will be presented which will enable Local Education Authority policy makers to make an informed choice about which indicators of nonstatemented special educational needs (NSSEN) should be included in the formula. The fourth subsidiary aim is to examine different types of formula which could be used across both the primary and secondary phases and to simulate the effects on schools' budgets. Each of the subsidiary aims is addressed through more specific key questions (see Table 1.1).

The thesis is in two main parts. Firstly, in Chapters One to Five, a theoretical

component provides the key questions, the research methodology, a thorough analysis of the conceptualisation of special educational needs, an examination of the principles for evaluating a funding formula and provides a critique of LMS and its effects on special educational needs. Secondly, in Chapters Six to Nine, there is an empirical component, which presents two national surveys, case studies from two LEAs and examples of SEN funding models for use within the framework of LMS.

In Chapter One the aims and key questions are formulated. In Chapter Two the research methodology is presented. Chapter Three discusses the conceptualisation of special educational needs and also examines the two main purposes for allocating additional funding for special educational needs i.e. effectiveness and equity. Chapter Four presents a set of criteria against which school funding formulae should be judged. Chapter Five attempts to draw out the historic association between special educational needs with provision and funding by consideration of the pertinent government circulars of guidance relating to both of these areas.

The empirical and technical component of the thesis will focus on the areas of resource definition, resource allocation and resource management. Chapter Six considers current SEN practice within LEAs by exploring two national surveys.

Chapters Seven, Eight and Nine describe a three part empirical study which addresses the question of how to design a SEN formula. Chapter Seven examines the resource allocation issue of how the quantity of resources allocated for specific forms of special educational need is determined. Chapter Eight considers, by way of correlation analysis, different indicators of SEN. Chapter Nine provides a set of technical evaluations from which recommendations will be drawn for how the formula can be further 'improved', relative to certain normative criteria mentioned in Chapter Eight. The chapter also examines three further issues: the effect on school budgets of different special educational needs indicators by the use of computer budget modelling; the use of National Curriculum Assessments (NCA) and whether different 'types' of SEN should be included within the formula.

Chapter Ten provides the summary and conclusions. It will draw on the findings to the key questions listed in Chapter One and it will evaluate the amended allocation model in relation to the principles discussed in Chapter Four. Particular attention will be paid to Coopers and Lybrand's (1996a) fourth strategic policy area of resource monitoring and accountability.

Table 1.1Summary Table to show Aims, Key Questions, Methods and
Chapter Structure

Main aim : to investigate the principles and practice of allocating additional resources by formula funding, to provide education for pupils with special educational needs (SEN) within the context of Local Management of Schools (LMS).

AIMS	KEY QUESTIONS	METHODS
First subsidiary aim : to investigate how the purposes underlying differential funding for special educational needs affect the rules or principles for allocation embodied in a funding formula.	Q1 How does the conceptualisation of special educational needs impact upon policy within Local Education Authorities? (Chapter Three)	Evidence will be presented from the literature about how the conceptualisation of special educational needs can be viewed from two main policy discourses i.e. 'special needs pupil' discourse and 'school and teacher effectiveness' discourse.
	Q2 What contradictions and tensions are apparent when the purposes of providing additional funding for special educational needs are examined? (Chapter Three)	Further evidence will be presented from the research literature about the main purposes and principles which should be considered in detail when constructing or designing a SEN formula.
	Q3 What principles or criteria should be considered when evaluating a funding formula and how do they relate to the purpose of the additional funding? (Chapter Four)	

AIMS	KEY QUESTIONS	METHODS
Second subsidiary aim : to examine the funding relationship between non- statemented special educational needs and pupils with statements in an attempt to develop a coherent approach to resourcing throughout the continuum of SEN.	Q4 What have been the historical arrangements for funding pupils with special educational needs? (Chapter Five)	Reference will be made to the government circulars of guidance and other research evidence from the literature relating to the arrangements and provision for special educational needs.
	Q5 What is the current practice in LEAs with regard to resource definition, resource allocation and resource management? (Chapter Six)	Two national surveys will be conducted. The first survey will consider current practice in LEAs for resourcing additional educational needs (AEN) in 1996/97 and will look at the areas of resource definition and resource allocation. The second survey will be concerned with resource management issues of how consistency can be ensured in decision making relating to the initiation of a Code of Practice Stage 4 statutory assessment.
	Q6 What is the relationship between special educational needs and resource levels and how does this match professional views? (Chapter Seven) Q7 Is it worthwhile for LEAs to differentiate financially between different levels of need? (Chapter Seven)	Case studies will be presented from two LEAs (<i>Whiteshire</i> and <i>Mercia</i> , 8 schools in total) to examine the different levels of additional teaching arrangements provided for both statemented and 'non- statemented' SEN pupils. The school's special educational needs policy will be examined in detail and views will be sought from relevant professionals on the proposed resources thought to be necessary to meet the needs of specified pupils.

AIMS	KEY QUESTIONS	METHODS
Third subsidiary aim : to investigate how a special educational needs funding formula for mainstream schools within an English Local Education Authority (LEA) (<i>Whiteshire</i>) can be best constructed which meets a	Q 8 What are the 'normative' or value questions which are informing decision making about the SEN formula within Whiteshire? (Chapter Eight)	An examination will be made of 'normative' or value questions within <i>Whiteshire</i> and it will be shown how these questions are informing decision making about the SEN formula.
specified range of principles.	Q9 How can the existing SEN formula be improved? (Chapters Eight and Nine)	An alternative allocation model based will be proposed based on three elements: a basic allocation per school for the responsibility held by the Special Educational Needs Coordinator (SENCO); an allocation based on social disadvantage in the population served by the school and an allocation per pupil identified as experiencing SEN.
Fourth subsidiary aim : to examine different types of formula which could be used across both the primary and secondary phases and to simulate the effects on schools' budgets.	Q10 What is the impact on school budgets of using different special educational needs indicators? (Chapters Eight and Nine) Q11 Could National Curriculum Assessments replace other standardised educational tests in the formula on the grounds of validity, dependability and reliability? (Chapter Nine)	An SEN formula for all mainstream schools will be simulated by computer budget modelling. Budgets will be compared with actual budgets. Conclusions drawn from the previous key questions will determine which indicators and relative weightings are most appropriate for specified purposes.
	Q12 Should recognition be made within the formula for different types of SEN e.g. specific learning difficulties and emotional and/or behavioural difficulties? (Chapter Nine)	

Key Questions 1 to 3 (Chapters Three and Four) relate to the first subsidiary aim i.e. to investigate how the purposes underlying differential funding for special educational needs affect the rules or principles for allocation embodied in a funding formula (see Table 1.1).

KEY QUESTION 1. HOW DOES THE CONCEPTUALISATION OF SPECIAL EDUCATIONAL NEEDS IMPACT UPON POLICY WITHIN LOCAL EDUCATION AUTHORITIES?

A fundamental issue of concern to this research is a full consideration of the concept, definition, identification and measurement of special educational needs. A review of the literature appears in Chapter Three. Particular attention is paid throughout the thesis to Galloway, Armstrong and Tomlinson's (1994) set of policy discourses, which provide a good basis for viewing the problem of how special educational needs should be conceptualised. Galloway et al. consider that the confusion over the term 'special educational needs' is not essentially one of identifying criteria, but rather of deciding when the term is appropriate. They describe three areas of policy discourse which have emerged about the causes and the solutions to the 'problem' of widespread low and/or under-achievement. This thesis will concentrate on two of these areas. Firstly, the 'special needs pupil' discourse which places emphasis on a careful assessment of the individual pupil to determine whether extra support is required in order to meet the needs of that child. This discourse concentrates on identifying the supposedly fixed characteristics of children with special needs and is predicated on the notion of help for the individual child.

Secondly, the 'school and teacher effectiveness' discourse which is based on research demonstrating the impact of schools on their pupils' progress and behaviour (e.g. Rutter et al., 1979; Mortimore et al., 1988; Smith and Tomlinson, 1989; Sammons, Hillman and Mortimore, 1995). This discourse has grown in response to the overemphasis of 'within-child' variables or the concentration on individuals' deficiencies observed in the special needs discourse. The 'school and teacher effectiveness' discourse sees special needs less as a social construct than as the product of the failure of various aspects of the educational system to respond to real differences between children. This discourse is concerned with the whole school context and uses research which demonstrates the impact of schools on their pupils' progress and behaviour. Although there are important differences between the 'special needs pupil' discourse and the 'school and teacher effectiveness' discourse, the contrast should not be over elaborated, as school effectiveness (SE) research does not ignore the powerful impact of pupil background factors such as socio-economic status of pupils. SE studies demonstrate the strength of the statistical links between such factors and prior attainment measures in value added studies and argue that it is because of these strong links that 'like with like' comparisons with schools (which explicitly control for intake differences) are more appropriate than raw league tables of test or exam results (see Fitz-Gibbon, 1996). The concept of differential school effectiveness is also important and is discussed in more detail by Sammons et al. (1993) and Sammons (1996). Differential school effects concern the existence of systematic differences in attainment between schools for different pupil groups (those with different levels of prior attainment or different background characteristics), once the average differences between these groups have been accounted for.

A third discourse is also described by Galloway et al. namely the 'school failure' discourse, which is essentially a political variant of the school and teacher effectiveness discourse and sees the problem as poor teaching and outdated ideology.

In the thesis I shall reflect on the role that the discourses have played in the policy and practice of formula funding. It became clear to me that the discourses also constitute a theoretical basis for attaining an objective (Fulcher, 1989 p.8). If the 'special needs pupil' discourse occurred in relation to formula funding and special educational needs, there should be evidence of factors and assessment information relating to the individual pupil. On the other hand if formula funding and special educational needs were to proceed according to the 'school and teacher effectiveness' discourse, it would be expected to have a focus on curriculum delivery and on the teacher's work rather than with individual pupils.

Significantly, since the first draft of the thesis was completed, a general election took place in May 1997 and the new government quickly published a White Paper *Excellence in Schools* (DfEE, 1997d) in July 1997. The White Paper is felt by Hattersley (1997) to be based on the assumption that "bad schools" are the products of poor teachers, who too often accept low levels of achievement as the inevitable fate of children from working class homes. This comment by the former deputy leader of the Labour party, echoes Galloway, Armstrong and Tomlinson's (1994) view that the 1988 Education Act was also based on the 'school failure' discourse. The Green Paper on special educational needs *Excellence for all Children* (DfEE, 1997e) published 3 months later in October 1997, builds on the Code of Practice (DfEE, 1994a) with its

emphasis on the 'special needs pupil' policy discourse. The two governmental papers give a good illustration of the importance of Key Question 1. This issue of the conceptualisation of SEN is a constant and important thread throughout the thesis.

Key Question 1 considers the impact on the development of the concept and the scope of special educational needs by the 1944, 1981, 1988, 1993 and 1996 Education Acts. The discussion will encompass children's rights and the definition, identification and measurement of special educational needs. It will also consider the views of educationalists who feel that a radical reconceptualisation of the state of provision for special needs is necessary (e.g. Dyson and Gains, 1993).

Throughout this research there is a complex interplay of tensions. The technical perspective of formula construction (e.g. Chapters Eight and Nine) has to be balanced against a thorough analysis of the issues and consequences of following such an approach e.g. Barton, 1993. Such an analysis has been attempted in Chapter Three. Additionally the thesis reports that LEAs are moving towards more needs driven formulae to match provision and resources with identified needs (see Chapter Six). However this approach carries the danger of labelling or classifying learners in a way that places the emphasis on a 'child deficit' model of SEN without due regard to the contextual variables.

The outcome of following an approach resulting from the 'special needs' discourse is that there may be a reinforcement of disempowerment for both children with special educational needs and their parents. Armstrong (1995) has argued that although the 1981 and 1993 Education Acts have emphasised the need for parents to work together with professionals in the assessment of children's special educational needs, the essential concept is one of power rather than partnership.

For children and their parents the outcome of partnership may, in practice amount to disempowerment by consensus. In these circumstances, the most effective partnership may be that which is forged through the strength of collective action against the structures of the state and against the imposition of needs by the state (Armstrong, 1995 p. 150).

The final chapter of the thesis will revisit Key Question 1 with particular respect to the case study LEA of *Whiteshire*.

KEY QUESTION 2. WHAT CONTRADICTIONS AND TENSIONS ARE APPARENT WHEN THE PURPOSES OF PROVIDING ADDITIONAL FUNDING FOR SPECIAL EDUCATIONAL NEEDS ARE EXAMINED?

Key Question 2 examines the tensions and contradictions pertaining to the purpose of providing additional resources (Chapter Three). Additional educational needs (AEN) is the name given to the range of factors which LEAs take into when funding schools for special educational needs and social disadvantage. Previous studies of funding arrangements for AEN have noted that in many cases the distinction between special educational needs and social disadvantage is blurred, in other words the purpose of the additional resources has not been defined. This point is crucial in policy formulation as it will determine future decisions about resource allocation. It will be proposed that there are two main purposes of providing additional resources i.e. effectiveness and equity. A review of the literature provides a theoretical analysis of these two main purposes.

KEY QUESTION 3. WHAT PRINCIPLES OR CRITERIA SHOULD BE CONSIDERED WHEN EVALUATING A FUNDING FORMULA AND HOW DO THEY RELATE TO THE PURPOSE OF THE ADDITIONAL FUNDING?

There are a range of objectives or principles which provide criteria against which different methods of allocating resources for special educational needs can be assessed in order to determine the preferred set of methods. The research was conducted against a set of local principles adopted by *Whiteshire*, a case study LEA. I felt that these principles needed to be broadened in order to provide more general criteria for assessing the impact of a funding formula. Chapter Three presents a set of criteria against which school funding formulae should be judged. The range of principles which LEAs need to address when determining their method of allocating resources for special educational needs, include operational simplicity, stability of funding, effectiveness, equity, efficiency, cost containment and accountability. It will be argued that the purpose of SEN funding will determine which principles should be chosen.

Key Questions 4 to 7 (Chapters Five to Seven) relate to the second subsidiary aim i.e. to examine the funding relationship between non-statemented special educational needs and pupils with statements in an attempt to develop a coherent approach to resourcing throughout the continuum of SEN (see Table 1.1).

KEY QUESTION 4. WHAT HAVE BEEN THE HISTORICAL ARRANGEMENTS FOR FUNDING PUPILS WITH SPECIAL EDUCATIONAL NEEDS?

An essential component of the research process is to explore the relationship for non-

statemented SEN and pupils with statements in terms of previous historical funding arrangements. This funding issue is considered by a literature search and by reference to the pertinent government circulars of guidance (see Chapter Five). The relationship between needs and resources is illustrated firstly in Circular 4/73 (DES, 1973) which provided guidance for LEAs on staffing in special schools and classes, using categories of handicap and maximum class sizes. This guidance was updated by Circular 11/90 which proposed the concept of resource bands. Chapter Five also provides a discussion about the advantages and disadvantages of incorporating resource bands within a SEN formula.

KEY QUESTION 5. WHAT IS THE CURRENT PRACTICE IN LEAS WITH REGARD TO RESOURCE DEFINITION, RESOURCE ALLOCATION AND RESOURCE MANAGEMENT?

Before embarking on the technical and empirical component of the research, I felt it was important to be aware of the current practice in LEAs in relation to the management of SEN. To this end, two surveys were conducted both of which have been made available nationally (reported in Chapter Six). The first survey (Marsh, 1997a), which has been published by Education Management Information Exchange (EMIE) is of current practice in LEAs for resourcing additional educational needs (AEN) in 1996/97 and looks at the areas of resource definition and resource allocation. The second national survey was commissioned by the Society of Education Officers (Marsh, 1996a) and is concerned with resource management issues of how consistency can be ensured in decision making relating to the initiation of a statutory assessment. KEY QUESTION 6. WHAT IS THE RELATIONSHIP BETWEEN SPECIAL EDUCATIONAL NEEDS AND RESOURCE LEVELS AND HOW DOES THIS MATCH PROFESSIONAL VIEWS?

KEY QUESTION 7. IS IT WORTHWHILE FOR LEAS TO DIFFERENTIATE FINANCIALLY BETWEEN DIFFERENT LEVELS OF NEED?

Key Questions 6 and 7 (Chapter Seven) relate to needs and resource issues and examples are drawn from two case study LEAs *Whiteshire* and *Mercia*. Key Question 4 has already considered the government's guidelines referring to the relationship between special educational needs and resource levels (Circular 11/90, DES 1990). These guidelines only refer to resource levels for pupils with statements of SEN and do not consider the wider definition, referred to in the Warnock Report (DES, 1978), of the '18% of pupils' with SEN but without statements. Moreover Circular 11/90 suggested the use of resource bands but did not offer details of how they should be calculated, but stated that the resourcing model:

...derives from observations of classroom work seen to promote learning and care for various groups of pupils (para. 6).

One of the principles adopted by the Secondary Special Needs Working Group in *Whiteshire* referred to the distribution formula being sufficiently needs responsive to reflect the continuum of SEN. The Green Paper *Excellence for all Children* also makes this point (DfEE, 1997e, Appendix 2). Previous observations have noted that typically a resource based division is imposed upon the continuum of special needs, which has been termed the 'resource divide' (Dessent, 1987).

The first national survey (Marsh, 1997a) referred to in Key Question 5, shows a trend in

the AEN formulae towards financial differentiation between different levels of need. This trend is set against a previous finding by Lee (1992a) that most LEAs distribute their non-statemented SEN (NSSEN) resources as a standard unit cost. That is to say, each identified NSSEN pupil is allocated the same amount of money irrespective of the degree and the nature of the learning difficulty. To be equitable this practice would require all NSSEN pupils to have similar needs.

If LEAs are moving towards more refined methods of allocation, I felt that it was important to examine the relationship between special educational needs and resource levels within the context of the school particularly at the interface of pupils which have a statement and those which do not have a statement. Key Question 6 develops the issue further and considers the views of relevant professionals from case studies carried out in two LEAs, on the proposed resources thought to be necessary to meet the needs of specified pupils. Key Question 7 considers the second form of equity, namely vertical equity i.e. whether financial differentiation is thought to be worthwhile within a formula.

Key Questions 8 and 9 relate to the third subsidiary aim i.e. to investigate how a special educational needs funding formula for mainstream schools within an English Local Education Authority (LEA) (*Whiteshire*) can be best constructed which meets a specified range of principles (see Table 1.1).

KEY QUESTION 8. WHAT ARE THE 'NORMATIVE' OR VALUE QUESTIONS WHICH ARE INFORMING DECISION MAKING ABOUT THE SEN FORMULA WITHIN WHITESHIRE?

KEY QUESTION 9. HOW CAN THE EXISTING SEN FORMULA IN WHITESHIRE BE IMPROVED?

An important point to consider is that research and development cannot provide answers to the value questions with which social and educational issues are imbued (Husen, 1984). Policy making within LEAs is set within the framework of 'normative' or value questions which have developed over time and which relate to a number of issues of concern to schools. Examples of these issues relate to : the purpose of additional allocations; the funding of schools or individual pupils; the accountability for SEN resources; the differentiation of resources across the continuum of SEN, including the relationship between funding for statemented and non-statemented SEN banding and the size of the steps between the bands; and the balance between primary and secondary funding. A critique of *Whiteshire's* current SEN formula is provided in Chapter Eight, the chapter also shows how the issues of concern are influencing decision making about amendments to the formula.

Key Question 9 (Chapters Eight and Nine) considers the existing SEN formula within *Whiteshire* and offers an 'improved' alternative allocation model based on three elements: a basic allocation per school for the responsibility held by the Special Educational Needs Coordinator (SENCO); an allocation based on social disadvantage in the population served by the school and an allocation per pupil identified as experiencing SEN. Reference is made to computer budget modelling which will help to

determine possible gains and losses in school budgets by comparison with actual budgets. Additionally consideration is made of the impact of moving to a Common Funding Formula (CFF) which uses free school meals entitlement (FSME) as its only non-statemented SEN indicator. The assumption has been made by LEAs using simple broad indicators of social disadvantage, that correlations which exist with educational achievement are valid at both the school and pupil level; this assumption is challenged in Chapter Seven.

Key Questions 10, 11 and 12 relate to the fourth subsidiary aim i.e. to examine different types of formula which could be used across both the primary and secondary phases and to simulate the effects on schools' budgets (see Table 1.1).

KEY QUESTION 10. WHAT IS THE IMPACT ON SCHOOL BUDGETS OF USING DIFFERENT SPECIAL EDUCATIONAL NEEDS INDICATORS?

KEY QUESTION 11. COULD NATIONAL CURRICULUM ASSESSMENTS REPLACE OTHER STANDARDISED EDUCATIONAL TESTS IN THE FORMULA ON THE GROUNDS OF VALIDITY, DEPENDABILITY AND RELIABILITY?

KEY QUESTION 12. SHOULD RECOGNITION BE MADE WITHIN THE FORMULA FOR DIFFERENT TYPES OF SEN e.g. SPECIFIC LEARNING DIFFICULTIES AND EMOTIONAL AND/OR BEHAVIOURAL DIFFICULTIES?

Computer budget modelling is used to answer Key Question 10, and the analysis also provides evidence for Key Question 9. Key Questions 11 and 12 (Chapter Nine) consider two further issues. Firstly, it will provide an evaluation of the use of National Curriculum Assessments (NCA). NCA have been promoted by several LEAs in their reviews for possible inclusion in the SEN formula. Secondly it will consider the subject of including different 'types' of SEN within the formula.

Although there is evidence that an indicator such as free school meals is related to poor educational attainment (mild/moderate learning difficulties) at a school level, no such evidence exists for other 'types' of learning difficulty. It is becoming apparent that increasing numbers of pupils experiencing specific learning difficulties and pupils identified as having emotional and/or behavioural difficulties are being referred by schools for statutory assessment. If the formula is well constructed then it should demonstrate by its transparency, that a range of pupils needs are being resourced and not just those with the lowest educational attainments/abilities.

The research methodology will now be considered in the next chapter.

CHAPTER TWO RESEARCH METHODOLOGY

The core concept underlying all research is its methodology. It is not enough to follow the research procedures without an intimate understanding that research methodology directs the whole endeavour (Leedy, 1997). In any research there are ontological and epistemological assumptions which underlie different understandings of the nature of reality. These assumptions influence the methodological approach and in turn the choice of particular techniques. Methodology can therefore be thought of as a set of principles or approaches by which we assess what is counted as "knowledge".

In this chapter I am going to use researcher reflexivity to discuss the methodological issues which directly impact on this research. A number of researchers (e.g. Bryman, 1988; Winter, 1989 and Troyna, 1994) have all stressed the importance of reflexivity as a crucial activity in attempting to choose an inquiry position appropriate to the phenomenon to be studied. The discussion will encompass four main areas: the relationship between policy making and research; positionality i.e how I saw my role change within the research process; epistemological issues about the meaning and the status of the data; and mixing research methodologies and methods.

2.1 POLICY MAKING AND RESEARCH

This research is not about policy making per se but it is important to be aware of the factors and issues to do with the process of decision making, which influence the

solutions policy makers adopt. In this section I shall examine the political constraints which have impacted upon the research process and also describe a taxonomy of research models (Weiss, 1977). The thesis has been conducted within the first decade since the passage of the 1988 Education Act. During that time not only has there been changing legislation but there may also have been a definite change in the ways in which the study of special educational needs has developed. One suggestion is that there has been a shift from the passive to the active: from a focus on explaining how difficulties and disabilities arise to a focus on active policy making and provision (Corbett and Norwich, 1997). The research from this thesis has reflected this change of emphasis and has attempted to inform the policy debate about resource allocation and the management of special educational needs.

The political constraints pertaining to the research were mainly of two forms. First, the research was performed and partly funded by a Local Education Authority (*Whiteshire*) which already had an existing formula and wished to modify this formula rather than starting from scratch. Second, there are legislative boundaries set by the procedures of the Code of Practice and by Local Management of Schools (see Chapters Three and Five). The suggestions to improve the formula in Chapters Eight and Nine are set against these baselines and attempt to build on extensive working party meetings attended by myself together with education officers and representatives from the teacher associations during the period 1988 to 1993 (see Table 2.1).

Table 2.1Working Groups in Whiteshire relating to the development and
construction of a special educational needs formula to be included
in the Local Management of Schools scheme

Name of Working Group	Time Scale	Number of Meetings
LMS Primary Working Group	Sep 1988 to Nov 1988	5
Primary Review Group	Apr 1990 to Sep 1990	8
Secondary Special Needs Working Group	Feb 1991 to Nov 1993	31
Individual Commissioned Research	Sep 1995 to Dec 1997	6

The Working Groups in *Whiteshire* adopted a set of principles which imposed further restrictions upon the research. These principles were:

- 1. The formula should be simple and objective.
- A range of SEN should be encompassed by the Index e.g. moderate or mild learning difficulties, specific learning difficulties, emotional and/or behavioural difficulties, and social circumstances.
- 3. The educational component of the Index should be based on individual pupil information.
- 4. The distribution formula should be sufficiently needs responsive to reflect the continuum of SEN i.e. differentiation of resources should be considered. The present Index uses a single allocation per qualifying pupil.
- 5. The formula should seek to avoid major changes in funding year on year and should initially have some relationship with historic funding.
- Resourcing should be made available for all identified pupils with SEN in all year groups i.e. there is no additional funding for Y10 and Y11 in the present secondary Index.

- 7. Pupils with statements which are covered by arrangements for delegation should be excluded from the educational part of the Index.
- The Index should provide sufficiently differentiated resources to reduce the need for statementing.
- 9. The formula should be based on readily available information which is administratively manageable for schools and the Authority.
- 10. The resources should be clearly identifiable within the LMS formula. Schools should be able to account for those resources.

Over the years there have been many attempts to describe models which explain or predict social science research utilisation in policy formation. As Fulcher (1989) writes:

I sought a model, a theoretical platform, which might provide an understanding of policy and its failure. But the literature was evasive, though voluminous, and varied widely in its theoretical bases (p.3).

Weiss (1977) has outlined different types of model, most of which she dismisses as unrealistic. I shall now briefly outline a selection of these models in this chapter and then revisit the taxonomy in Chapter Ten to show how my research overlaps many of model types put forward by Weiss.

The first model is the classical *linear* model that has dominated the picture of how research is utilised in the physical sciences and postulates a chain from basic research to applied research to development and to application. This model also has similarities to the ideal model of rationalist decision-making (Simon, 1957) which includes as its features: a thorough analysis of current and future problems; involves the identification and then comprehensive evaluation of all policy options; and results in the adoption of

solutions which are optimal given the values of the decision-making body (Hogwood and Gunn, 1984, p.45).

Weiss and most other commentators argue that the linear model is hardly applicable in the social sciences where "knowledge does not readily lend itself to conversion into replicable technologies" (p.427). Likewise the rationalist model of decision making is of little use to those seeking a description of practice or even a feasible prescription for practice. As March (1978) argues, given current knowledge even so called 'rational choice' inherently involves a significant degree of guess-work, in particular 'guesses about future consequences of current actions and guesses about future preferences for those consequences'.

The second research model is the *problem-solving* one which postulates that specific studies are commissioned in order to assist pending policy decisions. This is considered by Weiss to be unrealistic on the grounds that policy makers do not, in fact, wait for what researchers have to tell them and then act on it, if only because there may be no consensus of goals between researchers and policy makers. This is particularly the case when the research suggests that more resources should be directed to a particular service or social problem.

The third model is the *interactive* one where there is an assumption of no "linearity" from research to utilisation but rather a "disorderly set of inter-connections and backand-forthness". This model assumes the existence of dialogue between policy makers and researchers and has a likeness to the 'garbage-can' model of decision making (Cohen et al., 1972). The 'garbage-can' model assumes a fairly chaotic process in operation and that decision makers can and usually do operate without clearly defined goals.

The fourth model is the *political* one. What often happens is that a social issue after having been debated for some time has led to firm and entrenched positions that will not be shaken by new evidence. Research findings then become ammunition for one side in a policy dispute. Fulcher (1989) presents a good example of the *politics* in formulating policy in her account of the Review of Educational Services for the Disabled in Victoria, Australia. As she states:

None of my previous work or personal experiences prepared me for the intensely political process involved in producing a report....vigorous struggles took place between Committee members and their associates in attempts to influence the Committee's decisions (p1).

The fifth model, the *tactical* one simply refers to the frequent tendency to "bury" a controversial problem in research in order to have to defend procrastination or unwillingness to take immediate action. The tactical model can also be compared with the incremental model of decision-making as a process of 'muddling through' (Lindblom, 1959), of policy-makers pursuing marginal changes to pre-existing policies, of viewing ends, means and values as inherently and reciprocally interrelated.

The sixth is the *enlightenment model* which Weiss thinks is the one through which "social science most frequently enters the policy arena". All the research models make the assumption that the findings of a specific project are intended to, or should be, used to help make a specific policy decision. However Weiss argues that this is to misunderstand the nature of policy making. She contends that policy makers do not sit down to make a clearly defined decision, ponder various options, consider the relevant

facts, including research findings, and then choose one of the options. In reality, policy making is less rational and more diffuse than this and research is only one of a number of competing and contradictory pressures that influence policy. Policy making itself is a constantly evolving long term process, involving many different actors who come and go. In a decentralised system it may not be clear where policy is made. The enlightenment model refers to the way research is "permeating" the policy making process.

With regard to this thesis aspects from at least five of the models seem to have at least some relevance and will be further discussed in Chapter Ten.

2.2 POSITIONALITY

I shall use the term 'positionality' in this section to describe my role and how it changed throughout the course of the study. My own research background was that of a 'traditional scientist' working from within a positivist standpoint and emphasising quantitative methods. I started out on the project with the 'positivist' idea that the 'findings' or substance would be the most important outcome. I believed that a well constructed funding formula could enhance the learning opportunities for pupils with special educational needs but without statements. I also believed that a well resourced SEN funding formula would reduce the requirement to perform the costly bureaucratic and lengthy procedures involved in producing a statement of SEN. Whilst I still hold these beliefs, during the thesis I became more attentive of the importance of other methodologies as I became increasingly aware of complexities surrounding the

conceptualisation of SEN and the limitations of my findings based on quantitative analysis.

The self-image of the researcher tends to be someone who is unbiased and distanced from the emotional battles of politics (Tizard, 1990). However as Bulmer (1982) has pointed out, some distinguished British social scientists (for example Titmuss, Abel-Smith and Townsend) have seen their role differently. As committed and avowed socialists, their research was explicitly political in aim and they were able to feed directly into Labour policy. Other social scientists have played a similar role in relation to the Conservative party. My role within the research is shaped by the fact that I am employed by *Whiteshire* which holds a stable set of political views. The LEA has had a single party administration since 1981 with a proud and long standing commitment to positive discrimination towards pupils with special educational needs.

Following the publication of Circular 7/88 (DES, 1988a) I was asked to join a working group concerned with the development of the primary special needs formula (see Table 2.1). The time scale for the series of meetings was limited as the LEA wished to consult with schools, governing bodies and teacher associations during the Spring term 1989. The full scheme of financial delegation had to be submitted to the Secretary of State for approval by September 1989. The small working group was rapidly convened in September with a brief to report by mid October 1988. The membership of the group consisted of three education officers, a primary adviser, a seconded primary headteacher and myself. In the end the group met on five occasions during the period September to November 1988. My role in this group and two subsequent working groups, was seen by the LEA as an education officer advising the group on 'technical' matters e.g.

availability and accessibility of county wide special educational needs data. Early on in the discussions the view was put forward by one member of the group that the amount for special needs should be incorporated within the general amount delegated to schools based on pupil numbers. This viewpoint provides a good example of a first 'normative' or value question, more of which are listed below, which have had a direct influence on the technology of SEN formula construction (Coopers and Lybrand, 1996b). The 'value' questions need to unravelled from 'fact' issues and a fuller discussion takes place in Chapter Eight. The value questions are:

- 1. Why should we spend more on some pupils than on others?
- 2. Which pupils should these be?
- 3. What are we intending to achieve by allocating additional resources and how do we know when we have achieved it?
- 4. How should we assess the numbers of these pupils?
- 5. How much extra resources should they receive?

A second working group was formed in April 1990 to review the original primary SEN index. The group included representatives from the four main teacher associations, together with nine education officers, including myself. The time scale for the group was slightly longer i.e. April to September 1990 and 8 meetings were arranged. Even so the group did not consider there was enough time to start from first principles and concentrated upon 'value' question 4 above i.e. how should we assess the numbers of these pupils? Therefore the hastily prepared initial Primary SEN index became more established and was refined rather than evaluation of other possible options (see Chapter Eight).

A third working group was formed in February 1991 and was particularly concerned with the review of the secondary SEN index. The group consisted of members from 5 teacher associations, 2 county advisers and 5 education officers including myself. There was an 'unlimited' timescale and 31 meetings took place during the period February 1991 to November 1993. Although the group had the potential to fully redevelop the secondary index, in reality only 'value' questions 2, 4 and 5 as listed above, were considered. A lengthy debate took place within the group about whether there should be transparent funding for pupils expressing emotional and/or behavioural difficulties and pupils experiencing specific learning difficulties (see Chapters Eight, Nine and Ten). Another central point to the group was the amount of extra resources to be allocated to the secondary sector and perhaps not unexpectedly the teacher associations argued for a significant additional increase to secondary schools. This third working group was a good example of Weiss's interactive model whereby the research commissioned from myself (reported in Chapter 9, Table 9.17) had no linearity and was "a disorderly set of inter-connections and back-and-forthness".

A fourth research component was an individual commission carried out between September 1995 and December 1997 which is an example of Weiss's problem-solving model. In this project I was able to perform two national surveys and to explore different funding models. Due to the relatively long period of time for the commission, I felt more able to adopt the standpoint of a 'researcher' reflecting on different methodologies and upon the limitations of my data rather than having to adopt the standpoint of an education officer, with always a weather eye on finding 'an answer' in a severely restricted timescale. At the start of this section on positionality I outlined two personal beliefs which I held about the research carried out in Whiteshire. I am still of the view that a well designed funding formula can be key instrument of policy and can help to protect the needs of non-statemented pupils. However I am less convinced of the advantages of individualised funding because of the emphasis upon the 'special needs pupil' discourse without full consideration of the contextual variables. The research process has enabled me to reconsider and to reassess my own views. It is now my opinion that the enhancement of learning opportunities for non-statemented pupils is more about attitude change within schools and about the 'school and teacher effectiveness' discourse than simply about funding systems. My second personal belief is concerned with the impact that the SEN funding formula may have on statementing rates. A well designed and well resourced formula can still assist with the budget management strategies of prevention, containment and recycling (Coopers and Lybrand, 1996a). However in practice, without good accountability systems, the formula by itself, has not been effective in controlling the number of requests for statements (see Table 7.4). My position of advocacy at the start of the research process which emphasised positivism, has changed by the end of the thesis to the more cautious approach of a 'good researcher' realising that no single, simple account can do justice to the diversity of explanations offered by social scientists (Ryan, 1970).

In the next section I shall consider epistemological issues relating to the meaning and status of the data.

2.3 THE DATA

I shall now use the following sets of questions (Mason, 1991), together with the Key Questions listed in Table 1.1, to continue with the methodological analysis. The main sets of questions are:

- a) Data on what? What does the data tell me about and crucially, what can it not tell me about? How will the data be analysed and interpreted? (Section 2.3)
- b) The integration of data. How best can I integrate qualitative and quantitative data? (Section 2.4)

Throughout this study different types of methodological techniques will be used to yield data on the principles and practice of formula funding for special educational needs. The data of this research are of two types: primary data and secondary data. Primary data is mainly used to answer Key Questions 5 to 12 which relate to the empirical part of the thesis. Secondary data is accessed to answer the theoretical part of the thesis addressed by Key Questions 1 to 4. By secondary data I am referring to the literature search which was performed to provide answers to Key Questions 1 to 3 and which mapped onto the first subsidiary aim of investigating how the purposes of additional funding affect the principles for allocation.

The second subsidiary aim examines the funding relationship between non-statemented SEN and pupils with statements and maps onto Key Questions 4 to 7. As the research was conducted within the context of Local Management of Schools, I felt it was important to get a handle on the historical arrangements for funding pupils with SEN. This point was covered by Key Question 4 and was answered by reference to secondary

data in the form of relevant government circulars and to the research literature.

The two national surveys which were conducted to answer Key Question 5 (Chapter Six) will be interpreted as primary data in the sense that the data was obtained directly from LEAs and can be thought of as original data. The material obtained from LEAs is in the form of SEN policy documentation and financial budget statements. The reasoning behind the surveys is 1) to assess whether LEAs have changed in their approach to resourcing additional educational needs since a previous survey which was conducted four years earlier (Lee, 1992a), and 2) to explore whether there is a common approach to the decision making relating to the initiation of a Code of Practice Stage 4 statutory assessment.

The main aim of this thesis set out to investigate the principles and practice of allocating additional resources for SEN *not* to present a common funding formula to be used across the country. In this respect the data from the two surveys provided an overview of current practice in the two areas of: resourcing additional educational needs and statutory assessment criteria. As mentioned previously, the genesis of the research was a request from *Whiteshire* to help in their review of formula funding arrangements and commissions were received during the course of the thesis both from the LEA and from outside the LEA. Within this context it is pleasing to note that LEA Education Officers have found the surveys to be helpful as they can compare their own policies with other 'like LEAs'. There is always the danger, whether as a researcher or an education officer, to continue working in isolation perhaps attempting "to reinvent the wheel", whilst at the same time being ignorant of practice elsewhere in the country.

The research framework of Key Questions 6 and 7 (Chapter Six) is also mapped onto the second subsidiary aim and involved qualitative analysis. I took note of Burgess' (1992) argument that qualitative researchers, although generally good at providing detailed accounts of their data collection are rarely explicit about the procedures they use to analyse this data.

In some cases, reference is made (especially in the text books) to analytic induction and grounded theory, but these appear to be little more than labels as there are few accounts of the way in which these processes actually occur as opposed to the way they are supposed to occur. (Burgess 1992, p2).

For this reason I have attempted to avoid the use of jargon in the description of the methodology reported in this chapter and in the methods reported in Chapter Seven.

I considered that to address the two Key Questions, a research framework is needed from which the following could be derived:

- 1. a description of different LEA policies from key personnel within the school,
- 2. an analysis of the teaching arrangements for meeting pupils' SEN,
- the collection of professional opinions about the level of resources required to meet individual pupils' needs.

I felt that the framework also needed to include different levels within the education service: LEA, individual schools, individual pupils. I therefore chose two LEAs which represented different methods of resource allocation for special educational needs i.e. one which used a professional audit (*Mercia*) and the other LEA which used educational tests (*Whiteshire*). The purpose of the case studies is to examine the relationship between special educational needs and the level of provision thought to be required to meet these needs. I wished to explore whether there is an agreement between

professionals about the resources thought to be necessary to meet the needs of specified pupils. I also wished to scrutinise whether it is worthwhile to differentiate the amount of resources allocated by degree of need.

The qualitative data set consisted of policy documents, verbatim typed transcripts obtained from taped interviews, field notes and proformas on individual pupils experiencing special educational needs, completed at the interview with key personnel.

A first research technique is to search the data set for themes (Glaser and Strauss, 1967; Easterby-Smith et al., 1994; Miles and Huberman, 1994). The themes are grounded in the theoretical perspectives explored in the earlier chapters in the thesis and seek to assist in the assessment of the different SEN policies as perceived by professionals from the LEAs. A second research technique involves a descriptive survey by recording the information about the individual pupils obtained from the professional interviews.

It is important again to be clear about the limitations of the data. The case studies would not be able to provide evidence about whether a continuum of special educational needs is a concept worthy of merit or of the values or coefficients to be used in a differentiated funding formula. The arguments for a continuum of SEN and for the use of differentiated funding levels will be critically examined in other parts of the thesis.

The third subsidiary aim investigates the design of a SEN funding formula within *Whiteshire* and maps onto Key Questions 8 and 9 (Chapter Eight and Nine). Key Question 8 considers a number of 'normative' or value questions derived from the research literature which have been posed as concerns of the existing formula in

Whiteshire. Examples are used drawing on county held data from Whiteshire to illustrate each of these concerns. Key Question 9 explores how the existing SEN formula can be improved. The suggestions for improvement are grounded in the data used to answer the previous Key Questions. A number of funding models are examined which consist of three components i.e. an allocation for the special educational needs coordinator, an allocation for social disadvantage, an allocation for pupils identified as experiencing special educational needs. An important aspect of the revised formula is that it avoids dichotomous thinking (Corbett and Norwich, 1997) by combining both the theoretical discourses of 'special needs pupil' and 'school and teacher effectiveness'. The model also allocates resources both at a school level (e.g. using free school meals as an indicator) and at a pupil level (e.g. using educational test/audits as indicators).

I am clear throughout the research that the data do not enable me to design or single out an 'all singing and dancing' funding formula which could be used by LEAs as best practice. The answers to the value or normative questions derived from Key Question 8 are going to be different within each LEA. The approach taken by an Authority depends upon a complexity of factors including historical arrangements and the party political views of elected members.

The fourth subsidiary aim takes the design stage further by simulating the effect on school budgets of different indicators of special educational needs. With the advent of more powerful personal computers during the 1990s and therefore throughout the course of this thesis, there was the danger of becoming overwhelmed in data and to lose sight of the research design and research methodology. This was particularly the case with Key Questions 10, 11 and 12 (Chapters Eight and Nine) with the computer budget

modelling and correlation analysis.

Examples of the large databases in the thesis are those which are used to analyse the impact on school budgets of using different funding formulae (Key Question 10). Computer budget modelling takes place for all schools in *Whiteshire* (primary n=592, secondary n=98). In Key Questions 11 and 12 further large individual pupil data sets are used, to examine the possible use of National Curriculum Assessment information (see Table 2.2)

Table 2.2The Sample Sizes from the 1996 National Curriculum AssessmentDatabases in Whiteshire

Key Stage Number of Pupils in Sample		
1	17,479	
2	14,814	
3	6,083	

Using individual pupil data of this type immediately reinforces the 'special needs pupil' policy discourse. A consequence of locating problems within an individual framework is the tendency to look for rational, technical solutions rather than examining political or structural issues (Wilding, 1982). This view is similar to that of Galloway, Armstrong and Tomlinson's (1994) 'school and teacher effectiveness' discourse and is also supported by Fulcher (1989). Skrtic (1991)calls this approach, 'the delusion of certainty', that is a belief in professionals' ability to find objective, functional approaches to problems that will 'solve' them. Again it is important to remember what the data was *not* able to tell me. The budget simulations would not allow me to choose

'the best' formula for use in all LEAs, but the formulae could however be evaluated according to a set of criteria or principles discovered from Key Question 3 (Chapters Eight and Nine).

2.4 MIXING RESEARCH METHODOLOGIES AND METHODS

14

One of the most long-standing debates in the human and social sciences concerns the relative merits of quantitative and qualitative approaches and methods (see e.g. Hammersley, 1989; Silverman, 1993; Denzin and Lincoln, 1994). Traditionally a gulf is seen to exist between qualitative and quantitative research, with each belonging to distinctly different paradigms (Layder, 1988). The existence of two distinct paradigms suggests something about researchers' allegiances if not their practices. This is not surprising since the body of methodology texts which attests to the existence of the two paradigms is much larger than the body of literature which instructs researchers in the conduct of multi-method research (Brannen, 1992).

Burgess chooses the term 'multiple research strategies' to describe the use of diverse methods in tackling a research problem (Burgess, 1982). According to this view, field methods which do not encompass observation, informant interviewing and sampling are seen as narrow and inadequate. The argument is that researchers ought to be flexible and therefore ought to select a range of methods that are appropriate to the research problem under investigation (Burgess, 1984). The older and more widely used terminology to be found in the literature which refers to this strategy is 'triangulation' a term developed by Denzin (1970). There is much controversy as to the conditions under which multiple methods ought to be combined (Brannen, 1992). Some researchers have talked in terms of the complementarity of the two approaches. By this is meant that each approach is used in relation to a different research problem or different aspect of a research problem. By contrast Denzin, in his original formulation of triangulation, saw the combining of research strategies as a means of examining the same research problem and hence of enhancing claims concerning the validity of the conclusions that could be reached about the data (Denzin, 1970). In Denzin's view, the assumption was that the data generated by the two approaches, which were assumed to focus on the same research problem , were consistent with and were to be integrated with each other (e.g. Mason, 1991). By contrast with Denzin's view, the different data sets used in this thesis were not expected to be consistent; rather they were seen to be complementary.

In this research, I have considered the data sets in close relation to the Key Questions which generated them and have concluded that the data sets cannot simply be linked together unproblematically but need to be treated as complementary. As Cain and Finch (1981) argue there is no one truth; life is merely multi-faceted. According to their view, the discovery of what 'really' happens is not the task of sociological investigation. At the extremes, advocates of the integration of methods assume that triangulation offers the opportunity to increase the 'internal validity' of the data. In contrast, those who favour complementarity recognise that data are constituted by the method which elicits them and that different data sets do not add up to some rounded unity.

It is against the background of complementarity that I adopted the perspective of a

mixed methodology, incorporating both quantitative and qualitative techniques (e.g. Pollard et al., 1994). There are three main ways in which researchers have drawn on both qualitative and quantitative methodology in their work: 1) qualitative work as a facilitator of quantitative work, 2) quantitative work as facilitator of qualitative work; and 3) where both approaches are given equal status (Bryman, 1988). My view is that the first category is the best description of this research.

Leedy (1997) uses the broad heading of 'non-experimental quantitative research' to cover studies which involve making careful descriptions of observed phenomena and/or exploring the possible relationships between different phenomena. The thesis has used different types of research method under this broad heading i.e. the descriptive survey in Chapter Six (Key Question 5), correlational research (Key Questions 9, 10, 11 and 12) and computer budget modelling (Key Questions 9 and 10) in Chapters Eight and Nine.

Chapter Seven (Key Questions 6 and 7) provide the qualitative research, using a case study research design, which facilitates the quantitative work described in the previous paragraph. I took the view that to use a mixed methodology, to include both quantitative and qualitative methods would help to strengthen the overall research design (e.g. MacBeath and Mortimore, 1994).

An important question for this study is to ensure that the quantitative and qualitative data are complementary to each other and to make certain that sensible questions are asked of the data sets. The intellectual task in Chapter Nine is to formulate an account of how the methodologies and the policy discourses are related within the technical perspective and limitations of Local Management of Schools.

CHAPTER THREE THE CONCEPTUALISATION OF SPECIAL EDUCATIONAL NEEDS AND THE PURPOSES OF PROVIDING ADDITIONAL FUNDING

This chapter will be in two parts. First, it will provide an historical baseline for the origins and the development of the concept of special educational needs (SEN). The first Key Question will be addressed by this section i.e. how does the conceptualisation of special educational needs impact upon policy within Local Education Authorities? Second, the chapter will examine the second Key Question i.e. what are the main purposes for providing additional funding for special educational needs? It will highlight the different funding implications of policies which seek to provide additional resources for specific pupils with SEN compared with those which seek to compensate for social disadvantage.

There can be serious limitations to approaching the development of education from the standpoint of legislative peaks, not the least of which is that legislation is at several removes from actual provision (Lodge and Blackstone, 1982). Nevertheless legislation is a kind of social stocktaking. By focussing on the preamble and provisions of the legislation a better understanding can be made of both the continuities and discontinuities of educational provision. The first half of this chapter will examine four major pieces of legislation which have had a significant impact on the way in which special educational needs have been viewed. These are the 1944, 1981, 1988 and 1993 Education Acts.

3.1 THE 1944 EDUCATION ACT AND THE ORIGINS OF THE CONCEPT OF SPECIAL EDUCATIONAL NEEDS

The history of special education in Great Britain is clearly and elegantly described in chapter 2 of the Warnock report (DES, 1978). The opening paragraph is worth quoting in full:

Special education for the handicapped in Great Britain is of relatively recent origin. The very first schools for the blind and the deaf were founded in the lifetime of Mozart; those for the physically handicapped and epileptic arrived with the motor-car; whilst special provision for delicate, maladjusted and speech impaired children is younger than living memory. Even so, the very early institutions were nothing like the schools we know today and were available only to the few. As with ordinary education, education for the handicapped began with individual and charitable enterprise. There followed in time the intervention of government, first to support the voluntary effort and make good deficiencies through state provision, and finally to create a national framework in which public and voluntary agencies could act in partnership to see that all children, whatever their disability, received a suitable education. The framework reached its present form only in this decade' (i.e. the 1970s) (para 2.1).

The discussion leading up the 1944 Education Act and the implementation of the Act

itself is of major importance when examining the history of special education. The 1944

Education Act led to the introduction of universal secondary education which developed

along selective lines. Lodge and Blackstone (op.cit) describe the 1944 Act as:

....both the central legislative pillar of contemporary education and the major expression of modern, formal commitment to social justice in education.

In June 1941 the Board of Education issued the Green Paper *Education After the War*. Although "strictly confidential", the Warnock Report stated that it received a wide circulation. The statutory framework of special education at that time was set out in the 1921 Education Act which described school accommodation for blind and deaf children as being generally adequate, though much of it was old and ill-distributed. Less satisfactory was that for "mentally defective" and "delicate" children. It suggested that provision for most of these children should be made in ordinary schools. Therefore for the first time the notion was put forward that pupils with special needs should be taught alongside their peers. Two years after the 1941 Green Paper, the government issued its White Paper *Educational Reconstruction*. As in the Green Paper, handicapped children were included in a separate chapter devoted to health and welfare, but this time they were dealt with in two sentences:

Provision for the blind, deaf and other handicapped children is now made under Part V of the Education Act 1921. This part of the Act will require substantial modification.

The 1944 Education Act can be regarded as a major effort by educationalists to move as many 'defective' children as possible out of the medical domain and place them firmly under an education aegis. The intention of the 1944 Education Act was to extend greatly the range of children's special needs for which local education authorities would be obliged to make special provision, either in special schools or in ordinary schools.

Detailed guidance of the provision to be made for eleven categories of handicap by local education authorities was issued by the Ministry of Education (1946). It provided estimates for each category of handicap of the number of children who might require special educational treatment, not necessarily in special schools. In sum these amounted to a range between 14% and 17% of the school population (DES, 1978, paragraph 2.49). This appears to be first mention of the figure 'the 18%', which has been much quoted and generally acknowledged to have come directly from the Warnock Report itself. The intentions of this planning were not in the event fulfilled and special educational treatment came to acquire a much narrower connotation than the official guidance had

indicated. Moreover its provision in ordinary schools failed to develop on the scale envisaged.

In the later 1960s and early 1970s things changed considerably. In particular, the completion of the reorganisation of all-age schools in the 1960s and the progressive ending of selection for secondary education which followed the issue of Circular 10/65 enabled mainstream primary and secondary schools to broaden their educational programmes and to take account of children's individual needs. Fish (1989) took the view that during the 1960s, there was an increasing dissatisfaction with the notion of ineducability, and with children being deprived of the right to education, the idea of education as any planned and systematic intervention to facilitate learning gained ground. New legislation was enacted. The 1970 Education (Handicapped Children) Act abolished the legal status of ineducability and made local education authorities responsible for educational provision for all children, whatever the nature or degree of their disabilities. The issue of rights and needs will be referred to again later in this chapter (section 3.5).

In addition at the same time there were studies of compensatory education and the effect of early developmental influences. These provided a range of new evidence which influenced thinking about the causes of special educational need. These developments were reflected in the reports of the Plowden Committee (CACE, 1967) and the Newsom Committee (Ministry of Education, 1963), as well as providing one basis for the recommendations of the Warnock Committee. This area will be explored further in the second part of this Chapter.

3.2 THE 1981 EDUCATION ACT

The Warnock report (DES, 1978) and the subsequent 1981 Education Act represented the first attempt in the United Kingdom to take a synoptic view of the whole field of special education and to present a coherent philosophy and a blueprint for development for the rest of this century and beyond (Adams, 1986). The 1981 Education Act, which has now been superseded by the 1993 and the 1996 Education Act (see section 3.4), introduced the system of a statutory multi-disciplinary assessment which could lead to the LEA issuing of a statement of special educational needs.

Before the 1981 Education Act came into force on 1 April 1983, the provision of special educational services in England and Wales was formulated from the 1944 Education Act. Notwithstanding, it was still possible for Jones (1982) to identify 17 other 'Acts, Reports and documents relating to special education,' many of which clearly represented quite major changes in direction for either special education as a whole or some aspect of the service.

The designation of 'disability of mind and body' in the 1944 Education Act indicated the weight given to 'within-child' factors as the cause of a need for special education. From this position, Goacher et al. (1988) describe the gradual, but continual movement towards a more interactive view of special needs, derived from a variety of sources, including studies of compensatory education, and environmental influences in general, as indicated in the Plowden and Newsom Reports. As a result, thinking about categories of handicap began to be replaced by the idea of a continuum of special educational needs. It became generally accepted that children could not be fitted neatly into handicap categories, and that special needs were often more complex than a single category would indicate. Furthermore the educational needs of a child could not usually be derived from a given category of handicap. Continuing with this view, an individual's special needs have increasingly come to be seen as the outcome of the interaction between factors within the child and within the environment (Wedell, 1981).

There was also evidence of the recognition of education as a compensatory resource in this interactive process. This was exemplified in the campaign by parents of severely mentally handicapped children, those deemed 'ineducable' under the 1944 Act, to force the government to provide education for their children. The parents' campaign culminated, in 1971 in the transfer for these 'ineducable' children from social services to education. It represented the acceptance of the principle that no child was ineducable.

The Warnock Committee therefore recommended that statutory categorisation of handicapped pupils should be abolished. The arguments against categorisation were listed in the Warnock report (paras. 3.21 to 3.25) and included:

- children can suffer from more than one disability (para. 3.23)
- labels can stigmatise children who are experiencing learning difficulties (para.3.23)
- categories create an assumed equivalence of educational need for all members of the category (para. 3.23)
- categorisation promotes too sharp a distinction between handicapped and nonhandicapped (para. 3.24)
- focuses too much attention on the small group of ascertained pupils (para. 3.25).

The replacement of the within-child, deficit model by the interactive, ecological approach (Feiler and Thomas, 1988) carries with it the implication that for some children with learning difficulties, aspects of the school system itself may be the underlying problem. In other words there is a shift in emphasis from the 'special needs pupil' discourse to the 'school and teacher effectiveness' discourse.

In summary, the 1981 Education Act amended section 36 of the 1944 Education Act by imposing upon LEAs a basic educational duty to ensure that every child received fulltime education which was not only 'suitable to his age, ability, and aptitude', but also 'to any special educational needs he may have'. Furthermore it broadened the concept of special educational needs to include any child whose learning difficulty called for special educational provision, and made it the duty of governors of ordinary schools to use their 'best endeavours' to provide appropriate in-house support. Moreover, because the Act provided for all children with special educational needs to be educated in ordinary schools (subject to certain conditions of efficiency), (Jones and Docking, 1992) took the view that it foresaw the end of the arrangements whereby those who required special education, in the more restricted sense, attended segregated schools and units. In practice the evidence is limited that the inclusion of children with SEN has increased over the years. Subsequent government action, reflected in Circulars 1/83 and 22/89 suggest that no serious change was envisaged, nor was there any process led by central government which might have achieved this end. The Green Paper (DfEE, 1997e) provides numerical evidence to support the notion that inclusion has not increased :

Across the country as a whole, some 98,000 pupils are educated in maintained or non-maintained special schools, a number which has been virtually constant throughout the 1990s. (p45).

3.3 THE 1988 EDUCATION REFORM ACT

The next major piece of legislation to be considered is the 1988 Education Reform Act. A much fuller discussion of the impact of Local Management of Schools will be covered in Chapter Five.

The original Education Reform Bill gave scant attention to the education of pupils with special educational needs, even though one of the notable aspects of its passage through Parliament was the concern expressed for children with special needs in both Houses and from all parties (Rowan, 1988). Many of the amendments were necessitated only by the discordance between the terms of the Bill and current thinking and practice relating to the education of children and young people with special educational needs (Wedell, 1988). The 1988 Act had as one of its main tenets the implementation of a "quasi-market" whereby schools would compete directly with each other for pupils and school performance tables would be published to assist parents in their choice of school. Local Management of Schools, under which schools manage their own budgets, was another key policy of the 1988 Act. In addition a new type of school was introduced called a grant-maintained school. These schools are not controlled by the LEA and they have their own policies for the admission of pupils. The Education Reform Act introduced a further change through the implementation of the National Curriculum and Assessment.

For the first time this placed an obligation on all schools including special schools to teach subjects such as science, technology and a foreign language to all pupils unless specifically disapplied. There is an overriding contradiction which has pervaded responses to the National Curriculum in special education as outlined by Swann (1992). Key Question 11 to be examined later in this thesis (Chapter Nine), will consider whether National Curriculum Assessments can replace other standardised educational tests in the SEN formula (e.g. Lorenz, 1997).

The National Curriculum is promoted as a curriculum for all children. Yet the contrary view is that it lacks the flexibility to be a true curriculum for all. The National Curriculum Council's own guidance: *A Curriculum for All* (NCC, 1989) declares that:

All pupils share the right to a broad and balanced curriculum, including the National Curriculum. The right extends to every registered pupil of compulsory school age attending a maintained or grant maintained school, whether or not

she has a statement of special educational needs. This right is implicit in the 1988 Education Reform Act (p.1).

Bailey (1989) supports this positive view to the principle of access to the National

Curriculum for pupils with special educational needs:

The Education Reform Act should be viewed as an enrichment for all pupils with a widening of curriculum opportunities for pupils with SENs (p.78).

On the other hand some writers have strongly criticised the theory of learning which underpins the National Curriculum.

How will young people, no matter what their attainment, ability or background, be able to derive a sense of equal value and worth in an education system which clearly articulates delineation according to attainment and the increasing compartmentalisation of fact and knowledge? A system based on discrimination - not equality and integration (Spalding and Florek, 1989).

All National Curriculum subjects are subdivided for assessment purposes into a small number of Attainment Targets set out in eight hierarchical 'levels' (DFE, 1995). English, for example, has three Attainment Targets: speaking and listening, reading and writing. Each of these Attainment Targets has eight associated level descriptions. The level description for level 2 reading, for example, is

Pupils' reading of simple texts shows understanding and is generally accurate. They express opinions about major events or ideas in stories, poems and nonfiction. They use more than one strategy, such as phonic, graphic, syntactic and contextual, in reading unfamiliar words and establishing meaning.

A pupil is considered to be reading beyond level 2 when he or she has mastered the level 2 reading domain, that is, when the pupil's achievement in reading meets the criteria set out in the level 2 description above. This process of subdividing subjects into Attainment Targets, calibrated by level descriptions, allows all National Curriculum assessment to be referenced to a common 8-level scale with an additional description above level 8 to help teachers in differentiating exceptional performance.

As the central function of the National Curriculum 8-level scale is to monitor the progression of all pupils against an agreed set of national standards, it is important to ask if special and mainstream teachers share similar interpretations of standards associated with the lower levels of the 8-level scale. Wylie et al. (1995) set out to investigate whether there is evidence of differing perceptions of the standards between mainstream and special needs teachers such as would threaten the progression of pupils transferring from one type of schooling to the other. A previous investigation by the Educational Foundation Research/Bishop National for Grosseteste College (NFER/BGC) of the impact of National Curriculum assessment in special schools (SEAC, 1992) identified a degree of mismatch between the National Curriculum standards of mainstream and special educational needs teachers and found shortcomings in the quality of special needs in-service training.

... abundant evidence of concern on the part of teachers to conduct assessments fairly, that is, observing the same standards as would be applied to children without special needs (p.35).

Wylie et al.'s study involved an empirical comparison of the National Curriculum standards of three groups of teachers: 11 mainstream primary teachers, 10 special school teachers and nine teachers who taught in special units. All of the special needs teachers worked with children experiencing moderate learning difficulties. The study found no significant differences in the standards set by the three groups. Although the absence of teachers of children with severe learning difficulties may go some way in explaining the disparities between the two studies, the researchers felt that the result augers well for the progression of pupils experiencing moderate learning difficulties. They felt that meaningful progression to a transferring school would be better assured by the record of achievement which reports each pupil's level profile in each National Curriculum subject rather than a school report including results from a range of internal school examinations.

This optimistic view is not shared by Swann (1992) who warns of the dangers of replacing the previously flawed system of classification which was operated for many years before the 1981 Education Act with a classification system based on the levels of attainment. He claims that the organisation of the National Curriculum into levels of attainment involves the arbitrary classification of attainments to hierarchies of knowledge, understanding and skill, and the equally arbitrary assignment of levels to ages, leading to the arbitrary classification of children. Noss et al. (1989) and Brown (1989) also support this view that there are no linear hierarchies in children's learning of subject matter and development of understanding.

Despite these early criticisms about the use of National Curriculum Assessment (NCA)

results, the debate appears to have moved on and the Code of Practice for special educational needs, to be discussed in the next section (3.4), now makes several references to their use when determining to make a statutory assessment for special educational needs. Further evidence is provided from the surveys reported in Chapter Six, that the formal decisions which involve the transfer of one bureaucratic status to another, e.g. from non-statemented to statemented, or from the register of a mainstream school to a special school, are beginning to depend more and more on National Curriculum assessment results.

The full impact of the 1988 Education Reform Act upon the education of pupils with special educational needs is still being assessed. However Vincent et al. (1994) point out that SEN policy and provision varies very much from one local authority to another. These variations and their relationship with funding formulae will be explored in detail in Chapter Six by consideration of the survey looking at the criteria for deciding to make a statutory assessment and the survey looking at the current practice for resourcing additional educational needs.

LEAs were at different stages when the 1981 Education Act was introduced. Some used the Act as an opportunity to review their provision in its entirety, some made the minimum changes necessary to comply with the legislation (House of Commons Education Committee, 1993). However despite this variation, the recurrent concern about the 1988 Act is whether too much emphasis has been given to individual characteristics. This is clearly incompatible with the interactive nature of special needs as emphasised by the Warnock Report and provides evidence of the dominance of the 'special needs pupil' discourse.

3.4 THE 1993 EDUCATION ACT AND THE CODE OF PRACTICE

The Warnock report and the 1981 Education Act have now been superseded by the 1993 and the 1996 Education Acts. In addition there has also been a Green Paper on special educational needs (DfEE, 1997e). The parts of the 1996 Education Act which related to special educational needs were not significantly amended and so this section will make sole reference to the 1993 Education Act. During 1992 the Department for Education issued a number of reports on special education which included two joint papers by HMI and the Audit Commission (1992a and 1992b). These various reports informed the provisions of the 1993 Education Act which required the Secretary of State to issue a Code of Practice under Section 157. The Code was implemented in August 1995. The purpose of the Code is to give practical guidance to LEAs, the governing bodies of all maintained schools and other agencies on the discharge of their functions in relation to children with special educational needs. The Code covers:

- a five-stage model of assessment including the role of SEN coordinators and support services;
- the statutory assessment of SEN, including referral criteria for assessment, conduct of assessments and time limits for making assessments and statements;
- the issuing of statements, including criteria for drawing up a statement, writing the statement, and naming the school;
- assessments and statements for children under five;
- the annual reviews of statements, including transition plans.

The draft Code of Practice received mostly positive comments e.g. Wedell (1993). Upon publication of the final version (DfEE, 1994a), further favourable recognition was reported by Millward and Skidmore (1995), Bines and Loxley (1995), Lewis (1995) and Jowett et al. (1996). A detailed analysis of the Code's implementation in one LEA has been provided by Bines and Loxley (1995) who concluded that the Code can be seen as a mechanism for controlling and targeting resource allocation as well as a means of increasing accountability in relation to provision and partnership with parents. OFSTED (1997) found that steady progress is being made in almost all primary and secondary schools in implementing the Code's main recommendations. However, that is not to say that the Code has been without its critics and clearly there are some significant issues which need to be addressed.

First, schools are likely to take a pragmatic approach to some of the more complex and demanding aspects of the Code, such as individual education plans and reviews which are likely to be developed and adapted in a number of ways. Jowett et al.'s (1996) research provides an insight into how the Code was being implemented. The research included a questionnaire survey sent to all LEAs in England and Wales and returned by 55 LEAs. Further issues created by the Code are that the ideal role of the SEN coordinator (SENCO) will be curtailed by limitations of time and other resources. As Bines (1995) has stated, the shift from curricular to managerial and administrative activity by SENCOs, which reflects a general move towards more managerialism in education and other public service reform, may also pose new problems in terms of the definition of the SENCO's role. Further commentators e.g. Vincent et al. (1995), take the view that the Code leaves the whole concept of statementing largely unexamined and intact, ignoring those critics who have argued that statements are unhelpful, as they

focus attention on individual deficiencies rather than the whole-school approach e.g. Roaf and Bines, 1989; Ainscow, 1991a. While the survey in Chapter Six will demonstrate that many if not most LEAs are engaged in trying to limit the number of statements they maintain, their actions are, by and large, finance-led. The impression gained from the 1993 Education Act and the Code of Practice is that it has done little to alter the intrinsic values and principles of our special educational system.

Finally, the Code is being implemented alongside substantial cuts in education budgets. Galloway, Armstrong and Tomlinson (1994) issue the following warning:

The 1993 Act will make no changes to the funding arrangements for special educational provision, nor will it provide any additional resources.Reducing the time [to complete statutory assessments] will not produce more resources. It will simply mean that bad decisions will be reached more quickly.

The effect and impact of the final version of the Code will be closely monitored and evaluated by the Office for Standards in Education (OFSTED, 1997). The Secretary of State will consider, in the light of this evaluation, whether and when the Code should be revised (para.15, p.iii, DFE, 1994b). The Green Paper (DfEE, 1997e) proposes that a new revised Code of Practice could be in place by September 1999 and that the proportion of children who need a statement will move towards 2 %. The next section will consider the origin of the 2 % and how it is measured.

3.5 THE DEFINITION, IDENTIFICATION AND MEASUREMENT OF SPECIAL EDUCATIONAL NEEDS

The 1981 Education Act marked a number of major changes. It referred to special

educational needs as a subclass of the generality of special needs and rejected the categorical view of special educational needs, focusing instead upon the interactive, relative view. Circulars 8/81, 1/83 and 22/89 (DES,1981,1983,1989a) which all offered advice to LEAs about the implementation of the Act, established that a child has special educational needs if he or she has a learning difficulty that:

is significantly greater than that of the majority of children of the same age (para. 4).

This has been criticised on both the grounds of circularity (Goacher et al., 1988) and vagueness (Gipps et al., 1985). The circularity of the definition is illustrated by the introduction of two other concepts, 'special educational provision' and 'learning difficulty', without precise meanings being attached to any of them. The 1993 Education Act retains the definition of special educational needs but now recommends the general adoption of a staged model for the assessment of SEN, the first three stages are based in the school and will, as necessary, call upon the help of external specialists. At stages 4 and 5 the LEA shares responsibility with schools in considering the need for a statutory assessment and the need for a statement of SEN. The Code of Practice also lists criteria for deciding to make a statutory assessment (see Chapter Six). Therefore an attempt has been made to provide guidance to reduce the circularity and vagueness. The increasing number of pupils with statements, reported in the Green Paper (DfEE, 1997e), indicates that the criteria have had minimal impact.

The Warnock Report, Circular 8/81 and the Code of Practice all attempt to quantify the number of children who might be expected to fall within this group. It was felt that one child in every five at some time and one child in every six at any one time will require some form of special help. The Warnock Report looked at five sources of information on incidence of special needs:

- the Isle of Wight survey (Rutter et al. 1970),
- the Inner London Borough (ILB) study (Rutter et al. 1975; Berger et al. 1975),
- a study of children in the infant school (Webb, 1967),
- discussions with ILEA teachers (Inner London Education Committee, 1974) and
- the National Child Development Study (NCDS) (Pringle et al. 1966; Davie et al. 1972; Fogelman, 1976).

Gipps et al. (1985) split these sources into two groups - those which classified children according to measures of development and attainment regardless of the provision they were receiving, and those which classified children largely according to the provision they receive or it is thought they should receive. Thus, Rutter et al.'s Isle of Wight and ILB studies report the percentage of children, who, based on IQ and reading tests, behavioural rating and medical report were considered to have a problem in reading, have a psychiatric disorder, physical handicap or other severe problem. The NCDS data, on the other hand concerns the percentage of children receiving special help either in or out of ordinary schools, together with the percentage of children whom teachers thought would benefit from special help. With the exception of Rutter's ILB study all the reported prevalences were between 12 per cent and 20 per cent.

The 20 per cent figure is often quoted by LEA personnel as a baseline of provision to be aimed for. Dessent (1987) questions this notion of 20 per cent:

If 'specialness' is judged in terms of educational failure and if educational success is synonymous with the possession of examination credentials - why stop at 20 per cent? Warnock's 20 per cent is but a short step from the '40 per cent' of pupils who leave our secondary school system with no negotiable qualifications after twelve years of compulsory schooling (p.21).

Further evidence for Dessent's uncertainty about the '20 per cent' is provided by the 1992 School Performance Tables (DFE, 1992b), which quoted 35% of Y11 pupils who did not achieve at least one GCSE at grades A-C. Additionally, in 1978 HMI argued that up to 50 per cent of pupils in Scottish schools could be said to have learning difficulties (SED,1978). In reality the wide currency of the 20 per cent figure is really a political compromise (Galloway, Armstrong and Tomlinson 1994, p13).

The other figure which has also gained wide currency - the two per cent has been examined by Gipps et al., 1985. They observed that as the special schools in London could accommodate only 1.5 per cent of the child population, this is where Burt advocated that the cut-off should be set. The figure of the two per cent is used in the 1994 Code of Practice:

Only in a small minority of cases – nationally, around two per cent of children – will a child have special educational needs of a severity or complexity which requires the LEA to determine and arrange the special educational provision for the child by means of a statutory statement of special educational needs (para. 2:2).

An interesting insight into the thinking of the Warnock committee was made by Baroness Warnock when giving evidence to the select Education Committee which looked into aspects of special needs legislation to see how it is currently working (House of Commons Education Committee, 1993). In answering the question "What percentage of children did you foresee would be covered by your statements at that time, or did you not have a percentage?" Baroness Warnock replied:

We did not exactly, but we thought that it was roughly equivalent, possibly slightly fewer, than the 2 per cent of children who were then in special schools and we thought that probably the percentage might remain steady (para. 2).

Recent information on the incidence of statements taken from returns completed in January 1997 indicate a recorded range from 1.2 per cent in **Nottinghamshire** to 5.0 per cent in **Doncaster** (DfEE, 1997e). This appears to highlight the lack of definition and agreement over what constitutes a prima facie case for full assessment. Goacher et al. (1988) reported that administrators in some LEAs spoke of 5 per cent as their target population for statements, while in others it was considered that 18 per cent could require a statement (p.53). Such figures contrast greatly with those LEAs who have pursued a policy of 'minimal statementing' e.g. Nottinghamshire (Gray and Dessent, 1993). Goacher et al. continue by stating these differences did not, therefore, reflect a misunderstanding of the concept of special educational needs in the 1981 Education Act, but were due more to a disagreement over what constituted the range of educational provision 'generally provided in schools, within the area of the local authority concerned' (Section 1(2) of the 1981 Education Act).

The 1994 Code of Practice on the identification and assessment of special educational needs (DFE, 1994a) has put further emphasis on 'the special needs pupil' discourse and place importance on early identification. The tensions between the different discourse areas will continually resurface during the course of this thesis, and subsequent chapters will explore the conceptual confusion which is evident on the causes, nature and the solutions to the 'problem' of special educational needs.

3.6 THE RECONCEPTUALISATION OF SPECIAL EDUCATIONAL NEEDS

A number of commentators consider that a radical reconceptualisation of the state of

provision for special needs is necessary (Dyson and Gains, 1993). They argue that educational thinking is moving from a focus on structures to a focus on processes and an emphasis on the practitioner as the main problem solver. However they contend that this shift is taking place before its implications are fully understood. The continued distinctions between 'special' and 'ordinary' needs, the continued existence of special needs teachers, of special needs departments in schools and of centralised local authority provision outside mainstream schools are all based on the structural approach. The two views are mutually incompatible and effectively sabotage each other. Dyson et al. (1994) examine case studies which suggest that some schools are addressing these tensions by developing an alternative model of provision. This model builds on the concept of the 'whole school approach' which has gradually evolved during the 1980s (SED, 1978; ILEA 1985), but also implies a reconceptualisation of teaching and learning. An emphasis is put on the examination and development of teaching styles across the curriculum, rather than on remediation of learning difficulties of individual children or the support of identified pupils within mainstream classes offering an otherwise unchanged pedagogy.

One way in which LEAs have attempted to manage the market for special education is to encourage and support schools to collaborate with each other to provide for special educational needs (Norwich et al., 1994). Also relevant to inter-school collaboration is Corwin's description of education systems as 'loosely coupled' (Corwin and Kerckhoff, 1981). This refers to the degree of autonomy of the interdependent elements (e.g. schools). This notion can be applied to the school system, by saying that there has been an increase in loose coupling following the recent government legislation (1988, 1993). The LEA's direct administrative role has been reduced in this context following the introduction of local management of schools based on pupil-led funding, with schools having the opportunity to opt out of the LEA system.

Whilst accepting and agreeing with the main thrust of the 'reconceptualisation' movement, there are certain doubts about some of the practical issues which need to be addressed. First, it seems to me, that on the whole education officers tend to work with the structures imposed upon them by elected members and central government. This point is illustrated by Galloway (1985):

At local authority level, policy is influenced by political as well as educational considerations. Whether an LEA adopts a formal stance on such diverse issues as mixed ability teaching, corporal punishment and special educational needs depends as much on the political complexion and bias of its education committee members as on the interests and energy of the chief education officer and his (sic) senior colleagues.

While processes are clearly important, education officers might argue that one of their main roles is to enable the structures to work effectively and efficiently. The tendency noted by Dyson and Gains for LEAs to establish SEN support services since 1983 seems to emphasise this focus on structural thinking. Later in this thesis two LEAs will be used as case studies to illustrate their special educational needs policies and practice with particular regard to the allocation of non-SEN resources. One of the LEAs (*Mercia*) has adopted a process-oriented problem solving approach by using a professional audit to identify pupils experiencing special educational needs, which focuses on the arrangements made by schools. Although this methodology avoids the use of special needs categories, a centralised support team still exists to administer the audit and to provide general support to schools. There was no evidence in the schools of the alternative models of provision as reported by Dyson et al. (1994). They appeared to operate in the traditional mode of meeting special educational needs through a definite

SEN department. The other LEA (*Whiteshire*) had a sophisticated network of support teams to meet the needs of pupils with statements. These support teams were mainly attached to local special schools thereby reinforcing categories of SEN and locating the ultimate responsibility for special needs provision outside the mainstream school.

The Education (Special Educational Needs) (Information) Regulations 1994 prescribe that schools must provide the name of the special educational needs coordinator (SENCO) or teacher responsible for the day-to-day operation of the SEN policy. The Code of Practice does acknowledge that in larger schools there may be an SEN coordinating or learning support team. However the Regulations have given emphasis to the term SENCO and with it the earlier way of thinking based on structures.

A similar argument could be made about the notion of collaboration between schools (e.g. Norwich et al. 1994). This idea sits uneasily with the competitive models based on the market encouraged by the local management of schools legislation. LEA advisory services have traditionally offered to schools in service training programmes which have involved consortia or clusters. It is interesting to speculate whether grant maintained status and opting out from LEA control is an important factor which may encourage schools to follow this route, in search of the support which was previously available centrally. The evidence for effective collaboration is particularly weak in the area of emotional and behavioural difficulties. There has been a steady increase in the use of exclusion procedures leading to permanent alternative teaching arrangements such as home tuition (e.g. ACE, 1992; NUT, 1992; DFE, 1993c; Hayden, 1996). A partial explanation of the increase may be thought of as from the pressures brought about by the 1988 Education Act (Upton, 1992). Schools are now having to compete with each other for pupils and 'excellence' is likely to be viewed mainly in terms of position in performance tables of examination results. It is therefore understandable that school resources may be directed towards helping the more able and well-behaved pupils and not towards the more vulnerable.

In view of the major changes in educational policy since 1988, LEAs are in a transitional period with regard to their special needs policies. It is clear that there are serious deficiencies in the identification of and provision for pupils with special educational needs highlighted by the two reports from the Audit Commission/HMI (1992a and b). Dyson and Gains' (1993) urge for a radical rethink within the whole area of special educational needs may partly be a response to the longevity of the political Right, who were in power from 1979 to 1997. Within this context it is perhaps understandable that LEAs have continued with their structural thinking whilst keeping a weather eye on government legislation which has proffered the 'school failure' discourse and more to a view which encompasses evidence arising from the 'school and teacher effectiveness' research, then it is unlikely that the majority of LEAs and schools will reconceptualise their own policies.

The second part of this chapter will now reflect on the main purposes for allocating additional resources for special educational needs.

3.7 THE PURPOSE OF ALLOCATING RESOURCES TO RAISE EDUCATIONAL ACHIEVEMENT

A first purpose for allocating additional funding for special educational needs is to raise educational achievement or to provide a focus on educational outcomes. The purpose is based on the view that pupils with various degrees of learning difficulty need more resources (i.e. they cost more) to educate to a given level of attainment e.g. to functional literacy. This can be seen as an effectiveness argument.

It is now commonplace, following the work of the Audit Commission (1985), to refer to the 'three E's' in education of economy, efficiency and effectiveness (Simkins, 1994). Chapter Four will make a further analysis of these and other principles which LEAs use to provide for pupils with special educational needs. Economy is defined as the purchase of a given standard of good or service at the lowest cost, efficiency as the achievement of given outcomes at least cost, and effectiveness as the matching of results with objectives. In management theory the distinction is often explained by saying that efficiency is to do with 'doing things right' whereas effectiveness is concerned with 'doing the right things'. In both terms a value judgement is assumed however this is much more the case for effectiveness than it is for the definition of efficiency. Similarly, Helsby and Saunders (1993) talk about an increasing requirement for accountability in the educational system. They state:

Alongside these changes in lines of accountability in education has come a new value system which emphasises efficiency and cost-effectiveness within fixed funding, rather than the unquestioned resourcing of professionally identified needs.Symbolic of this general trend has been the rapid growth in popularity of the idea of educational 'performance indicators'. p57.

'Performance indicator' is an economic concept frequently applied to industrial practice, where outcomes tend to be readily susceptible to quantitative measurement of, for example, increased production, higher sales or enhanced profits. Such measurements allow managers to make judgements about relative efficiency and to identify good (and bad) practice in terms of cost-effectiveness or value for money. The development of performance indicators for education can be seen as an attempt to enable outsiders to make their own such judgements about the education service, and to circumvent reliance upon professional opinion. (*ibid.* p58).

Thomas (1990) explores the definitions of efficiency and effectiveness further. For example he states that:

Effectiveness is inescapably linked to the outcomes of educational activity (p.26).

Hoyle (1980, p.160) suggests that:

Broadly speaking effectiveness is the degree to which an organisation approximates to achieving its goals.

Placing this view in a more general setting, Simkins (1981, p.77) states that:

An activity is effective if it achieves its goals.

These writers are all agreed that it is issues related to goals and purpose, and their context, which create many of the difficulties related to making the concepts of efficiency and effectiveness operational. This includes problems of setting and defining goals, agreeing the relative weight to be attached to different goals and setting criteria for evaluating whether goals are being achieved. More fundamentally, there are also questions as to whether institutions and systems do have goals or whether 'What may

appear to be organisational goals are the purposes of the winners between competing interest groups' (Hoyle, 1980, p.160). Thomas (1990, p. 49) gives examples of the relationship between the two concepts of effectiveness and efficiency. However it should be noted that the definitions of effectiveness which follow do not take into account cost. Taking a simplistic view cost-effectiveness can be thought of as being broadly comparable with efficiency or price efficiency.

Thomas states that the concept of effectiveness must be regarded as a narrower one than efficiency. The debate about the relationship between efficiency and effectiveness was prominent during the 1980s e.g. Atkinson (1983, pp122-3) and Simkins (1981, p77), who argued that it is not only possible to be effective but not efficient, but it is also possible to be efficient without being effective. An example of the first case would be where a 'teacher achieves good examination results in a relevant subject, but does so only at great cost, perhaps to other subjects in the curriculum'. An example of the second case is where a 'teacher teaches extremely well and achieves good examination results with limited resources, but the syllabus he/she is teaching does not meet the needs of the students or the objectives of the institution'. The use of the word objectives should perhaps be replaced by *aims* but Thomas claims that in the second case the differences between efficiency and effectiveness arise from not recognising differences in the objectives being pursued by the teacher as against other interested parties. It also raises the value judgement question of which are the right objectives for society i.e. what is the social welfare function?

If the purpose for allocating additional funding for pupils with special educational needs is to raise achievement then the goals to be pursued could be defined in different ways. These might be defined as an improvement in National Curriculum attainments or perhaps for a special school pupil the emphasis would be on the independence/self help skills deemed to be necessary for life after compulsory schooling. The definition is important otherwise confusion will exist when the resource policy is evaluated. Knight (1993b) stresses the need for compatibility of aims between schools and LEAs. An example of incompatibility of *purpose* is where a school may use its non-statemented special educational needs funding to reduce class sizes for all pupils rather than targeting the resource towards those individual pupils who have been identified as experiencing special educational needs.

Dessent (1987, p51) makes the important point that resource policies are underpinned and guided by more fundamental ethical and value-based decisions concerning how *much* should be spent on *which* pupils in our schools. He describes the phenomenon of 'resource drift' whereby teaching or financial resources accorded to schools for SEN pupils drift over a period of time to other areas of the school's work which are perceived as having higher priority. The idea that children at the end of the continuum of need e.g. those who have profound/multiple learning difficulties (PMLD), require higher levels of individual attention would rarely be disputed. That they merit greater entitlement to teacher time and the available financial resources appears just within a society which expounds humanitarian ideals (Dessent, 1987, p55). This resourcing policy could be described as a form of positive discrimination although it is rarely conceptualised in this way by LEAs. However it does cause a conflict with the purpose of effectiveness. That is to say, some PMLD pupils will make very limited progress in terms of educational achievement during their compulsory education. The staffing levels allocated to these pupils would therefore appear to be more dependent on special care needs rather than special educational needs and have their roots in compassion and humanity (Pritchard, 1963).

In practice the principle of allocating additional resources for the purpose of raising the educational achievement of children with special needs has not been clearly distinguished from that of palliative care, compensation and positive discrimination. For instance OFSTED (1993) reported that school development plans did not generally identify raising pupils' achievements as the central purpose of the establishments (para. 42). Historically the provision of additional resources for children with special needs has been strongly associated with providing them with more attention from teachers and para-teachers in an attempt to develop and refine intervention strategies for individual pupils. Ainscow (1993) argues that regrettably much less attention has been paid to conceptualising what we are trying to achieve or the effectiveness of the interventions.

3.8 THE PURPOSE OF COMPENSATORY RESOURCING

A different form of positive discrimination to the one described in the previous section, has its roots in the Plowden report (CACE, 1967) which itself was influenced by much of the anti-poverty legislation and programmes instituted in the USA during the 1960s (Silver and Silver, 1991). The Plowden Report concluded from the research literature that evidence existed of strong links between educational achievement and a variety of students' home background characteristics (Sammons, 1991). It was argued that schools in socio-economically disadvantaged areas should be given extra resources because of the greater educational needs of their pupils.

The dominant mood of the 1950s according to Silver and Silver (1991) was one of underlying political confidence that poverty was being slowly eradicated. This was in spite of Britain's post-war economic difficulties. There was an assumption that poverty as it was known in pre-war Britain was being defeated partly by growing affluence and partly by the redistribution of the nation's resources through the mechanism of the welfare state. Rowntree and Lavers (1951) concluded that in York, the proportion of the working-class population 'living in poverty' had been reduced since 1936 from 31.1 per cent to 2.77 per cent, but that the reduction would have been only 22.18 per cent 'if welfare legislation had remained unaltered' (p.40).

In the 1950s and 1960s there was a growing recognition of the continued existence of poverty and deprivation in Britain in spite of the better welfare services and a general rise in standards of living (Essen and Wedge, 1982). A connection between poverty and educational policy was not established in Britain, according to Silver and Silver, until the late 1960s and, specifically, following the publication of the Plowden report (CACE, 1967) and the earlier Newsom report (Ministry of Education, 1963). The Newsom report focused on problems of social inequality and was concerned with the education of pupils aged 13 to 16 of average and less than average ability. It particularly looked at 'problem areas', 'education in the slums' and the social problems related to environmental, population and other factors, using Mays' (1962) identification of the relationship amongst delinquency rates, ill health and local conditions. In the introduction of the Newsom report to a chapter on 'Education in the slums', a quotation from Mays was used:

.....Life in these localities appears to be confused and disorganised. In and around the squalid and narrow courts, along the landings and staircases of Formula Funding and Special Educational Needs 87 Chapter Three OU/PhD/AJM/April 1998 massive blocks of tenement flats which are slowly replacing the decayed terraces, outside garish pubs and trim betting shops, in the light of coffee bars, cafés and chip saloons, the young people gather to follow with almost bored casualness the easy goals of hedonism.

Smith (1987) felt that the above description was tinged with moral disapproval and with the implication that something ought to be done, if only for the nuisance value to society at large. He saw a substantial shift in tone from the Newsom to the Plowden report. One of Plowden's key proposals was the setting up of educational priority areas, the description of EPAs was far more neutral, although the evaluation, the social distance and the disapproval remained. Amongst Plowden's other recommendations were that incentives should be devised to attract and retain good teachers in 'problem' areas' and for other special programmes, not just in education. The Plowden report focused on two main aspects of primary education: its endorsement of 'progressive' approaches to the primary school, and its clear recommendations for 'positive discrimination' and 'educational priority areas' as responses to economic, social, environmental and educational disadvantage. The Plowden committee drew energies from two important sources: firstly previous understandings of the relationship between education and disadvantage by its predecessor, the Hadow report (Board of Education, 1931) and other analyses of and policies relating to disadvantage since the 1930s, and secondly the recent British and international focus on poverty.

In the introduction of the Hadow report, the committee drew attention to Burt's evidence later reported in his 'The Backward Child' (Burt, 1937), that a 'squalid environment', had deleterious effects on physical and mental vitality. The committee also drew attention to 'a marked correspondence between the distribution of poverty and the distribution of educational retardation', the past underestimation of the effects of the environment, and the fact that a home in poverty did not give the young child the same educational start as did homes with more adequate means. These latter homes were described as those where children were encouraged to read and write, acquired greater general knowledge and 'the foundation of education':

For many young children from the poorest home all this is reversed. Their parents know very little of any life except their own, and have neither the time nor the leisure to impart what little they know. The vocabulary that the child picks up is restricted....There is no literature that deserves the title...His universe is closed in by walls of brick and a pall of smoke... (Board of Education, 1931, xix p54-58).

The Plowden committee's recommendation for 'positive discrimination' appears to have its roots in a Ministry of Education (1959b) volume of suggestions for primary teachers which contained a section on 'Special educational treatment', which contained the following passage:

There are...children who require special help because they have been severely deprived in their upbringing. If these do not respond to even a generous share of the teacher's attention it is clear that something more must be done for them (p. 107).

The Plowden Report provided a major stimulus for the development of policies of positive discrimination in the distribution of educational resources and, in particular, the use of educational priority indices (EPIs). The school remained central to the distribution of extra resources because the Plowden strategy had recommended using the experience of school as a means of compensating children for their disadvantages. Teachers working in schools with a high level of disadvantage received an additional amount of money known as the 'social priority allowance'.

Smith (1987) has argued that research studies and changing social conditions all contributed to making the educational priority area (EPA) an outdated concept. Most

importantly came the problem of the overlap between social and spatial disadvantage. The term spatial disadvantage refers to the importance of the area where the child lives in determining the level of disadvantage. This link is fundamental to the EPA idea, yet in Plowden it is asserted rather than derived from empirical research. Smith also felt that the Report slides easily from referring to disadvantaged areas, schools and individual children, as if all these disadvantages were coextensive. However, Barnes and Lucas (1975) demonstrated that the majority of disadvantaged children were not concentrated in a few areas and therefore that more disadvantaged children attended schools which were not designated for educational priority, than attended schools designated priority area schools. Analysis of census data by Holterman (1975) produced similar findings indicating that, at the small area level, although there was some concentration of disadvantaged children, only a small proportion lived in areas covered by priority areas. Area or school designation is thus an inefficient way of reaching individually disadvantaged children. Smith (1987) claimed that defenders of EPA were quick to point out that such a complete overlap had never been claimed, nor was EPA policy intended primarily to be a way of reaching individually disadvantaged children, so much as an 'area policy'.

During the 1970s the arguments for positive discrimination by area gradually weakened and it was increasingly replaced by a policy of positive discrimination in favour of special groups or those with special needs. This trend is exemplified by the publication of two major reports Warnock in 1978 and Swann in 1985 (DES, 1985). The later was concerned with the educational needs of ethnic minorities. Educational disadvantage had effectively replaced EPAs (Smith, 1987). The Plowden Report concluded that home influences far outweighed those of the school. It drew on evidence comparable in many respects to that in the studies of Coleman (1966) and Jencks (1972). These two influential books from the United States argued that home background, including social class and economic class, were much more influential on a child's development than the effect of schooling. They reasoned that because the differences between families were much greater than those between schools, families were likely to exert the greater influence. As Mortimore et al. (1988) state:

Whilst it is undoubtedly true that an economically advantaged family - with comfortable housing, healthy diet, and time for stimulating educational experiences, contrasts starkly with an economically disadvantaged one - with inadequate, over-crowded or even a lack of permanent housing, poor diet and little time or money for educational experiences, it is also true that schools vary a great deal. The problem for researchers is how to tease out the effects of families from the effects of schools (p. 1).

A major criticism of compensatory resourcing is that no account is taken of the teacher and school effectiveness literature that is, schools do make a difference when dealing with pupils with learning and behavioural difficulties which can not be attributed to differences in the catchment area they served. Underachievement can therefore be viewed as both a curriculum and a funding issue. A fundamental question which LEAs need to address is how both of these two issues can be accommodated.

A second fundamental issue is that of accountability which will be examined in Chapter Four. That is whether schools are spending the additional resources they are allocated for special educational needs on pupils or groups of pupils who are actually experiencing SEN and what they are achieving with these additional resources. Evans et al. (1994) provide evidence to suggest that schools are using SEN money to plug gaps in other budget areas or using the resources to create a regime supportive of children with social needs rather than targeting individuals or groups. If this proves generally to be the case then it is difficult to press for an increased level of SEN funding and a more finely tuned and targeted methodology of allocation. These arguments would become more convincing if LEAs, the Funding Agency for Schools (FAS) and OFSTED inspectors were able to encourage headteachers and governing bodies that the additional funding would be better utilised in focused curriculum based interventions and targeted towards groups and individuals which could then be open to evaluation. For example, schools could be asked by the LEA to prepare action plans about how and with whom they would use their non-statemented SEN allocation to enhance achievement in specific areas such as: reading and numeracy with the clear target of improving schools' average test scores at 7 and 11. The OFSTED report (1993) directed to access and achievement in urban education concluded that:

Curricular planning in the primary and secondary sectors particularly does not directly access the needs of children from disadvantaged backgrounds and does not focus sufficiently in raising their achievement (p. 6).

The next section will consider how significant research studies since the 1970s in the area of school and teacher effectiveness have had an important impact upon the concepts of special educational needs, educational disadvantage and the purpose of providing additional funding. It will demonstrate how the 'widespread pessimism about the extent that schools could have any impact on children's development' (Rutter et al., 1979), and Bernstein's (1970) view that 'Education cannot compensate for society', has been altered in the light of this school and teacher effectiveness research carried out during the 1970s and 1980s.

3.9 RESEARCH STUDIES ON SCHOOL AND TEACHER EFFECTIVENESS

3.9.1 RESEARCH ON SCHOOL EFFECTIVENESS AND SCHOOL IMPROVEMENT

The last decade has seen a burgeoning of interest in the twin fields of school effectiveness and school improvement by politicians, policy makers and practitioners (Stoll and Mortimore, 1995). The issue of differential school effectiveness whereby schools differ in their effectiveness for particular pupil groups has also gained in importance since the publication of school league tables has become mandatory (Sammons et al. 1993). Whilst it is acknowledged that no simple combination of factors produces an effective school, several reviewers have identified certain common processes and characteristics of more effective schools and those seen to have improved. Stoll and Mortimore contend that such factors provide a picture of what an effective school looks like but they cannot explain *how* the school became effective. This is the domain of school improvement. This section will now sample some of the literature from the area of school effectiveness and school improvement.

The slogan of the school effectiveness movement is that "schools make a difference" (Brookhover et al., 1979). Wang, Haertel and Walberg (1990) undertook a comprehensive review of research on variables related to learning. They examined 228 items related to school learning and consulted 179 authoritative research and review papers. The analysis confirmed the relative strength of the influence of factors such as : metacognition, classroom management, quality of instruction, classroom interactions and climate, and the peer group. Compared with these factors, district demographics such as per-pupil expenditure and contractual limits on class size, and school and

district policies (e.g. on discipline or home-school contact) were much less influential. The authors state:

The items most important to learning outcomes were those directly tied to students' engagement with the material learned.

The research demonstrated that student aptitude characteristics were the most important of six broad categories of influence. Important characteristics were students' capacities to plan, monitor and review their learning strategies (metacognitive processes), their general intelligence, competence in reading and mathematics and verbal ability (cognitive processes), their constructive attitudes and behaviour (social and behavioural attributes) and their motivation. Classroom Instruction and Climate had nearly as much impact: classroom management (e.g. smooth transitions, teacher "withitness", and learner accountability); student-teacher interactions (frequency and quality); quantity of instruction; classroom climate (e.g. clear goals and a clear academic focus); classroom instruction (e.g. systematic sequencing of material, use of review, guided student practice and the use of feedback and correctives); and classroom implementation and support (which includes the contribution of in-service training to improving teachers' skills). The out-of-school context was also relatively important: home environment and parental support, community influences and extra-curricular activities.

Programme Design had a moderate influence: well designed textbooks, appropriate grouping and activities well aligned to goals. School organisation was also moderately influential: school culture, teacher involvement in decision-making, parental involvement in the school and school demographics and policies (e.g. size of school and number of support teachers), for example District and State characteristics were among the least influential.

Edmonds (1982) has noted the following features that seem to be characteristic of exceptional schools:

- 1. The principal's leadership and attention to the quality of instruction.
- 2. A pervasive and broadly understood instructional focus.
- 3. An orderly, safe climate conducive to teaching and learning.
- 4. Teacher behaviours that convey the expectation that all students are expected to obtain at least minimum mastery.
- 5. The use of measures of pupil achievement as the basis for programme evaluation.

These rather general features have been confirmed by an impressive range of other studies (e.g. Rutter et al., 1979; Purkey and Smith, 1983; Bickel and Bickel, 1986; Mortimore et al., 1988; Smith and Tomlinson, 1989). Reynolds (1990) identification of important factors included site management, leadership, staff stability, curriculum organisation, staff development, maximised learning time, recognition for academic success, and parental involvement in school. These factors are associated in effective schools with the following process characteristics within the culture of the school: collaborative planning, a sense of community, clear expectations shared among staff, and firm order and discipline. The factors are summed up by Rutter, who when commenting on the factors which make good schools, noted it is:

...schools which set good standards, where the teachers provide good models of behaviour, where they (the pupils) are praised and given responsibility, where general conditions are good and where the lessons are well-conducted (p. 204).

There has been recent debate over the question of differential effectiveness, that is whether or not schools do better for pupils with particular characteristics. Nuttall et al. (1989) found evidence of differential school effectiveness although Jessen and Gray (1991) argued that there was no conclusive evidence for it. More recent work by Sammons et al. (1993) has showed more support for the existence of differential school slopes and have argued that this has significant policy implications for the publication of schools' examination and test results.

Sammons et al. (1995) have reviewed the British and North American research literature and have provided a summary of eleven key factors or correlates of effectiveness. These are participatory leadership, shared vision and goals, teamwork, a learning environment, emphasis on teaching and learning, high expectations, positive reinforcement, monitoring and enquiry, pupil rights and responsibilities, learning for all and partnerships and support. Sammons et al. acknowledge that the list is neither exhaustive nor are the factors necessarily independent of each other. The authors share an elaborate view of causality in that schools and classrooms are complex, non-linear, adaptive systems and that rules of simple cause and effect can not be applied.

However the review has been criticised by Hamilton (1995), who proposes that research into effective schooling has become too product oriented and is pulled by the market place rather than steered by axioms and principles.

I reject both the suppositions and conclusions of such research. I regard it as an ethnocentric pseudo-science that serves to mystify anxious administrators and marginalise classroom practitioners. Its UK manifestations are shaped not so much by inclusive educational values that link democracy, sustainable growth, equal opportunities and social justice but, rather by a divisive political discipline redolent of performance-based league tables and performance-related funding (Hamilton, 1995).

This example again demonstrates the tensions apparent when following different discourses of special educational needs. The notion of effectiveness will be explored

again in Chapter 4 when an investigation will take place of the principles which LEAs use to provide additional resources for pupils with SEN. In summary, there appears to be a fine dividing line between the benefits of taking the emphasis off individual child deficits by considering context factors and "peddling simplistic school effectiveness snake oil as a cure-all" (Reynolds, 1995).

3.9.2 RESEARCH ON TEACHER EFFECTIVENESS

Until recently most of the school effectiveness studies have focused on school level factors (Stoll and Mortimore, 1995) yet it is clear that school and classroom development need to be linked. Wang et al.'s review of the research considered teacher effectiveness and as well as school effectiveness. The comments which follow, relating more specifically to teacher effectiveness, will to some extent overlap with some of Wang et al.'s overall conclusions. Generally Ainscow (1991b) suggests that there seems to a general consensus of findings within the research literature (e.g. Bennett, 1991; Bickel and Bickel, 1986; Brophy, 1983; Rosenshine, 1983). Rosenshine (1971) was one of the first to note that data from different investigations using different methods indicated that certain teacher behaviours were consistently correlated with student achievement gain. A more recent synthesis of the findings in this area of research is provided by Porter and Brophy (1988). They suggest that the research provides a picture of effective teachers as semi-autonomous professionals who:

- are clear about their instructional goals;
- are knowledgeable about their content and the strategies for teaching it;
- communicate to their students what is expected of them and why;
- make expert use of existing instructional materials in order to devote more time to

practices that enrich and clarify the content;

- are knowledgeable about their students, adapting instruction to their needs and anticipating misconceptions in their existing knowledge;
- teach students metacognitive strategies and give them opportunities to master them;
- address higher as well as lower-level cognitive objectives;
- monitor students' understanding by offering regular appropriate feedback;
- integrate their instruction with that in other subject areas;
- are thoughtful and reflective about their practice.

Ainscow (1991b) has compared Porter and Brophy's findings with those of Ainscow and Muncey (1989). Ainscow and Muncey were concerned with policies for meeting special needs in ordinary schools. Within their project the most effective teachers:

- emphasis the importance of meaning;
- set tasks that are realistic and challenging;
- ensure that there is progression in children's work;
- provide a variety of learning experiences;
- give pupils opportunities to choose;
- have high expectations;
- create a positive atmosphere;
- provide a consistent approach;
- recognise the efforts and achievements of their pupils;
- organise resources to facilitate learning;
- encourage pupils to work co-operatively;
- monitor progress and provide regular feedback.

Ainscow (1991b) uses this evidence to support the view that teachers said to be successful in meeting special needs are to a large extent using strategies that help all pupils to experience success. As Stoll (1991) argues :

... in an effective school with quality classroom instruction, all children, irrespective of social class differences, can make more progress than all children in an ineffective school with poor teaching methods.

3.10 CONCLUSIONS

The chapter set out to discover how the conceptualisation of SEN impacts upon both the policy and purposes of providing additional funding. There has been much confusion by policy makers about the definition and the overlap between SEN and social disadvantage (Lee, 1995). I shall now examine how the two policy discourses of the 'special needs pupil' and 'school and teacher effectiveness' map onto the two main purposes of SEN funding i.e effectiveness and equity. A first analysis of this problem might suggest that the purpose of effectiveness maps more readily to the 'special needs pupil' discourse. However I think this is an oversimplification of the case and that in fact both discourses address effectiveness and equity but with different emphases.

If an LEA wishes to follow only the 'special needs pupil' discourse then the purposes of raising achievement of individual pupils (effectiveness) and allocating resources to individual pupils (equity/equality of opportunity) become all important. On the other hand, the outcome of following the 'school and teacher effectiveness' discourse is to

place more value upon raising achievement of *all* pupils (effectiveness) by allocating resources to particular schools (compensatory resourcing). The implication of this finding for the thesis is that LEAs may wish to adopt both purposes and both policy discourses within their formula funding arrangements. An important strategy for designing a SEN funding formula is the combination of the purposes and policy discourses by allocating distinct and separate amounts for different formula components (see Chapters Eight and Nine).

A number of writers e.g. Dyson and Gains (1993), have suggested that a radical rethink about SEN is necessary, however this is unlikely to happen due to inevitable governmental time constraints. It is significant that the new government published a White Paper (DfEE, 1997d) and a Green Paper (DfEE, 1997e) within the first five months of taking office. The 'school failure' discourse is still to be found in the White Paper and the 'special needs pupil' discourse remains the focal point of the Green Paper. Predictably in such a short time period, the discussion paper has been based on the present educational structures involving a revised Code of Practice rather than, for instance, a radical reappraisal of the system of 'statementing'. In this context many LEAs, who are continuing to struggle with escalating SEN budgets, are inevitably finding that their solutions to the problem leads them further down the 'special needs pupil' road e.g. by adopting stricter criteria for the identification of pupils with SEN at stage 4 of the Code of Practice. It may take a major change in the way that resources are 'attached' to statements to halt the statutory assessment momentum and to shift the emphasis more towards the 'school and teacher effectiveness' discourse.

However on a more positive note, it is salutary to remember that in the UK the right to

education for all children with SEN was not recognised until the 1970 Education Act. The principles and practice relating to SEN have therefore developed more during the last 25 years than have those in most other areas of education (Wedell, 1993).

CHAPTER FOUR AN INVESTIGATION OF THE PRINCIPLES WHICH LEAS USE TO PROVIDE FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS

Whether LEAs seek to pursue the purpose of raising educational achievement or of compensation or seek to address both purposes, there are a range of objectives or principles which provide criteria against which different methods of allocating resources for special educational needs can be assessed in order to determine the preferred set of methods. In this chapter an examination is carried out of the range of objectives or principles which LEAs need to address when determining their method of allocating resources for special educational needs (Key Question 3).

The next chapter will consider in greater detail the relevant government circulars pertaining to Local Management of Schools. To summarise Circulars 7/88, 7/91 and 2/94 do not prescribe a uniform formula but the expectation is for LEAs in preparing and reviewing their formulae to bear in mind certain general principles. In Circular 7/88, the general term 'special needs' is used to refer to pupils with learning difficulties and also to needs arising due to social disadvantage. Circular 2/94 amended the term special needs to special educational needs although it still envisaged the use of proxy indicators. The general principles or rules of formula funding are summarised in Circular 2/94:

- the basic rules of the formula should be as simple as possible and predictable in their impact, so that governors, head teachers, parents and the community can understand how it operates and why it produces the results it does, and can include it as a key factor in their planning for future years. The rules should also be clearly expressed, so as to minimise the scope for time-consuming disputes about their interpretation;
- the formula should reflect schools' objectively-measurable needs rather than their

historical patterns of expenditure, in order to ensure that resources are allocated equitably;

- for county and voluntary schools the central determinant of those needs should be the number of pupils in each school, weighted for differences in their age;
- the formula should include at least two other specific factors, namely

 (i) variations in the additional costs of making provision for pupils with special educational needs (including pupils with SEN but without statements);
 (ii) the additional costs in small schools of maintaining a curriculum comparable to that available in larger schools, where the LEA considers that appropriate. (para. 102).

The principles or criteria by which a formula should be evaluated have been drawn from three sources: Ross 1983); Levačić (1995); Ross and Levačić (in press). The principles to be considered in detail in this chapter are:

- 1. Simplicity. A simple formula will assist transparency and will also help to keep administrative costs low.
- 2. Equity. This principle also includes objectivity in the distribution and differentiation of resources.
- 3. Effectiveness: what do the additional resources achieve and how does this relate to the intentions of the policy makers? This principle includes the issue of how to relate resource allocation to individual needs.
- 4. Responsiveness to needs. The distribution formula should be sufficiently needs responsive to reflect the continuum and range of SEN.
- 5. Efficiency and value for money. This principle includes discussion of the 'resource paradox' whereby schools which raise their educational achievement will receive a reduction in funding if the SEN index is based on measures of educational achievement which the school can influence.
- 6. Stability of funding.
- 7. Cost containment and the need to reduce and stabilise the rate of statementing.
- 8. Accountability. The Audit Commission (1994) emphasise the need to ensure that

schools are aware of the amount they receive for pupils with special educational needs through their normal allocation under formula funding and that they should account for how this money is spent.

The listing and descriptions of evaluative criteria take a technical perspective which is crucial to understanding the resource implications of local management of schools. However other perspectives could have been considered which are not developed in this chapter, such as the micro-political or a cultural perspective (Levačić, 1995). I adopted the technical perspective because it seemed to me that it would offer valuable insights which would complement the discourses of the 'special needs pupil' and the 'school and teacher effectiveness'.

An important point to note at this stage is that these objectives are not mutually exclusive and some are better delivered by some types of SEN allocation system than others. For example free school meals is one of the best SEN indicators for the objective of simplicity and low administrative cost but performs poorly with respect to responsiveness to individual need. Each of the criteria will now be examined individually whilst methods of resource allocation used by LEAs will be considered from the survey reported in Chapter Six.

4.1 SIMPLICITY

The 'simplicity rule' is intended to make resource allocation more widely understood and transparent. The difficulties in understanding complicated formulae is amply illustrated by the following comment made in a House of Commons select committee (1994) by an education officer giving evidence about the construction of a Common Funding Formula:

The difficulty we have is that the system starts with Standard Spending Assessments. Really I can stop there in terms of problems because once you start laying complexity upon a system which is probably understood by three people in the country, and I have to say that I have never met any of those...(para. 35).

Although, as Lee (1992b) argues the aim is commendable, it demands that LEAs adopt simple solutions to what are inherently extremely complicated problems. Additionally the 'simplicity rule' does not integrate well with some of the other objectives e.g. responsiveness to individual need, as recommended by the Code of Practice. This is especially the case if an LEA is concerned with the purpose of raising educational achievement.

ILEA (1982) devised an Educational Priority Index (EPI) and demonstrated the impact of 'cumulative disadvantage'. That is, there is clear evidence that pupils who experience several forms of disadvantage are affected in a cumulative rather than an additive way. This is illustrated in Table 4.1.

Table 4.1Percentage of Secondary Pupils with Different Combinations of
Characteristics in Verbal Reasoning Band 3 (ILEA, 1982, pp.9,11)

Combination of Characteristics	% of Pupils in Verbal Reasoning Band 3
No factors	10.8
Eligibility for Free Meals only	21.1
Large Families only	13.0
Parental Occupation only	18.4
Free Meals and Parental Occupation	26.7
Free Meals, Parental Occupation and Large Families	31.8

Table 4.1 shows that only 11 per cent of secondary pupils within verbal reasoning band 3 were not affected by any of the EPI factors. However, if eligibility for free meals is considered, 21 per cent of pupils were identified by this measure alone but the figure rose to 32 per cent when free meals was combined with the characteristics of parental occupation and large families. The survey reported in Chapter Six will show that 92% of LEAs use free school meals data in some form and that 80% of LEAs use three or fewer different additional educational needs formula elements in their resource allocation. The use of Free School Meals (FSM) information has been chosen by LEAs as it meets the criterion of simplicity, is readily available and is administratively cheap to use. (Section 45 of the 1988 Education Act requires LEAs to collect information regarding the entitlement to free school meals).

Although the above comments have highlighted some of potential difficulties in adopting the 'simplicity rule', nevertheless it is important to remember that:

...the old system, as familiar as it was inequitable and ineffective, was also guilty of failing those very same children....LMS did not cut short a 'golden age' of special education. (Lee, 1992c, p296).

The use of free school meals data will be discussed further in Chapter Six.

4.2 EQUITY

Equity is an intriguing concept (Lee, 1995, 1996). It may be broadly equated with 'fairness' and 'justice' (Le Grand, 1991, Ch.2). The term can also be defined as relating to the fairness with which different people or different categories of people are treated

in relation to the distribution of resources they receive (Levačić, 1995). One useful distinction is that between procedural equity and distributional equity. Procedural equity refers to the consistent application of agreed rules. It can therefore be argued that the allocation of non-statemented special educational needs resources by means of quantitative indicators of need, as in the prescribed LMS formula, is procedurally equitable in comparison with former methods of allocating resources to schools. These former methods depended to some extent on LEA officer discretion and hence on head teachers' ability to exploit their networks for the benefit of their individual schools. This procedural justification for formula funding was clearly stated in Circular 7/88:

it (the formula) should be based on an assessment of schools' objective needs, rather than on historic patterns of expenditure in order to ensure that resources are allocated equitably (DES, 1988a, para. 22).

Circular 7/88 further claimed that an objective approach ensures 'an equitable allocation of the available resources' (para. 99). Again the aim is commendable but in practice has caused some confusion over the interpretation of what is meant by an 'objective' formula. As Simkins (1994) states:

On the one hand, it might simply imply that the formula is specified so that its outcome can be predicted once the values of the independent variables are known. Alternatively, and more demandingly, it might mean that there is a clearly defined rationale for its components. Evidence suggests that the early days of formula funding have been dominated by the former interpretation (p. 17).

The crucial test for the distinction between objective and subjective data initially appeared to be whether the data can be collected without any aspect of judgement by headteachers, teachers, educational psychologists or any other LEA staff. Internal professional audits of pupils' needs were not acceptable at first to the Department for Education and Science (DES) as they were deemed too subjective. The renamed Department for Education and Employment (DfEE) have since revised their views, particularly in the light of the Code of Practice, and have now accepted properly moderated audits of need e.g. Kent, Avon, Northamptonshire.

Distributional equity is the form of equity which most people associate with the concept of social justice. It refers to the distribution of income and wealth and the means to obtain these. Distributional equity is a particularly important concept for education given that children's educational attainment is unevenly distributed and is positively associated with social background factors. Le Grand and Bartlett (1993) suggested that an appropriate distributional equity criterion for assessing an allocation system is the extent to which it distributes resources according to need rather than to other factors such as income and social status.

There are two forms of distributional equity: horizontal and vertical. Horizontal equity is the principle that every individual in like circumstances should receive the same treatment. The guidelines listed in Circular 7/88 strongly support horizontal equity principles i.e. the importance given to age-weighted pupil units and that, except for very small schools, the budget share must be based on average LEA teacher costs rather than actual costs. Vertical equity is the principle that individuals who have different needs should be treated in ways which compensate for these differences. The criterion that the special needs resource allocation system should be responsive to individuals' differentiated needs is an application of the vertical equity principle. By adhering to the 'simplicity rule', Circular 7/88 advises against vertical equity by stating that the use of a 'multiplicity of factors':

...will make the formula less intelligible without necessarily making it more equitable (para. 104).

Allocating resources according to special needs audits conducted by special needs coordinators and headteachers, as in Kent and Northamptonshire, fulfils the vertical equity criterion, but needs to be carefully moderated to ensure that horizontal equity is achieved as well, so that children with similar needs in different schools get similarly resourced. The professional audit approach with its subjective element performs less well against the procedural equity criterion.

Simkins (1995) argues that the Government's rationale for its educational reforms, commencing with the 1988 Education Reform Act made no explicit reference to equity, however it is unlikely that these reforms will be neutral in equity terms. He draws on the work of Wise (1967) and Monk (1990) to divide distributional equity into two broad categories: input based and outcome based.

The first category, which defines equity in terms of resource inputs, comprises:

- the 'equal expenditure per pupil' definition;
- the 'maximum variance' definition: placing a limit on the permitted variance in expenditure per pupil;
- the 'foundation' definition: a prescribed minimum level of expenditure provided for all pupils;
- the 'classification' definition: treating equally all members of specified categories i.e. horizontal equity; whether these be defined in terms of need, ability to benefit or some other variable; and also allocating more to those with greater needs (vertical equity).

Such expenditure-based approaches are attractive in policy terms and most LEAs surveyed by Lee (1992a) could be classified using the four input-based criteria. However these approaches do not address the accountability issues of the relationship between expenditure, educational processes and learning outcomes which will be discussed in more detail later in section 4.8. In an attempt to incorporate some view about the outcomes to which the resources are intended to contribute, Wise (1967) suggested the four following definitions of equity:

- the 'minimum attainment' definition: sufficient resources should be provided to enable all pupils to reach a minimum level of attainment;
- the 'full opportunity' definition: resources should continue to be provided until the marginal gains of all pupils are reduced to zero;
- the 'levelling' definition: resources should be distributed so that the least disadvantaged are favoured most and variances in achievement are minimised;
- the 'competition' definition: resources should be provided in proportion to the pupils' ability to benefit i.e. marginal benefit per unit of resource which is the same for all pupils.

Simkins (1995) has integrated the input and outcome based definitions together and has argued that they fall into three categories (see Table 4.2).

The definitions of equity illustrate the relationship between the principle of equity and the purpose of providing additional funding for pupils with special educational needs. Simkins asserts that the input-based definitions (equal expenditure and maximum variance) are more concerned with resource equality than with equity. In other words

	Input-based	Outcome-based	
Equality	Equal expenditure (strong) Maximum variance (weak)		
Baseline	Foundation	Minimum attainment Full opportunity Competition Levelling	
Differential	Classification		

they ensure that all pupils are treated the same rather than treated fairly. Lee (1992a) has shown that a large number of LEAs used the 'equal expenditure' definition in the first generation of SEN formulae, by allocating a unit cost to free school meals data. One example of the second of Simkins' categories, i.e. of outcome-based baseline criteria, is found by the Government's performance indicators for Key Stage 4 which records the number of pupils for each school achieving 5 or more GCSEs with a level A to C. However this definition does not provide any rationale for determining the different levels of expenditure required to achieve the minimum level of attainment.

It has already been argued in Chapter Three that if the LEA's purpose for providing additional funding for special educational needs is to raise achievement, then differentiation of costs is important. Examples of differential equity are provided within Simkins' third category of definitions. The 'full opportunity' definition appears to focus on the much quoted policy of 'the need to maximise pupil achievement' or 'enabling a pupil to achieve his or her potential'. Monk (1990) has argued that this definition is flawed because of the difficulties of putting the policy into practice as it places almost unlimited demands on resources without providing guidance about distribution if resources are finite. Also, the equity consequences are potentially damaging if pupils' ability to benefit varies significantly. The remaining two differential definitions of equity, 'competition' and 'levelling' are important because of the implications. As Simkins (1995) states:

If we assume that there is a fixed quantity of resources to be allocated and that pupils have different capacities to benefit in terms of learning from a given level of resourcing, then there is a clear choice available. We can attempt to maximise the total learning gain by directing resources to those whom we expect to gain the most even though this may widen the distribution of learning outcomes (the 'competition', 'élitist' or 'utilitarian' approach); or we can direct resources to those whom we judge to be most disadvantaged, thus hopefully reducing the level of variance in individual learning outcomes but at the potential cost of a lower total level of learning for the whole group (the 'levelling' or justice as fairness' approach).

The outcome-based definitions of equity have a clear relationship with the principle of effectiveness, to be discussed in section 4.3. That is to say maximising pupil outcomes (full opportunity), ensuring minimum standards (levelling) or maximising 'value added' (competition), all imply different resource allocations.

It is debatable whether the 'competition' definition can really be considered as a concept of equity at all. In practice however many examples are apparent, for example within the area of specific learning difficulties (SpLD). Riddell et al. (1994) reports of a study which focused on a group of parents of children experiencing SpLD in Scotland. The research found that within this group, parents with middle-class occupational levels were: three times more likely than working-class parents to report that the special educational provision their child received were inadequate; more likely to seek additional private tuition, but were 'able to secure a disproportionate share of additional provision within the state sector'. Similarly, research by Gross (1996) found that pupils

with SpLD were more likely to be 'overfunded' than other types of learning difficulties. Croll and Moses (1985) report that teachers attribute the source of children's difficulties to IQ, other within child variables, or the home background, but very rarely the school itself. This finding might explain the viewpoint held by some teachers that SpLD pupils are more 'worthy' of additional resources than their moderate learning difficulty (MLD) counterparts, as their higher abilities would enable them to make better progress. The issue whether expectations for future attainment of SpLD pupils can reasonably be based on measured IQ is seriously questioned by Stanovich (1994), Stanovich and Siegal (1994) and Fletcher et al. (1994). These researchers provide clear evidence that it is not possible to distinguish between SpLD and poor readers on significant measures of their reading skills or response to teaching. The issue of differential equity will be considered again in Chapters Eight and Nine.

An understanding of the various concepts of equity is important during formula construction, because LEAs can implement various policy thrusts by their selection of factors and different weightings. There is also an additional equity consideration related to the 'geographical lottery' aspect of variation between LEAs (examined in Chapter Six) of the funding of both statemented and non-statemented SEN. The Government's stress on procedural equity and horizontal equity i.e. age weighted pupil units has placed an over emphasis on the criterion of age being the most important determinant of need. LEAs which have developed professional audits of need have attempted to balance these effects by introducing a vertical equity component. These examples are all 'input-based'. Chapters Eight and Nine will include an exploration of 'output-based' approaches which, as Simkins (1995) suggests, would address more explicitly the relationships between resource deployment and pupil achievement and provides a direct

link with the principle of effectiveness.

4.3 EFFECTIVENESS

Chapter Three has already considered the principle of effectiveness in relation to the purpose of allocating resources to raise educational achievement and in particular from the discourse of teacher and school effectiveness e.g. Sammons et al. (1994), Hutchison (1993). The effectiveness of a funding formula will depend on the extent to which the formula delivers central and local authority aims for education (Levačić, 1989). The increasing requirement for accountability from the education service is closely connected to demands for greater effectiveness since educators are facing growing expectations that they should be able to demonstrate that they have used resources effectively (and efficiently). This criterion is now one of the four aspects of a school's performance that is assessed in the OFSTED (1995b, 1995c, 1995d) Guidance on Inspection. One of the contributing factors to this assessment is the school's special educational needs provision.

As has already been stressed, any assessment of effectiveness depends crucially on the objectives that have been set and against which what is provided or what is achieved educationally is assessed. Simkins (1994) suggests that the most obvious way to explore effectiveness in education is to address the issue of pupil learning. The principle of effectiveness is a highly relevant criterion if the purpose of additional resources for children with special educational needs is to raise their educational achievement. It then becomes important, in order to assess effectiveness and render accountability for

effectiveness to define what is meant for individual pupils by the objective of 'raising achievement'. Also of importance is the choice and the validity of the indicators which are used within the formula, which will be discussed further in Chapters Eight and Nine.

4.4 RESPONSIVENESS TO NEEDS

Amongst the issues to emerge from the national reports which have been published following the implementation of the 1981 Education Act are the relationship between non-statemented and statemented special educational needs, the resources to meet SEN generally, together with the increasing demand for pupils to be statemented. There appears to be a strong case for the systematic allocation of teaching time to meet the wider range of SEN to enable appropriate provision for this wider range to be made and to reduce the excessive pressure which may otherwise be placed on LEAs to carry out full assessments and make statements. It has been clear from DFE circulars that the LEAs' policy for SEN must cover the wider range of SEN and not just the arrangements for pupils with statements.

The Warnock Report placed great emphasis on the continuum of needs. As mentioned above, Dessent (1987) has argued that typically resources are allocated in a discontinuous way to a continuum of needs (p.55). This is particularly apparent when Circular 11/90 is considered in parallel with LEA's non-statemented resources. A primary aged pupil with a statement at band 5 within a special school, i.e. other learning difficulties, can accrue 0.1 teacher time and 0.1 learning support assistant (LSA) time. A secondary aged special school pupil at band 5 can accrue 0.1 teacher and 0.05 LSA

time. This has been costed by *Whiteshire* at £4,100 for a primary aged pupil and £3,400 for a secondary aged pupil. Within the same LEA a band 5 mainstream pupil with a statement would typically be resourced with 0.1 of an outreach teacher or approximately £2,200. However a non-statemented primary SEN pupil in this LEA would attract £320 and a secondary non-statemented pupil £1200. In Staffordshire the unit cost per non-statemented SEN pupil for 1994/95 was £264.60. This cost was the same for primary and secondary pupils.

LEAs which have adopted an audit approach may have already extended the five bands of statemented resourcing to include bands for non statemented special educational needs pupils. For example Kent allocates money based on their audit of special needs as follows:

Table 4.3Allocation to schools in Kent per pupil with SEN at various levels
(Marsh, 1997a)

Stage/Level Primary (per pupil) Secondary (per pupil)					
1	£97	£80			
2	£390	£319			
3	£742	£592			

If the main purpose of allocating additional resources for special educational needs is to raise educational achievement and provide access to the curriculum then it might be expected that differentiated levels of resourcing should be provided for pupils with different levels and types of need. A significant proportion of statements are produced for pupils with specific learning difficulties. In *Mercia* 32% of all statements issued in

one year were written for pupils experiencing specific learning difficulties. Therefore special consideration needs to be taken that the formula identifies the full range of special educational needs. Relationships have been cited for the numbers of pupils taking free school meals and the numbers having special educational needs (e.g. McConville et al., 1991). However the relationship between free school meals and specific learning difficulties is less clear. The issue of different SEN indicators will be explored in greater detail in the next section.

The principle of responsiveness of the allocation system to individual need is thus highly complex and conflicts with the principle of simplicity and low administrative costs.

4.5 EFFICIENCY

Efficiency has been defined as the achievement of given outcomes at least cost. The salience of the efficiency principle depends on the purpose of the resource allocation. If compensation for social disadvantage is the main purpose then efficiency and value for money would not be important criteria, whereas they would be if raising achievement is the main purpose. However if the purpose of additional funding is for effectiveness reasons then further implications exist for the LEA which are usefully discussed in the context of the purchaser-provider model.

The purchaser-provider model used here is one in which the purchaser and provider functions are undertaken by separate organisations e.g. LEA and schools. The aim of separating the purchaser role from that of the provider is to prevent 'provider capture', i.e. to prevent suppliers of services from having a monopoly. In economic theory a monopoly is against the interests of clients as it has no incentive to provide services at an efficient cost or of the quality desired by its customers and therefore operates in the interests of the providers rather than those of the customers. This model needs to be distinguished from the 'traditional state welfare bureaucracy model' in which the purchaser and provider functions are undertaken by the same organisation e.g. the LEA.

The Audit Commission report (1992a) suggested that the purchaser-provider model could be used to allocate resources for pupils with SEN. That is, LEAs could purchase services from schools on behalf of children with special educational needs. In some circumstances the LEAs will be the providers and the schools the purchasers. For example, if the LEA delegates the funding for support services to schools and leaves schools to buy in those services which they feel they need, then the school is purchasing from the LEA. In the context of non-statemented special educational needs resource allocation then the LEA, as a provider of additional resources, might expect a higher level of efficiency if resources are allocated for raising educational achievement in well defined outcome terms than when the purpose is for compensation.

A further aspect of the efficiency criterion is the issue of the 'resource paradox' whereby a school which raises its academic achievements will be penalised if an index of its educational output is included in the formula for funding special educational needs. An allocation system which discourages schools from striving for the highest possible educational attainment for their students would be inefficient as well as ineffective. However if attainment is measured at intake to primary or secondary school,

the danger of rewarding low performing schools can be overcome.

Another issue with respect to incentives is whether the allocation system gives schools sufficient incentive to recruit, retain and provide for SEN pupils. If schools perceive that the costs of such pupils outweigh the benefits to the school then the allocation system is not promoting efficiency from the perspective of LEA SEN policy. The issue of the perceived benefits to a school of having SEN pupils is related not only to the financial incentives but also to the school's educational values and aims. It has been suggested by Lunt and Evans (1994) that a 'place element', as recommended by the Touche Ross (1990) report on LMSS would, if incorporated into a funding formula with a pupil element as well, give schools a greater incentive to assume responsibility for pupils experiencing special educational needs.

4.6 STABILITY OF FUNDING

Another important principle of formula funding is that of stability in order for financial planning to occur and so that least disruptions are caused to individual schools. This is emphasised in Circular 7/88 which stated that the formula must be:

...simple, clear and predictable...so that governors, head teachers, parents and the community can understand how it operates and why it yields the results it does, and can include it as a key factor in their planning for future years (para. 104) (my highlights).

The LMS Initiative (1992) reported that the majority of LEAs responding to their survey claimed that the most important criterion in designing their formula had been to 'minimise change'. This is perhaps understandable given the wish by LEAs to

minimise "winners" and "losers" and to prevent the disequilibrium that large discrepancies would cause. Moreover, the study reports that even in the minority of LEAs that claim to have taken the opportunity to change funding patterns to reflect more objective measures of need, it is likely that the impact on individual schools was scrutinised heavily before this course of action was taken. The LMS Initiative felt that this finding was disappointing in that it would appear to conflict with the principle that resource allocation under LMS should be based on 'objectively measured needs' rather than historical levels of funding. However for many LEAs such a distinction was a false dichotomy.

For them, historical funding did reflect need - indeed when it came to designing the formula there was no better objective measure of need than the previous pattern of funding, which in itself had risen through an accumulation of LEA decisions over time and in response to educational need. Thus the attempt to match history could be interpreted as an attempt to match need (LMS Initiative, 1992).

Despite the attempts of LEAs to minimise changes in the funding to individual schools, the move to formula funding has caused a redistribution of resources. Chapter Nine will consider the impact on school budgets of using different special educational needs indicators. Thomas and Bullock (1992) reported that the frequency of budget losses (comparing formula and historic funding for the same set of variables) is greater among small schools in both primary and secondary sectors than in larger schools. The LMS Initiative survey found that the maximum gain for any individual school was 91% of its previous budget figure and the maximum loss 61% (51% and 34% respectively after dampening and transitional arrangements). In terms of sectors and types of schools, the survey found there had been a shift from the secondary sector to the primary sector and from small or under occupied schools to large schools. Therefore the main gainers were large primary schools and large secondary schools and the main losers were small

secondary schools and under occupied schools. The same association with budget loss and size, particularly in the secondary sector, is reported by Levačić (1992) for 16 LEAs. The studies referred to drew data from a large number of LEAs but were only able to use statistical data on a narrow range of school characteristics. Levačić (1993) focused on a single LEA and was able to analyse a wider range of school level data and interpret the findings using detailed knowledge of the LEA's formula. She found that whilst the largest determinant of budget changes was the change in pupil numbers, schools with high unit costs due to excess capacity or being relatively small tended to lose budget. Thus the formula promoted cost efficiency by reducing the number of schools which had large positive discrepancies between their unit costs and the average for their sector.

The LMS Initiative report emphasised the importance of the formula for transmitting policy signals to schools. However the report also offered the warning that it is a fairly crude policy instrument where a small change can have big effects at the school level. Because of the sensitivity of the formula to minor amendments and the pressures on LEAs to revise their formulae, schools are unlikely to enjoy a stable funding regime when transitional arrangements are over (Levačić, 1993). One of the side effects of formula funding and instability of funding will be that schools will build up bank balances e.g. Downes (1993).

4.7 COST CONTAINMENT AND THE NEED TO REDUCE OR STABILISE THE RATE OF STATEMENTING

Cost containment refers to the objective of public expenditure control. An allocation

147 T-1-1-

system which provides additional resources to any pupil who can be certified or measured as meeting the criterion for additional resources provides an incentive for parents and the school to secure the necessary identification for that pupil. It can therefore be hypothesised that such an allocation system will over time generate increases in the number of pupils eligible for additional funding. I shall refer to this behaviour with respect to statements as 'statementing inflation'. This development will over time either increase the total special educational needs budget by diverting resources from other areas of the education service, other services or by increased government grant or local taxation. If the additional expenditure on special educational needs is funded out of other sources than the education budget then it is not at the expense of other pupils. However there is no guarantee that this is the case, in which event statementing inflation has equity implications for the education service of which educationalists are not usually aware.

There is some evidence that 'statementing inflation' does occur. The 1981 Education Act introduced procedures for the assessment and production of statements for pupils with special educational needs. The Code of Practice states that:

Only in a small minority of cases - nationally, around two per cent of children will a child have special educational needs of a severity or complexity which requires the LEA to determine the LEA to determine and arrange the special educational provision for the child by means of a statutory statement of special educational needs (para. 2:1).

Since the implementation of the Act in 1983 there has been a general rise in the number of statements issued. Data obtained from the DfEE statistics section for all 109 English LEAs indicates that there has been an overall increase in the percentage of statements from 1.6 % to 2.4 % during the period 1985 to 1993 with 89 LEAs experiencing an increase. The 1985 figures include some artificially low percentages due to the lateness of a few LEAs to issue transitional statements, e.g. five LEAs had records of 0.0 %. The explanation usually given for the increase is that it is partly, due to better identification and assessment procedures but, perhaps more importantly, due to parents and schools increasingly seeking statutory assessments in order to meet the needs of pupils with special educational needs. Information collected annually for the Citizen's Charter (Audit Commission, 1997) confirms the trend in the increase of pupils with statements of special educational needs, 72% of all the LEAs in England and Wales now have over three per cent of pupils with statements and 98% LEAs have statements at or above the 2 per cent level (Marsh, 1997b).

Further examples of statementing inflation have occurred in other countries implementing LMS. In Edmonton, Canada there were initially 22 levels of educational need which determined levels of resource. However in an attempt to combat 'statement inflation' it was decided to reduce the number of levels to 11. It is interesting to speculate whether a similar type of inflation will occur if LEAs follow the lead of Kent and allocate resources according to the Code of Practice assessment stages. Waters (1994) reported that in 1994/5 the unmoderated overall percentage of special educational needs pupils identified by the professional audit rose to 27-30 per cent.

The growth in the number of statements as experienced in *Whiteshire* is shown in Chapter Seven (Table 7.4). The percentage increase in statements over the last nine years has been within the range of 8 to 15 per cent per year (average 10 per cent per year). As already stated it may be argued that if professionals are becoming better able to identify needs and to discover shortcomings in provision then the increase in

statements might be expected. However several writers have commented on the gross inequities which can occur when individualised provision is made by statements with children with similar levels of need receiving different levels of resource. Additionally there is the issue of the 'resource divide' described by Dessent (1987) whereby the continuum of need is resouced in a discontinuous way. This point will be discussed again in Chapter Seven. Again the choice of purpose for SEN additional funding will help to determine the importance of this principle. It could be argued that compensatory resourcing should help to reduce the demand for statementing as in general terms the schools with the highest level of need as determined by a proxy indicator will receive higher levels of resources. However in practice, without LEA records to identify individual pupils experiencing SEN then 'double resourcing' often takes place, in which pupils with a statement also receive an allocation for FSM. In addition, without accountability, to be discussed in the next section, schools have not had to demonstrate their effectiveness with this additional funding and may not even be aware of the level of funding for this purpose within the formula.

4.8 ACCOUNTABILITY

If the LEA is unsure about whether the purpose is for compensatory reasons or to raise school achievement then it is not surprising that schools show a lack of awareness about the amount of money that has been allocated by the formula to SEN. The Audit Commission (1992a) stated that:

The key factor which is missing in considerations of the use of resources for pupils with special needs is an analysis of what funds are expected to achieve in terms of a child fulfilling his or her potential. (paragraph 113).

It continued (1992b):

Accountability should go hand-in-hand with the delegation of funds to schools. Schools should be held responsible for the use of resources and for what they have achieved with them. Objective indicators in this area can be an incentive to schools to achieve well. (p.2).

It is important to note that 60 per cent of headteachers were not aware of the special needs resources they did get. The Audit Commission/HMI report (1992a) considered that this situation arose because LEAs have not been sufficiently clear about amounts in schools' budgets which relate to special needs and partly because headteachers have not seen it as a priority to find this out (para 74).

There are further examples to illustrate schools' lack of awareness. Firstly, during a survey of pupils with special educational needs in mainstream schools, HMI (OFSTED, 1996) noted that:

In the earlier stages of the survey, many schools had an inaccurate knowledge of the exact level of resourcing for pupils with SEN. Towards the end of the survey, schools became more aware of the delegated funding available for special educational needs, and this strengthened their monitoring of the provisions available (p6).

Secondly, a similar point about schools lack of awareness was raised by the House of Commons Education Committee regarding the working of the Code of Practice and the Special Needs Tribunal (House of Commons, 1996). Mr Gerry Steinberg MP questioned Mr Vincent McDonnell (representing the Society of Education Officers):

(Mr Steinberg) Are you actually saying that schools, under local management of schools, have money allocated to them from the local authority for special needs and have not actually spent it on special needs, they have spent it elsewhere?

(Mr McDonnell) Potentially this has happened, yes.

(Mr Steinberg) That is interesting. I think you are going to have to keep an eye on that, to be quite honest. (House of Commons 1996, paras. 8, 9 and 11).

The degree to which LEAs can keep an eye on accountability is limited, of course, due to the delegated powers given to governing bodies under LMS. However the main point to be remembered is that if LEAs specify the reason for additional resources, a proactive message will be delivered to schools and governing bodies about their intended use. In the light of these comments it is perhaps surprising to note that the arrangements adopted by *Whiteshire*, in response to appeals heard by the Special Educational Needs Tribunal, does not request evidence from the Headteacher as to how the school is spending the portion of its budget allocated by SEN indicators. The requirements of the 1993 Education Act states that the governing body must:

...do their best to secure that the necessary provision is made for any pupil who has special educational needs. ...report annually to parents on the school's policy for pupils with special educational needs (Section 161, DFE, 1994, p6).

Some governing bodies have interpreted this to include in the annual report to parents, details of the use of SEN resources, the total expenditure and an evaluation.

It is likely that a much higher profile will be given by LEAs to the accountability of non-statemented special educational needs resources particularly in the light of reports from LEAs which appear to show that schools are carrying forward significant underspends into the following financial year (see Downes, 1993). It should also be borne in mind that there are also inherent costs involved in rendering accountability e.g. paper production and checking. Therefore the most efficient form of accountability needs consideration.

Bines and Loxley (1995) have argued that the Code of Practice for Special Educational

Needs will also increase accountability in relation to provision and partnership with parents. In general allocation systems, based on differentiated indicators of individual pupils' special needs which specify the expected educational achievement, lend themselves much more readily to accountability for the effectiveness with which resources have been used.

4.9 SUMMARY

This chapter has taken a technical perspective in outlining the general principles against which the provision of additional resources for special educational needs can be evaluated. However the application of explicit normative criteria does not, of course, give unequivocal guidance to budget construction (Levačić,1989). Additionally I shall consider in Chapter Ten how the policy discourses of the 'special needs pupil' and the 'school and teacher effectiveness' are accommodated within this 'rational' framework.

The principles may be mutually inconsistent and so it is important to consider their relative effects. For example, the construction of a complex formula which places emphasis on the concept of equity may make the whole process less accountable and would fail the 'simplicity rule'. At an individual school level, the consequences of formula funding depend not merely on the design of the formula, which is essentially a static concept, but also on the nature of the school's market where choices made by parents and other factors influence the size and composition of the pupil's population (Simkins, 1995). The distribution of resources within a market model will change over time and will depend on the quality of resources a school can attract (e.g. teacher

experience and qualifications) and the characteristics of the pupil population, particularly if consideration is taken of Monk's (1990) evidence about peer group effects on achievement.

A clear set of general principles for providing additional resources formula funding can assist the partnership between LEAs, governing bodies and headteachers (AMA, 1995). More and more pressure is being put upon governing bodies to divert monies to other areas from budgets which have been originally allocated by LEAs for non-statemented SEN. Without accountability of these in-house resources, there is evidence that referrals for statutory assessment will increase to gain access to further funding from the LEA. The implications of an increasing statutory assessment component of the LEA budget will have a direct influence on the amount of money which is left for calculating the age weighted pupil units and the non-statemented SEN allocation. Increasing the nonstatemented SEN allocation and developing a SEN formula which includes differentiation of funding levels will not by itself reduce the continuing trend in the increase of statements. LEAs are attempting to develop robust and transparent SEN policies which clearly define the threshold of need to trigger a stage 4 assessment and documents the LEAs' expectation of schools' responsibilities (Coopers and Lybrand, 1996a). If LEAs are successful in controlling and stabilising the costs involved with the increase in the number of pupils with statements, then this may offer the possibility for some recycling of resources to the non-statemented sector. In addition an understanding of the issues and general principles of formula funding will enable LEAs to adjust and review their own formula to reflect policies and objectives.

CHAPTER FIVE HISTORIC FUNDING OF SPECIAL EDUCATIONAL NEEDS AND THE RELATIONSHIP WITH FORMULA FUNDING

The second subsidiary aim of this thesis is to examine the funding relationship for nonstatemented special educational needs and pupils with statements in an attempt to develop a coherent approach to resourcing throughout the continuum of SEN. The purpose of this chapter is to concentrate on Key Question 4 i.e. to draw out the historic association between special educational needs provision and funding by reference to the literature on the subject including pertinent government circulars of guidance.

The first section of this chapter will examine the relationship between special needs and resources as illustrated by two important circulars of their time i.e. Circular 4/73, (DES 1973) and Circular 11/90 (DES, 1990). Although both of these circulars relate to the 'two per cent' of pupils with SEN, it is important to be aware of the government's recommendations for resource levels in the context of the continuum of SEN. Circular 4/73 provided guidance to LEAs on staffing ratios in special schools and classes, using categories of handicap and maximum class sizes. The general issue of class size in mainstream schools, which has gained in importance over recent years, will then be discussed. Class size is particularly crucial when determining resource levels for pupils on a per capita basis, where each pupil is funded for a fraction of a teacher, as recommended by the LMS proposals. Circular 11/90 provided an update of 4/73 and proposed the concept of resource bands based on five bands of learning difficulty.

The second part of the chapter will examine the impact of LMS on the formula funding arrangements for special educational needs. There are three major functions of a funding formula (Ross and Levačić, in press) : a market regulation function, an equity function and a directive function. The market regulation function has been predominant during the period 1988 to 1997 during which time the Conservative government was in power. There was an assumption by the government that parents would choose schools on the basis of the quality of the education provided and an important element to influence choice would be to improve the level of school output information available to parents. In this way as resources would follow the pupil, so 'good' school would prosper and 'poor' schools would either improve or leave the market place. The second major function of a funding formula is concerned with equity and this is of particular importance when determining resource levels for pupils with special educational needs, the main focus of this thesis. The directive function of the formula is an important instrument by which the LEA can implement policies using financial incentives e.g. by protecting the size of small schools or by encouraging the specific use of resources e.g. for the teaching of English as a second language to pupils from an ethnic minority background. It will be argued later in this thesis (Chapter Ten) that the part of the formula concerned with funding for non-statemented special educational needs should encompass both the equity and directive functions.

5.1 PUPIL TEACHER RATIOS AND CLASS SIZE

An essential concept in the understanding of resource issues for pupils with special educational needs is how the amount of resource or the 'fraction of a teacher' is calculated. This section will discuss four resourcing areas relating to pupil teacher ratios and class size. First, Circular 4/73 will be examined which provided guidance for LEAs on staffing in special schools based on pupil-teacher ratios; second, the concept of curriculum based staffing will be discussed, which emerged because of concerns about the teacher-pupil ratio; third, activity led staffing which was developed from the curriculum led approach and fourth, a brief literature review on class size will be provided.

5.1.1 DES CIRCULAR 4/73

The relationship between needs and resources is illustrated in Circular 4/73 (DES, 1973) which provided guidance for LEAs on staffing in special schools and classes using the categories of handicap and maximum class sizes. This circular replaced the regulations issued in 1959 when maximum class sizes in special schools were prescribed by the Handicapped Pupils and Special Schools Regulations (Regulation 9) (Ministry of Education, 1959a), (see Table 5.1).

Table 5.1	Staffing recommendations for children with special educational
	needs taken from Ministry of Education (1959a) and DES Circular
	4/73

Category of Handleap	Prescribed Maximum Class Size 1959	Recommended Teaching Group Size 1973
Deaf/Partially Hearing	10	6-8
Speech Defects	10	6-8
Blind	15	6
Partially Sighted	15	9
Maladjusted	15	7
Educationally Sub-normal Moderate ESN(M)	20	11-13
Educationally Sub-normal Severe ESN(S)	N/A	10
Epileptic	20	8-10
Physically Handicapped	20	4/5-10
Delicate	30	4/5-10
Autistic	Not given	6-8

Note: ESN(S) children were termed 'unsuitable for education in school' until the 1970 Education (Handicapped Children) Act transferred the responsibility from the health to the education authorities.

Circular 4/73 indicated that:

The increased complexity of the disabilities found among children, and improvements in the supply of teachers since the regulations were made, have resulted in average class sizes well below the prescribed maxima for a number of handicaps. Thus, in January 1970 the average class sizes in special schools for the blind, the maladjusted and the physically handicapped were 9.2, 9.0 and 12.6 respectively, against the maxima prescribed by regulations of 15, 15 and 20. For other handicaps, notably the educationally sub-normal, average class sizes were closer to the prescribed maxima (para. 3).

Three important principles were encompassed by Circular 4/73. Firstly, the rigid concept of class size was replaced by the principle of pupil teacher ratios (PTR) which allowed flexibility to be built into the organisation of the work of each school. Thus flexible teaching groups were envisaged ranging from individual tuition to groups of 20

or more for music and games. The second principle was that the more severe the Formula Funding and Special Educational Needs 132 learning handicap, the smaller should be the teaching group, recognising that children with multiple handicaps make the greatest demands of all. Thirdly, it was felt that with young children a more favourable staffing ratio was required.

5.1.2 CURRICULUM BASED STAFFING

Despite the adoption of the principle of PTRs in Circular 4/73 there were concerns about the shortcomings of their use. The White Paper of 1972 *Education : A Framework for Expansion* indicated that:

It (PTR) does not allow for changes in the age distribution of the school population. For example, an increase, within a given school population, in the proportion of older pupils with their more favourable staffing ratio would necessitate an improvement in the overall ratio merely to retain the same standards.

According to Simpson (1987) the concept of curriculum based or curriculum related staffing (CBS/CRS) "was born of dissatisfactions with the pupil-teacher ratio". Under this traditional approach of PTR schools were entitled to a teacher for every set number of pupils they enrolled and the number of teachers per pupil varied according to the age of the pupils concerned. The value of the curriculum-led approach was that it focused on the impact of the curriculum and class sizes on the staffing requirements of each school and did not simply rely on the application of pupil-teacher ratios to arrive at the staffing complement of each school. However it was not until the contraction in the education system, evidenced by falling pupil rolls, became a reality in the 1980s that alternatives to the PTR were taken seriously.

The basis of the curriculum-led approach was the adoption of a curriculum model which laid out for each of the first five years of secondary education, the distribution of the 40period week between various subjects or groups of subjects. This was then used to calculate the number of teachers required to teach the curriculum once the average class sizes had been decided upon, together with the range of choice of subjects to be offered in later years. The CBS/CRS policies were also not without critics as is shown by the comments from a Headteacher from *Whiteshire*, an LEA used in the case study referred to in detail in Chapter Seven.

...the CRS policy so called which wasn't really a CRS policy at all. It was just a group size policy, under which you got a number of teachers delivered by various group sizes 16, 19, 24 and all those various numbers that are floating around the system. At the end of the day if that and a bit of small school supplement didn't get you to 18.5 to 1 then you were given 18.5 to 1 anyway. (Headteacher)

5.1.3 ACTIVITY LED STAFFING

Activity Led Staffing (ALS) was developed from the curriculum-led approach in the late 1980s with the introduction of Local Management of Schools. It extended the analysis further and included, as well as class teaching, all the other activities that teachers undertake. The rationale of ALS has been described as establishing a benchmark for resources which is related realistically to the nature and scale of activity in schools (Cambridgeshire County Council, 1993). The main aim of ALS then is to identify the curriculum and management's activities within schools and to quantify the resources required to carry out these activities. This approach is seen as particularly important in assessing the resources required when new demands are placed on schools such as the introduction of the National Curriculum and assessment, records of

achievement, teacher appraisal, OFSTED inspections or the costs of implementing the Code of Practice on the identification and assessment of special educational needs.

A number of steps are required to arrive at an ALS system of funding (Cambridgeshire County Council, 1993). Defining the activities undertaken by teachers is the crucial first stage in ALS. The stages are:

- Design stage this involves identifying all the curriculum and management activities carried out in schools;
- Parameter values are inserted these drive the model and consist of the numbers or standards (parameters) which will set against curriculum and management activities which constitute the model;
- Calculations take place to determine the number of teachers required to deliver the model on the basis of the parameters decided on in the stage above;
- Actual cost of employing teachers is calculated.

A particular problem that LEAs have found is that ALS models tend to generate budgets that are often far in excess of their Education Standard Spending Assessments. In Leeds (1993), for example, it was calculated that at least a further £9 million (5% of the Aggregated Schools Budget) would be required using the ALS model to provide an acceptable curriculum entitlement for pupils (using parameters that were considered to be appropriate by the working party examining the approach). In Hampshire (1992), a working party proposed an activity-led staffing model which, if translated into funding, would have required a 50 per cent increase in the funding of primary school staffing. A subsequent report from Hampshire County Council pointed out that "such increases in

funding will not be possible without changes in national policies and budgets". The issue of underfunding as defined by ALS models has meant that LEAs have had to make a difficult choice, either to alter the ALS parameters until they offer the "best fit" to the available resources or to abandon the ALS approach at least temporarily. In Cambridgeshire, for example, the parameters were adjusted to meet the available expenditure by using relative weights for different age groups, whilst in Leeds it was decided that it would not be fair to implement a sub-optimal scheme and it was recommended that further work should be undertaken to develop a model that was fair at low resource levels.

The next section will provide a brief look at the research on class size, an area which has a significant impact on ALS and resourcing for pupils with special educational needs but without statements. The White Paper *Excellence in schools* (DfEE, 1997d) outlined the government's intention to reduce class sizes for 5, 6 and 7 year olds to 30 or below by 2002.

5.1.4 LITERATURE REVIEW ON CLASS SIZE

Class sizes have been long regarded as an central factor within education e.g. Bennett, 1996. Although there is a wide spread belief amongst parents, teachers and others that pupils learn most effectively in small classes, the research evidence according to the Director of the National Foundation for Educational Research, "has been conflicting, inconclusive and disappointingly meagre" (Burstall, 1992, p.23).

The literature on class size has been reviewed by Mortimore and Blatchford (1993) and Blatchford and Mortimore (1994). They concluded that there is now firm evidence of a link between class size and educational attainment but only in the early years, especially with disadvantaged pupils and only with classes smaller than 20. Research was quoted from the USA from the so called STAR project (which stands for 'student-teacher achievement ratio'). This is a major state-wide intervention in Tennessee which included over 7,000 pupils in 79 schools. It compared pupils in three types of classes:

- 1. 'small' classes (13-17)
- 2. 'regular' classes (22-25)
- 3. 'regular' with full-time teacher aide.

Pupils were followed through from kindergarten (aged 5) in 1985 to third grade (aged 8) in 1989. Pupils were then (and are still being) followed, after the experimental stage, into grades 4-6, and beyond in the Lasting Benefits Study (LBS). Based on the STAR results, a new initiative was begun in Tennessee by providing incentives in 17 counties to reduce class size to 1:15 in grades K-3 (see Nye et al. 1993).

Nye et al. (1992) reported that the results were impressive and consistent. In both reading and mathematics pupils in small classes performed significantly better than pupils in regular classes. This was true from Kindergarten to grade 3. Interestingly, being in regular class with a teacher aide made no difference; small classes with one qualified teacher had pupils who did better than pupils in regular classes with an assistant; and there appeared to be a particular advantage for pupils from ethnic minorities. The gains still appeared to be evident when the pupils returned to regular

classes. The Lasting Benefits Study (Nye et al. 1992) found that significant differences were still evident for the two school years after returning to regular classes, that is grades 4 and 5. Even though the authors agreed with the view that their research is the 'most significant research in the USA in the last 25 years' there is still need for caution. Although Slavin (1989) agrees that substantial reductions in class size do have positive effects, the size of the difference reported in even good quality research studies is moderate. He reviewed eight studies of primary aged children, including the STAR research, which met three selection criteria. Firstly, comparisons between small and large classes over a period of one year; secondly, comparisons of larger classes with classes at least 30% smaller and containing no more than 20 pupils and thirdly, using random assignment or matching with initial equivalence. However, the sizes of the effects for the STAR research are more marked than most of the figures cited by Slavin. It seems reasonable to conclude that the most thorough research, which would be expected to result in the most reliable evidence, has produced the most marked effects, (Blatchford and Mortimore, 1994).

Blatchford and Mortimore have also considered the particular concerns about class size reductions. Firstly, class size reductions would appear to be more effective in the first years of school, when children are more dependent on adult help. Achilles et al. (1993) claim that for benefits to result, pupils have to start school in small classes; entering small classes later has less benefit for pupils and cannot be expected on its own to affect difficulties that may have developed. The second main concern with class size reductions is the expenditure. It has been estimated that after seven years the Prime Time project in Indiana has cost \$82 million (Weis, 1990). Tomlinson (1990) has

questioned whether this expenditure is justified given the lack of evidence of clear effects. Blatchford and Mortimore (1994) give the example from one LEA that to reduce all classes by one pupil would cost approximately £1 million. To reduce classes from 30 to 20 pupils would be seen by education officers and elected members to be too expensive and would be construed to be better spent in other ways e.g. to increase primary non-class contact time.

A third question about class reductions is how much they have to be reduced in order to be effective. The consensus from the American research according to Blatchford and Mortimore, seems to be that reducing class size by a few pupils across the board is unlikely to be effective and that significant effects will not be achieved until classes are reduced to below 20. This evidence does not necessarily produce beneficial effects in all aspects of education. Shapson et al. (1980) found that teachers do not change their methods and styles of teaching when faced with fewer students. Their research discovered that teachers had firm expectations about the positive effects of class size but these consistently failed to match what was observed in the classroom. The concern might be that class sizes could make teachers feel more comfortable and make their lives easier without necessarily improving the quality of teaching or the curriculum experienced by the pupils.

A number of commentators have advocated the need for new research on class size in the UK e.g. Bassey (1995), Mortimore and Blatchford (1995), and Bennett (1996), despite the assertion by Hodgetts (1995) that the argument is not really about class size at all but about the political decision of how much of the public expenditure budget should be allocated to education. The argument has been proffered by researchers in education that, given the basic importance of class size and how it determines vast costs in education, it is surprising how little investment has been put into research on class sizes and teaching groups, on the effects on teachers and pupils of different class sizes, and on the opportunities that might be provided.

In summary although the research evidence on the benefits of smaller classes is not clear cut, it does appear that pupils educated in smaller classes during the early years of schooling out-perform pupils in larger classes and maintain their advantage, demonstrating increased attainment two years later. Children from disadvantaged backgrounds appear to benefit most. This finding has implications for LEA policy makers, for example Staffordshire LEA (1995) have proposed to direct additional funds to the most disadvantaged schools at Key Stage 1. However it is important to remember that real improvements to pupil attainments depend on a combination of factors and not simply class size. This is emphasised by the research concerned with investigating teacher, school and other effects on pupil achievement e.g. Rutter et al. (1979) and Mortimore et al. (1988). The evidence suggests that factors such as classroom management, classroom interactions and climate, and the peer group (home environment/parental support) are much more significant than simply per-pupil expenditure.

5.2 STAFFING FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS - THE CONCEPT OF RESOURCE BANDS OF LEARING DIFFICULTY (DES CIRCULAR 11/90)

DES Circular 11/90 (DES, 1990) outlined the considerations which LEAs and schools should bear in mind when determining staffing levels for pupils with statements of special educational needs. In practice staffing for pupils with SEN typically includes the involvement of both teachers and classroom ancillaries which were referred to in the Circular as special or learning support assistants (LSAs). It set out a possible model (see Table 5.2) in five bands of learning difficulty to assess the staff time needed per pupil, in terms of teacher and learning support assistants to take account of the particular learning difficulties of each child. The Circular stated that:

The model derives from observations of classroom work seen to promote effective learning and care for various groups of pupils... The model proposes that one means of assessing pupils' SEN is in terms of the demands made upon the teachers and the extent to which teaching methods have to be adapted to meet those demands. The model is soundly based on good practice. By relating the complexity of pupils' learning difficulties to his or her needs for a balanced and broadly based curriculum, judgements can be made about the likely levels of demand made upon teachers and Special Support Assistants. This complexity is reflected in the bands of learning difficulty described in Annex A (i.e. Table 4.2) (para. 6).

The Circular also stressed the point that the model should only be taken as a starting point for assessing staffing levels and that they should not be taken as indicating staffing minima to be applied in all cases. As Norgate (1995) suggests ultimately the LEA will need to be sensitive to local circumstances rather than to use the circular to justify minimum levels of staffing.

Band of Learning Difficulty	Primary		Secondary	
	Teacher per papil	Learning Support Assistant per pupil	Teacher per pupil	Learning Support Assistant per pupil
1. Profound and multiple learning difficulties	0.2	0.3*	0.2	0.3*
2. Severe communication difficulties	0.18	0.18	0.18	0.10
3. Severe emotional and behavioural difficulties	0.15	0.15	0.15	0.15
4. Severe developmental difficulties	0.13	0.13	0.13	0.13
5. Other learning difficulties	0.1	0.1	0.1	0.05

* In a group of 10 pupils the maximum number of Learning Support Assistants will be 3.

Circular 11/90 concluded with this caution about the difficulty in providing definitive

guidance and warns against an over-simplistic application of this model.

There can be no blueprint for ideal staffing arrangements in any institution making provision for pupils with SEN since much will depend upon the particular circumstances of that institution, the mix of skills of its teaching and non-teaching staff, and the nature of the needs of its pupils, both as individuals and as a group. ... The Secretary of State offers the advice in this Circular as a contribution to LEAs and governors' own consideration and planning to that end (para. 25).

Interestingly, the principle adopted in Circular 4/73, that young children require a more

favourable staffing ratio was not supported by the model of staffing proposed in

Circular 11/90. The reasons for this are given in Touche Ross (1990):

 whilst the age of a pupil in a mainstream school generally provides some indication of the learning stage reached by the child, pupils with special needs may well progress at unpredictable rates, and knowledge of their ages provides no such indication; • some pupils require substantial care or medical support throughout their school career, and the cost of this support remains broadly constant whatever their age.

As Touche Ross continue, that is not to say there are not significant differences between the funding requirements of schools catering for dissimilar age-groups. For example, there was general agreement that:

- the youngest pupils in special schools (who are sometimes much younger than mainstream pupils) would need significant extra carer and supervision;
- in their final years of schooling pupils should be prepared for life in the outside world, perhaps through work or college placements, or through taking public examinations.

The Touche Ross report concluded that a formula based on age-weighted pupil units would be inappropriate for special schools, as originally Circular 7/88 envisaged. It suggested that the differences between the needs of school populations may be better recognised by considering the overall age group of the school rather than the ages of the individual pupils. The suggestions of the Touche Ross report were incorporated into Circular 7/91 which will be discussed in the next section.

Importantly, there was no mention in both Circulars 4/73 and 11/90 of any objective basis for calculating the staffing ratios e.g. Norgate, 1995. The final sentence of the Circular 4/73 read:

The Secretary of State believes that the flexibility encouraged as a result in staffing arrangements should make it possible to match special school provision even more closely than before to the widely varying needs of handicapped children.

Circular 11/90 states that the model:

...derives from observations of classroom work seen to promote learning and care for various groups of pupils (para. 6).

The use of the concepts of 'need' and 'learning and care' neatly side-steps the fundamental issues of 'resourceworthiness' and degree of need. Dessent (1987) points to the issues as being essentially ethical in nature as any discussion of special education is unavoidably a discussion concerning questions of value and ethics in terms of the distribution of society's educational resources. The issue of whether it is worthwhile to provide differential resourcing levels will be addressed in Chapter Seven.

5.3 LOCAL MANAGEMENT OF SCHOOLS (DES CIRCULAR 7/88)

The 1988 Education Act has been described as the most important piece of educational legislation in the United Kingdom since 1944. Local Management of Schools (LMS), is a key policy of this Act and has brought radical changes to the way schools are run and how resources are allocated both within mainstream and special schools. Underpinning the statutory detail of LMS are two fundamental principles:

- allocating resources to schools on an equitable basis, and
- giving schools considerably greater autonomy in the management of those resources, (para.1 Circular 2/94).

A number of commentators have described the trend of decentralisation as a growing feature of the school systems throughout the western world (e.g. Hill et al., 1990). The rationale behind this trend is the observation that there has been a considerable growth Formula Funding and Special Educational Needs 144

in decentralised administration. Several national governments and their agencies have come to the view that too many decisions were located at a distance from the place of learning. Policies to decentralise school management were formulated in the Netherlands, the USA, Australia, New Zealand, England and Wales. As Lowe Boyd (1992) notes, despite differences in political and social context, there are striking parallels in contemporary educational reforms adopted by English-speaking countries, in particular Australia, New Zealand, the UK and the USA. These countries have combined both decentralisation of management decision-making to schools and a tendency to stronger centralisation of control over specifying and monitoring educational standards. Levačić (1995) considers that recent developments in these directions in continental Europe seem to be less marked, although Spain, the Netherlands and Finland were singled out by the OECD (1992) as having the highest proportion of decisions taken at school level (between 45 and 56 per cent).

The general aim of these educational reforms has been to introduce a more competitive market approach to the allocation of resources in the education system. Chapter Three has already outlined the political thinking of the new Right which evolved during the late 1970s and 1980s. This promoted the view that children's education is a consumer good to be obtained through parental choice. Allied to this is the assumption that market forces will ensure parents get what they demand, as these changes will move inevitably in the direction of rising standards (Wallace, 1993). However education cannot be a "market" in the strict sense because it is a public utility, therefore the term quasi-markets has been used by Le Grand and Bartlett (1993), which they acknowledge to Williamson (1975, p.8). The quasi-market remains highly regulated. The government

continues to control such matters as the quality of service (as with the national curriculum) and price, which is often set to zero to the user, as in schooling. In this way the markets are 'quasi' because they differ from conventional markets in a number of other ways. There are differences on both the supply and the demand side. On the supply side as with conventional markets, there is competition between productive enterprises or service suppliers. Thus taking the context of education, the schools are seen to compete for customers, their pupils. However schools are not out to maximise their profits, nor are they privately owned. On the demand side, prices are regulated or set to zero, so for example consumer purchasing power is not expressed in money terms in quasi-markets. Instead either it takes the form of an earmarked budget or 'voucher' confined to the purchase of a specific service allocated to others, or it is centralised in a state purchasing agency, the LEA. Thirdly, in most cases it is not the direct user who exercises the choices concerning purchasing decisions. Instead these choices are often delegated to a third party such as parents who can exercise choice of school thereby determining a large component of the school budget by the number of pupils that are enrolled. However school places would still be rationed and total numbers would be determined by a state agency such as the LEA.

A key part of the quasi-market is the use of formula funding to allocate resources directly to schools. Chapter Three has already noted that the Plowden Report (CACE, 1967) encouraged LEAs to develop policies of positive discrimination in the distribution of educational resources which included the use of formula or educational priority indices.

Formula Funding was proposed by Local Management of Schools as an alternative method of resource allocation to the three main systems of historic funding, bidding and officer discretion described by Knight (1993a). Section 38 (1) of the 1988 Education Act requires each LEA to determine a 'formula' for allocating a share of the Aggregated Schools Budget (ASB) to each of the schools covered in its scheme. Under Section 38 the formula:

- may include 'methods, principles and rules of any description, however expressed' (Section 38(2)). The formula does not have to be expressed in purely algebraic form, but it must apply a consistent set of criteria for distributing resources;
- may include 'provision for taking into account any other factors affecting the needs of individual schools which are subject to variation from school to school'. The formula can take account of relevant factors other than age-weighted pupil numbers, including in particular 'the number of registered pupils at a school who have special educational needs and the nature of the special educational provision made for them' (Section 38(3)(b)).

Devising an acceptable formula for pupils with non-statemented special educational needs has been one of the most difficult tasks for LEAs. The task has become all the more arduous as serious tensions exist between the 1981 Education Act and the 1988 Education Reform Act (Wedell, 1988). The definition of special educational needs in the 1981 Act marked a change from a 'within child' view to an 'interactive' view. In other words special educational needs are the outcome of the interaction between the resources and deficiencies within a child and the resources and deficiencies within the environment (Goacher et al., 1988).

The first generation of LMS SEN formulae saw the majority of LEAs using free school meals (FSM) data obtained at the school level, to solve the problem of predicting the incidence of SEN. However the survey on additional educational needs reported in

Chapter Six, will show that many LEAs have expressed their unease with using FSM as their only proxy indicator and are preferring to use more direct or 'needs' related measures e.g. the use of professional audits and the use of standardised educational tests. This change in thinking by LEAs is in line with the Code of Practice which has encouraged the cult of individualism. The rhetoric of individual education plans and individual needs is evidence of Hargreaves' (1982) argument that schools have become so involved with the rights, progress and the welfare of the individual pupil that they have lost sight of the corporate aspects of school life. Therefore the tension exists in the context of formula design whether it is sufficient to predict the incidence of SEN, which could be achieved by the use of FSM data, or whether the emphasis should be on the identification of individual SEN as recommended by the Code of Practice. A main implication of the different approaches is that the use of FSM implies a less specific demonstration of accountability of funds than the use of individual pupil measures of special educational needs.

The case for using formula funding relies on the assumption that the formula is well designed and is not merely the product of whatever LEA wide data were available at the time of the LMS scheme being forwarded to the Department for Education and Employment for approval. The main asset of a formula is that it is objective and transparent and can be a highly visible piece of policy implementation. There are certain budget restrictions regarding the amount which can be delegated which relate to the structure of the non-statemented SEN formula. The glossary of terms (Appendix D) describes what is meant by General Schools Budget, Potential Schools Budget and Aggregated Schools Budget (ASB). A formula requirement is that 80% of the ASB

must be allocated on the basis of pupil numbers or age weighted pupil units (AWPUs). Within this 80% requirement, 5% can also be allocated on the basis of additional weightings for pupils with SEN but without statements (known as the pupil-led component). This amount is sometimes known as the 'hidden 5%' because many LEAs have not made it clear in their budget statements that this money exists or have not defined its purpose. In addition to the 5%, LEAs may also allocate further sums of money within the 'other' or non-pupil led part of the formula. Chapter Six shows that the expenditure in LEAs on additional educational needs ranges from 10.4% of the ASB to 0.0% and it also illustrates the indicators which LEAs are currently using to assess the numbers of pupils with additional educational needs.

5.4 LOCAL MANAGEMENT OF SPECIAL SCHOOLS (LMSS) (DES CIRCULAR 7/91)

Published one year after the implementation of LMS by LEAs, Circular 7/91 signalled significant changes in DES/DfEE attitudes and requirements regarding the funding and management of SEN provision including the extension of LMS to special schools (LMSS). The key provisions of Circular 7/91 included:

- expenditure on special schools to fall within the General Schools Budget (GSB) from April 1994 and special schools must be funded from a formula from that date. The LMSS formula does not have to be largely pupil led and may be largely place led.
- at least 80% of the budget for distribution to schools (the Aggregated Schools Budget, ASB) must be distributed according to pupil numbers.

- weightings factors for SEN should be valid and reliable measures of educational needs. (The use of proxy indicators was not encouraged, but they may be used preferably on a temporary basis).
- the expectation that support service provision which makes a direct contribution to the curriculum to be delegated.
- the expectation that all expenditure on pupils with statements of special educational needs could be delegated using formula factors. Under delegation, governing bodies must ensure that provision specified in statements is made available and that LEAs should monitor the provision made.

The rest of this section will now concern itself with the implementation of LMSS. Touche Ross (1990) who carried out a feasibility study, commissioned by the DES, argued that:

Properly implemented, the extension of Local Management of Schools to special schools should bring them the benefits of increased flexibility and control, ensure that they are funded on a fair basis which relates to their needs, and recognise the managerial capabilities of their heads and governors. Combined with effective planning by LEAs, this should result in a significant overall improvement in the quality of special education (p.50).

Circular 7/91 went to offer guidance on the structure of a LMSS formula.

It is for each LEA to identify all the factors which it wishes to take into account in respect of special schools but the Secretary of State will expect the formula to include the following: - an element per planned place at a school; -an element per pupil on roll (para. 79).

Using a case study LEA, Whiteshire, referred to in Chapter Seven as an example, in

1995/96 the Special Schools budget was distributed as shown in Table 5.3.

Formula Element	Funding per Formula Element 1995/96	Percentage of Special Schools Budget
Number and type of places	£17.8 million	75%
School Size	£ 3.3 million	14%
Premises	£ 2.2 million	9%
Pupil Numbers	£ 0.5 million	2%
Totals	£23.8 million	100%

 Table 5.3
 To show the overall LMSS Budget Distribution in Whiteshire

In Whiteshire the total Special Schools Budget was 6.9 per cent of the Aggregated Schools Budget (£344,439 million). In addition, Whiteshire also allocated 5.9 per cent of the ASB (£20.4 million) to non-statemented SEN pupils. Therefore, in 1995/96, in total approximately 13 per cent (12.8%) of the ASB was assigned for pupils with special educational needs. Chapter Six will consider the budget allocations again for different LEAs.

The funding for the number and type of places (planned places) element of the LMSS formula used the banding system proposed in Circular 11/90 as the framework for distribution as indicated in Table 5.4.

		Funding pe	r Planned P	ace 1995/96	
	Band 1	Band 2	Band 3	Band 4	Band 5
Primary Day Special School Place	£10,200	£7,300	£6,100	£5,300	£4,100
Secondary Day Special School Place	£10,200	£6,300	£6,100	£5,300	£3,400

The Touche Ross report (1990) noted that the majority of their interviewees expressed reservations that formula funding should not re-introduce the categorisation of pupils. The reasons for recommending the abolition of the category classification, in operation prior to the 1981 Education Act, are found in the Warnock report (para. 3.21 to 3.25; DES, 1978). These were:

- that to attach "a single label" to a child was unsatisfactory, because many children had combinations of needs which did not readily match the pre-defined categories;
- that, once children had been placed in a particular category, it was very difficult for them to escape it, throughout or even after their school career;
- that a description of a child's impairment did not suffice to determine what educational provision the child needed;
- that some children with unusual special needs might slip through the categorisation altogether, and fail to receive appropriate provision;
- finally, but most importantly, because it encouraged a conceptual division of children in to the handicapped and the non-handicapped, rather than the view of a range of children with needs at different points along a continuum.

The system of providing funding based on the notion of bands of learning difficulty, as adopted by Whiteshire as well as several other LEAs, can be criticised in that 'new' categories of SEN have been created. The potential difficulties which can be created by this system of funding is provided in the following example from the LEA. A school catering for pupils with moderate learning difficulties (MLD), Riverview, is presently resourced entirely at Band 5 of Circular 11/90. The school would benefit by £2,700 for every re-categorised Band 5 to Band 3 secondary pupil (see Table 5.4). Riverview made a request to the LEA that an audit should be conducted of its pupil population as the Headteacher expressed the view that 45 of the 155 pupils had more severe needs than those typically found in the LEA's MLD schools. A Dependency Staffing Inventory (DSI) (Norgate, 1995) was used to assess each of the 45 pupils which drew on the work of Haley et al., (1989). The DSI identified nine key areas in which items were ranked in terms of staff demands i.e. feeding, toileting, dressing, movement, visual impairment, expressive communication, receptive communication, engagement and behaviour. Items were assigned a score of 0 to 15. A cut-off of 60 was used by Norgate to identify 'high dependency' pupils or Band 1 pupils. No clear basis was given as to why this cut-off was used, although Norgate claims that "a cut-off was established to provide the best discrimination between the two groups of high and low dependency. By using the DSI at Riverview, the results suggested that Band 5 (other learning difficulties) was appropriate for 15 of the 45 pupils, but that 18 fell within Band 4 (severe developmental difficulties) and 12 within Band 3 (severe emotional and behavioural difficulties). It was noted however that the Band 4 pupils had less severe needs than similar Band 4 pupils from a school catering for pupils with severe learning difficulties which shared the same site.

Formula Funding and Special Educational Needs Chapter Five OU/PhD/AJM/April 1998 In the first audit, *Whiteshire* used a separate indicator, the Bristol Social Adjustment Guide, to assess whether a pupil met the Band 3 severe emotional and behavioural difficulties criteria and a "2 per cent" cut off was read from the scoring tables. Even though the LEA noted that the results of the audit may to some extent reflect disaffection rather than severe emotional and behavioural difficulties, this methodology clearly did not take into account the context of the classroom. It is a good example of the use of the special needs discourse without any reference to the teacher and school effectiveness research referred to in Chapter Three.

Important issues are raised in this example of LMSS formula funding from *Whiteshire*. As 'new' categories accrue different levels of funding, it is in the special schools interests to 'upgrade' their pupils in order to generate a higher overall school budget. In the above example *Riverview* would appear to have been successful in re-categorising 30 of their pupils, which in turn will eventually produce an additional £67,000. The LEA use a three-yearly review of the pupil population and have stated that in the interim period before the next review they will consider making an adjustment to the school's present budget from the LMS contingency fund. It could be argued that the distinction between Band 4 and 5 reflects the historical 'categories' of severe learning difficulties (SLD) and moderate learning difficulties (MLD) which have existed since the implementation of the 1981 Education Act in the form of separate MLD and SLD special schools. However, by the very nature that *Riverview* had already admitted and had presumably felt, at the time of admittance, that they were able to meet the needs of the 18 'Band 4' pupils, they would appear to be operating dual standards. If the needs of

the 18 pupils were so demanding then it is assumed that the school would not have been able to meet their needs from existing resources from the start unless the issue was viewed from the discourse of teacher and school effectiveness. That is, the Headteacher must have felt that the style of teaching and curriculum offered by his school, even without additional resources, was more suitable than that of the nearby SLD school. A similar argument could be applied to the 12 pupils assessed as presenting with severe emotional and behavioural difficulties. The general issue of attempting to use a formula factor to identify emotional and/or behavioural difficulties will be discussed in greater detail in Chapter Nine. The main finding that "schools make a difference" has already been presented in Chapter Three and it offers the conclusion that it is not possible to assess behaviour without consideration of the context variables.

The similar point is made by Bowers (1995) who gives three examples of how categories are finding their way back into the special education system. The first involves special school 'planned place' elements already mentioned; another involves the allocation of set sums to pupils who fit 'types of learning difficulty' within the formula funding arrangements by some LEAs for both statemented and non-statemented pupils. Thirdly, with many LEAs turning to the stages of the Code of Practice on which to base funding for non-statemented children, there may be another incentive to categorise if the money attached to stage 3 pupil is seen to of significantly higher value than the money attached to stages 1 and 2. Chapter Seven will present a case study example of an LEA, *Mercia*, where an attempt has been to avoid categorisation by the use of a professional audit of needs.

Although this section has illustrated some of the shortcomings of the application of a banding system, particularly when funding special schools, the notion is still relevant if vertical equity i.e. differential resourcing is seen to be an important principle for funding non-statemented SEN pupils. Chapter Eight will use a banding system in the design of an improved non-statemented SEN formula in *Whiteshire*.

5.5 SUMMARY

This chapter has looked at the relationship of special educational needs with historical funding arrangements, in particular with the policy of formula funding arrangements as introduced by Local Management of Schools (LMS) and Local Management of Special Schools (LMSS). The three major functions of formula funding have been highlighted i.e. market regulation, equity and the directive function and it has been shown that formula funding can be a key instrument of policy if well designed.

Although there appears to be general support for the decentralisation of managerial decision making to the school level (see Levačić 1998), a number of commentators have expressed concerns about the serious tensions which exist when the use of market philosophy is applied to the area of special educational needs e.g. Evans and Lunt (1990); Vincent et al. (1994) and Housden (1992) who have all argued that the overall impact of LMS on LEA's approach to SEN is likely to be negative.

...a market-oriented discourse, within a quasi-market framework, encourages an emphasis on individualism which is antithetical to the concept of a planned and pervasive approach to provision for "vulnerable children" (Housden, 1992).

This is an example of the tension between the two policy discourses of the 'special needs pupil' and 'school and teacher effectiveness'.

The complex task of identification and description of children's needs within the formula should, in theory, take account of the relative and interactive nature of special educational needs which lie along a continuum from greater to lesser need. In other words the 'school and teacher effectiveness' discourse should be accommodated, however in the context of formula funding it is difficult to see how this can be included. In other words there is the danger that formula funding will drive LEAs further towards the discourse of the special needs pupil without a full appreciation of other possible discourses of the conceptualisation of special educational needs. Whilst this concern is real it is important to remember that there was no golden age of SEN resourcing in the days before LMS and that the benefits of formula funding, which encompass the principles of objectivity, effectiveness, equity and transparency, were all missing when education officer discretion was the funding method of choice for LEAs.

FORMULA FUNDING

AND SPECIAL

EDUCATIONAL NEEDS

Part II

From Practice to Accountability

Formula Funding and Special Educational Needs OU/PhD/AJM/April 1998

CHAPTER SIX FUNDING METHODS USED BY LOCAL EDUCATION AUTHORITIES TO DETERMINE SPECIAL EDUCATIONAL NEEDS

The first part of this dissertation has provided an analysis and discussion of the underlying issues surrounding the conceptualisation of needs within the framework of Local Management of Schools (LMS) and the Code of Practice. It has shown that the policy thrust has been on the identification and assessment of the individual child's difficulties and has reinforced the special needs discourse rather than consideration of wider issues such as those portrayed by the 'school and teacher effectiveness' discourse.

This chapter continues with the second subsidiary aim of the thesis namely the examination of the funding relationship between non-statemented special educational needs and pupils with statements to develop a coherent approach to resourcing throughout the continuum of SEN. To this end Key Question 5 will be held up to scrutiny i.e. what is the current practice in LEAs with regard to resource definition, resource allocation and resource management? The chapter will also consider whether the various principles for evaluating a funding formula, mentioned in Chapter Four, are better delivered by some types of SEN allocation system than by others.

The results of two national surveys will be analysed which illustrate the methods adopted by Local Education Authorities (LEAs), in their attempts to find solutions to the funding questions posed by the limitations of the government's legislation. The first survey explores current practice in LEAs for resourcing additional educational needs in 1996/97. It was published by Education Management Information Exchange (EMIE) (Marsh, 1997a) and distributed to all LEAs in England, Wales and Northern Ireland. The umbrella term 'additional educational needs' has been used throughout the survey and refers to a wide range of factors, relating to special educational needs and social disadvantage, which LEAs take into account when funding schools. The second survey looks at criteria adopted by LEAs for deciding to make a statutory assessment and is particularly concerned with the interface on the continuum of SEN, between pupils with statements and those without statements. The survey was commissioned by the Society of Education Officers (Marsh, 1996). The backcloth to the survey was the rising costs of special education and in particular the upward trend in the number of pupils with statements of special educational needs.

6.1 BACKGROUND TO THE ADDITIONAL EDUCATIONAL NEEDS SURVEY

The first survey set out to analyse the Additional Educational Needs of LEAs in England. During summer 1996 all 119 LEAs in England, including the 15 Unitary or All Purpose Authorities, were invited to participate in the survey. They were asked to send a copy of their 1996/97 Section 122 budget statements³, precise details of how the AEN budget allocation has been calculated and any in-house working papers relating to the subject. Table 6.1 illustrates that 85 LEAs (71%) supplied information which made this national survey the largest sample of its kind. Previous surveys have been

³ Each LEA is required to send a copy of their Section 122 budget statement to the Department for Education and Employment. The Section 122 budget statement (changed from Section 42 under the 1996 Education Act) sets out school budget information on an annual basis in a comparative form on the following: a) the amount of the general schools budget of the LEA; b) the amount of the aggregated schools budget; c) prescribed details of the LEA's formula; d) an indication of the basis on which excepted expenditure is attributed to schools; e) planned expenditure per pupil in each school to be met from its delegated budget; and f) planned expenditure per pupil in each school to be met by the LEA from its budget for 1) mandatory exceptions and 2) discretionary exceptions.

performed by Lee (1992a), NFER in 1994 reported in Fletcher-Campbell (1996), Robertson (1995), Coopers and Lybrand in 1995 reported in Coopers and Lybrand (1996a) and Bibby and Lunt (1996) using 1994/95 Section 42 Budget Statements (the previous name for Section 122 Budget Statements).

The traditional way of reporting LEA data has been by type of authority i.e. Inner London, Outer London, Metropolitan, County and Unitary/All Purpose. Table 6.1 provides a summary of the number of LEAs in the survey by type.

Table 6.1 Number of LEAs which participated in the 1996/97 AEN surve	ber of LEAs which participated in the	1996/97 AEN survey
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	No in Sample	No of LEAs	Percentage of LEAs in Sample
Inner London	9	13	69%
Outer London	16	20	80%
Metropolitan	27	36	75%
Counties	22	35	63%
Unitary/All Purpose	11	15	73%
Totals	85	119	71%

However this method of reporting masks considerable differences in pupil numbers between LEAs. For instance, the largest LEA from either Inner or Outer London in the survey is Newham (42,000) which is ranked only 40th in terms of pupil numbers reported on the Section 122 Budget Statements (i.e. LEA mainstream and special schools but not including grant maintained schools). The range for the County authorities is from 212,000 in Lancashire to 50,000 in Northumberland and within the metropolitan authorities the range is from 112,000 in Leeds to 22,000 in

Calderdale.

Formula Funding and Special Educational Needs Chapter Six OU/PhD/AJM/April 1998 This survey reported in this chapter uses the second of the two methods, that is to say the reporting of LEAs based on the numbers of pupils in mainstream and special schools. The designations used are High (greater than 90,000 pupils), Mid (between 90,000 and 20,000 pupils) and Low (fewer than 20,000 pupils). Table 6.2 illustrates the distribution of the 85 LEAs in the survey by this criterion.

Table 6.2The Distribution of LEAs in the Survey by High, Mid or Low PupilNumbers in LEA Maintained Mainstream and Special Schools

	High (greater than 90,000 pupils)	Mid (between 90,000 and 20,000 pupils)	Low (fewer than 20,000 pupils)
Inner London	0	3	6
Outer London	0	13	3
Metropolitan	1	26	0
Counties	13	9	0
Unitary	0	10	1
Totals	14	61	10

This survey will provide an update and overview of current practice by LEAs for resourcing additional educational needs (AEN) and will be structured around the following questions:

- 1. How do LEAs assess the numbers of pupils with additional educational needs?
- 2. How much extra resources are given by LEAs to pupils with additional educational needs?
- 3. What options are available for the distribution of the extra resources?

6.2 HOW DO LOCAL EDUCATION AUTHORITIES ASSESS THE NUMBERS OF PUPILS WITH ADDITIONAL EDUCATIONAL NEEDS?

Precise details of individual LEA AEN funding arrangements are to be found in Marsh, (1997a). Table 6.3 shows the indicators which are used and the relative extent to which they are employed. Table 6.4 illustrates the indictors used in a similar survey conducted in 1992 by Lee, who used a different sample.

Table 6.31996 Survey : Indicators used by English LEAs for Funding
Additional Educational Needs (n= 85)

Indicator	No of LEAs	% LEAs
Free School Meals	78	92%
Educational Tests	27	32%
Pupil Turnover inc. Transience	26	31%
Ethnicity / lack of fluency in English	20	24%
Professional Audit / Code of Practice	19	22%
Other	17	20%
Education Welfare Benefits	7	8%
Pupil Numbers	5	6%

Table 6.41992 Survey : Indicators used by LEAs in England and Wales for
Funding Additional Educational Needs (n=72) (Lee, 1992a)

Indicator	No of LEAs	% LEAs
Free School Meals	58	81%
Ethnicity / lack of fluency in English	21	29%
Educational Tests	20	28%
Pupil Turnover inc. Transience	23	18%
Education Welfare Benefits	10	14%
Professional Audit / Code of Practice	5	7%

The present survey has thus confirmed the finding of earlier surveys that free schools meals (FSM) is the most common indicator used by LEAs to distribute funding for AEN. In total 92 % of LEAs (n=78) used FSM either as their sole indicator or in combination with other factors. This compares to 81% in the survey performed by Lee (1992a). The next most popular indicator was the results of educational tests, which included tests of cognitive abilities, standardised attainment tests and National Curriculum Assessments (NCA). In 1996 six LEAs were using NCA : Corporation of London, Bexley, Bradford, Havering, Hounslow and Essex. A review of tests which involves the use of information from National Curriculum Assessments was being undertaken by Derbyshire.

As Table 6.3 shows, 31% of LEAs used pupil turnover as an indicator, under which heading can be included transience, mobility, and the particular circumstances of travellers and service families. The figure is considerably higher than that established in 1992 by Lee, who recorded it as 18%. Also there has been a trend towards the use of professional assessments and/or Code of Practice assessment stages over the last four years, from 7 per cent to 22 per cent. The benefits of implementing audits have been pointed out by Fletcher-Campbell (1996), but a number of LEAs e.g. Nottinghamshire and Staffordshire, have concluded that the problems with the design and conduct of the Audit, (including difficulties and the costs involved in achieving moderation within and across schools), are disproportionate to the resulting resources accruing to the school.

The number of formula elements for AEN used by LEAs is illustrated in Table 6.5. There has been an increase in the use of different formula factors. 72 per cent of LEAs now use two or more indicators compared to 55 per cent in 1992.

No of Indicators used	No of LEAs in 1996 survey	% LEAs (1996 Survey)	% LEAs (Lee, 1992a)
0	1	1%	3%
1	23	27%	42%
2	28	33%	28%
3	16	19%	18%
4	11	13%	7%
5	4	5%	1%
6	2	2%	1%

Table 6.5 The Number of Different Indicators used by English LEAs for Funding AEN

The increase in the number of indicators seems to imply that LEAs have made efforts over the four years to supplement their formulae with more than one indicator of AEN. Of the 78 LEAs which used FSM, 61 now used the proxy socio-economic indicator in combination with other factors.

The next section will look at the level of resources, viewed from the standpoint of LEA to school.

6.3 HOW MUCH EXTRA RESOURCES ARE GIVEN BY LEAS TO PUPILS WITH ADDITIONAL EDUCATIONAL NEEDS?

There are three main levels of resourcing for pupils with additional educational needs. The first level is the Age Weighted Pupil Unit (AWPU) which forms a significant proportion of the mainstream schools' delegated budget. The second is the specific amount given to Additional Educational Needs. The third is an amount allocated for pupils with statements; this is known as delegated special provision. This section will be divided into three sub-sections. Initially it will consider the notion of a total special educational needs budget. Secondly, the total AEN budget for non-statemented pupils will be analysed for each LEA and thirdly how much of the total AEN budget is delivered by different indices.

6.3.1 THE TOTAL SPECIAL EDUCATIONAL NEEDS BUDGET

A single overall SEN budget heading, which includes cost of special schools and transport of pupils with SEN, has been proposed by Coopers and Lybrand (1996a). This model has been employed in determining total SEN expenditure from the Section 122 budget statements:

 The total costs of all "Special" items within the GSB total amounts at the end of Part 1 of the Section 122 budget statement. The line containing GSB total amounts is split into three sectors : Primary, Secondary, Special and Total.

It is too simplistic to believe that LEAs have accurately calculated the sector costs for each of the discretionary items within and outside the Potential Schools Budget and the mandatory exceptions. Nevertheless the estimates supplied will provide a good approximation for the total cost of the special items.

2. Special Educational Provision including special units for a) provision for pupils with statements and b) other which includes central support services for reading and language, behaviour etc.

This provision is included under discretionary exceptions within the PSB Primary and Secondary costs which is also listed in Part 1 of the Section 122 statement.

3. Educational Psychology Service and Statementing costs.

This item is included under mandatory exceptions outside the PSB Primary and Secondary costs, also listed in Part 1 of the Section 122 budget statement.

- Primary and Secondary pupil and place led funding which may be for both pupils with statements and those with additional educational needs but without statements. This funding is included within Part 3 of the Section 122 budget statement.
- 5. Primary and Secondary non pupil led funding which has been allocated to schools for pupils with additional educational needs but without statements. This element is included under other funding also within Part 3 of the Section 122 budget statement.

Tables 6.6 and 6.7 show the overall percentage amount of the GSB which is allocated to the total SEN expenditure is 13.3 % which is close to the regression statistic of 15 % allocated by the AEN component of the Standard Spending Assessment. CIPFA statistics (1994, 1995) have been used to calculate the total SEN budget using the same criteria as specified above, see Table 6.8.

	% of PSB delegated to schools	Total SEN as % of GSB	Total SEN Expenditure per all pupils E	Total AEN 25 % of Prim/Sec ASB	AEN Index
Inner London	89.3%	17.2%	597	8.5%	2.22
Outer London	90.4%	12.5%	343	3.0%	1.42
Metropolitan	90.6%	12.8%	309	3.8%	1.30
Counties	90.6%	13.4%	323	3.3%	0.87
Unitary	89.6%	12.9%	317	3.0%	1.07
Average	90.4%	13.3%	327	3.6%	1.26

Table 6.6 Level of Resources by Type of Authority

Table 6.7 shows the average percentages for the same data but arranged by size of LEA based on numbers of pupils (see Table 6.2).

	% of PSB delegated to schools	Total SEN as % of GSB	Total SEN Expenditure per all pupils	Total AEN as % of Prim/Sec ASB	AEN ladex
High	91.0%	13.2%	313	3.3%	0.91
Mid	90.2%	12.8%	327	3.4%	1.33
Low	89.9%	14.3%	463	6.5%	1.65
Average	90.4%	13.3%	330	3.6%	1.26

Table 6.7 Level of Resources by Size of Authority

Table 6.8The Total SEN Expenditure as a Percentage of GSB (1994-95 to
1996-97)

1994-95	2772.72	1996-97
11.5%	12.4%	13.3%

The growth in total SEN expenditure, 16 per cent over two years, or approximately 7 to 8 per cent per year, supports a similar, but lower trend, observed by Coopers and Lybrand (1996a). They concluded that there was an overall increase of approximately 5% from 1994/5 to 1995/6, although acknowledgement was made to the difficulties in performing the calculation because of some differences in definition of total SEN expenditure by LEAs. Table 6.6 shows that Inner London has comparative high SEN costs and also a higher AEN index score. The relationship between the total SEN budget as a percentage of the GSB and the AEN index at an individual LEA level is not particularly strong. The correlation of 0.50 implies that only 25% of the variation in the amount spent by LEAs on total SEN is accounted for by the AEN index score. However when the calculation is corrected for by LEA size i.e. the relationship between total SEN budget per pupil and the AEN Index, this improves to 0.73. Although even then, only 53% of the variation in the amount spent by LEAs on total SEN per pupil, is accounted for by the AEN Index.

The range of total SEN budget is from 20.1% to 8.6 % of the GSB (excluding the **Corporation of London**). Tables 6.6 and 6.7 add confirmation for the high SEN costs for Inner London. Of the 10 LEAs, which have been defined in this survey as having low pupil numbers i.e. less than 20,000 pupils, six of them are from Inner London. These ten authorities with low pupil numbers spend an average of 14.3% or £463 on special educational needs per all pupils, compared with the overall LEA average of 13.3%, or £330.

6.3.2 THE TOTAL ADDITIONAL EDUCATIONAL NEEDS BUDGET FOR PUPILS WITH SEN BUT WITHOUT STATEMENTS

Within the requirement that 80% of the ASB has to be based on pupil numbers, it is permitted that 5% be allocated on the basis of additional weightings for pupils without statements (Circular 7/91 para. 105). This is sometimes known as the "hidden 5%" because many LEAs have not made clear in their Section 122 budget statements that this money existed or defined its purpose. Circular 2/94 (DFE, 1994b) states that:

...the pupil led component... amounts allocated through additional factors or weightings in respect of non-statemented pupils with SEN may not exceed 5% of Formula Funding and Special Educational Needs 169 Chapter Six 0U/PhD/AJM/April 1998 the ASB - any further amounts which an LEA proposes to allocate on the basis of additional needs or social deprivation will count against the 20% not allocated on the basis of pupil numbers.

Coopers and Lybrand (1996a) suggested that the "hidden 5%" should be included in the total SEN calculation. This increases the overall national percentage to 15.3% in line with the amount allocated to AEN by the Standard Spending Assessment. When size of LEA is accounted for, the correlation between total SEN per pupil and the Standard Spending Assessment AEN index score is 0.72. This evidence seems to suggest that there is, at least, some degree of hypothecation in the use of the AEN allowance.

The average amount of funding delegated to schools based on measures of AEN for pupils without statements is 3.6% of the ASB delegated to primary and secondary schools. The total AEN budget for pupils with SEN but without statements can also be expressed as a percentage of the PSB (3.0%) and as a percentage of the GSB (2.5%). In order for comparisons to be made with previous surveys, the denominator of ASB delegated to primary and secondary schools will be used in the rest of this chapter. The range is from 10.4% of the primary/secondary ASB in Westminster to 0.0% of the primary/secondary ASB in Newham. The latter is the only LEA not to allocate any money for AEN. The reasons for this seemed to be 1) related to their general unease of using a socio-economic proxy indicator to identify educational need; 2) the use of the "hidden 5%" concept by the LEA; and 3) a feeling that the SEN population was generally evenly distributed between schools (Kraschik and Trotter, 1996). In 1997/98 Newham are planning to change their stance and are considering to allocate approximately 1% of the primary/secondary ASB on AEN, to be based on the use of the Code of Practice assessment stages. Table 6.9 considers the ranges of AEN

expenditure by LEA type.

Formula Funding and Special Educational Needs Chapter Six OU/PhD/AJM/April 1998

	Highest	% of Prim/Sec ASB	Lowest	% of Prim/Sec ASB
Inner London	Westminster	10.4%	Kensington & Chelsea	5.2%
Outer London	Sutton	5.7%	Newham	0.0%
Metropolitan	Sandwell	9.1%	Doncaster	0.6%
Counties	Lancashire	6.4%	Lincolnshire	0.5%
Unitary	Middlesbrough	6.5%	South Gloucestershire	0.4%

Table 6.9 AEN Expenditure Ranges by Type of LEA

The average was found by Bibby and Lunt (1996) to be about 3% when they examined Section 122 budget statements from 1994/95. This suggests there has been some increase over the two year period which may be due to policy changes by some LEAs to respond to the growth in the number of statements. However it would be too simplistic to think that a higher AEN budget will automatically reduce the budget required for statements without consideration of the issue of accountability. The relationship between AEN budget allocation and the percentage of statements within each LEA is as low as 0.01 (Marsh, 1996).

6.3.3 THE TOTAL AEN BUDGET ALLOCATIONS DELIVERED BY THE DIFFERENT INDICES

In their recorded AEN budget statements, LEAs have presented AEN budget allocations as being either pupil led or non-pupil led. The resource split is 60% pupil led to 40% non-pupil led. Table 6.10 illustrates the total pupil and non-pupil led amounts for the main AEN indicators. Although Table 6.3 illustrates that 92% of LEAs use free school meals, less than half of the total AEN budget is allocated by that factor. Those LEAs who use the audit approach (n=17 or 20%), allocate a higher proportion of the total AEN budget (19%) than the LEAs (n=26 or 31%) who use educational tests (11%). It should be noted however that 12% of the total AEN budget was allocated via combined approaches i.e. FSM + Tests or FSM + audit, etc.

 Table 6.10
 The percentage of the AEN Budget for pupils without statements by Different Indicators

Indicator	Percentage of total AEN budget
Free School Meals	47%
Professional Audit/Code of Practice	19%
Combined Approaches	12%
Educational Tests	11%
Other	11%

6.4 WHAT OPTIONS ARE AVAILABLE FOR THE DISTRIBUTION OF THE EXTRA RESOURCES?

A number of alternative allocation mechanisms have been considered by LEAs to distribute the resources allocated for additional educational needs. These options may be summarised as:

- A flat rate allocation per pupil. This may be regarded as the simplest method, regardless of the type of index chosen, however no account is taken of the different levels of need of individuals/schools e.g. Shropshire.
- A proportional allocation involving the use of thresholds setting a minimum lower and/or upper limit to the percentage of pupils qualifying under the index. A drawback of this type of arrangement is that allocations may be skewed towards certain schools and that SEN pupils in non-qualifying schools will receive nothing

- Banding, whereby qualifying pupils are identified in a number of bands, which carry different levels of resources e.g. Bolton. This approach although common, can give rise to the situation in which small differences between pupils/schools can give rise to large differences in funding. However this may be overcome by mathematical devices to smooth allocations e.g. Stockport.
- Targeting by phase, with a higher weighting given to qualifying pupils/schools in either the primary/secondary phase in order to provide early intervention/enable a wider range of pupil attainments to be addressed across the curriculum e.g. Northumberland.
- Additional amounts for concentrations of AEN e.g. Sheffield increase the percentage of FSM to the power of 1.25.

The choice of indicators and the method of resource allocation is clearly an important issue for LEAs and is related to the principle of stability of funding already mentioned in Chapter Four.

6.5 CONCLUSIONS FROM THE AEN NATIONAL SURVEY

This survey has emphasised the importance of clearly specifying the purpose of additional funding as previously discussed in Chapter Three. It has been shown that more LEAs are using needs related indicators e.g. educational tests and professional audits/Code of Practice assessment stages than in 1992. Also there has been an increase in the number of formula indicators used by LEAs which may imply a higher level of sophistication to the formula. This evidence suggests that LEAs are now beginning to

make a distinction in their LMS schemes between funding for special educational needs and funding for social disadvantage.

There has been a general consensus that the proxy socio-economic indicator of free school meals is remarkably robust as a means of predicting incidence levels of pupils with special educational needs and for distributing resources at a school level e.g. **Nottinghamshire**. It could, indeed, be argued that the principle of simplicity makes this indicator the best option, if accountability for AEN were left out of consideration. The number of LEAs using FSM has increased to 92% since the first generation of AEN formulae was surveyed by Lee (1992a). There is not, however, as much enthusiasm about the continued use of FSM, particularly in the light of the Code of Practice which places further emphasis on the identification of special educational needs of individual pupils. The correlation between FSM and SEN at a pupil level falls to 0.20 (see Chapters Eight and Nine). For these reasons many LEAs are reviewing their formulae in an attempt to improve their schemes to a more needs led approach.

As we have seen, free school meals is one of the best SEN indicators for meeting the principles of simplicity and low administrative cost, but performs poorly in terms of responding to individual need. Professional audits and the results of educational tests are better indicators than FSM on a range of principles, particularly if the purpose of additional funding is to focus upon the individual pupil. Audits satisfy the equity principle by attempting to apply consistent standards across schools. They also satisfy the criterion of effectiveness by increasing awareness of good practice targeted at identified pupils. Educational tests are more simple to apply than audits and have lower administrative and maintenance costs. The disadvantage of using tests is the danger of

categorising pupils according to particular test cut-off scores, placing an undue emphasis on 'within-child' factors rather than a full consideration of context. The main difference between audits and tests is in the area of cost containment. Audit approaches can be subject to 'identification inflation' which are more difficult to moderate than simple manipulation of test cut-off scores, assuming the school can't influence the test score by the way it administers the test. Chapter Seven will examine the different funding arrangements of two LEAs and Chapters Eight and Nine will consider how one of these LEAs, *Whiteshire*, has attempted to resolve the funding issues raised in this chapter. Also in Chapter Eight I shall discuss more fully the issue of what makes a good indicator of SEN.

Two data sources will be scrutinised by LEAs in their future development work. The first of these, the assignment of pupils to Code of Practice stages, has considerable potential, although comprehensive moderation systems need to be introduced before it can be employed with any confidence. The second source, the results of National Curriculum Assessments (NCA) will be explored in greater detail in Chapter Nine. However they may still prove too controversial for funding use at the present time. This is because of their link with performance tables, which are produced by the government, and are based on raw results without consideration of socio-economic factors. The tables have not been generally accepted by the teacher associations (TES, 1997b). The DfEE (DFE, 1993a) have already noted the high correlation of 0.66 between children in households on Income Support (directly comparable to eligibility to FSM) and Key Stage 1 reading attainments. Nevertheless the other main objection to the use of NCA or other attainment tests is that schools could be penalised financially for improving their results. This effect is sometimes known as 'perverse incentives' or the 'resource

paradox'. From a national funding standpoint, although this argument is reasonable, it should perhaps not carry the day. It is hard to imagine that a school will wilfully disadvantage its pupils simply to gain more funds in a future funding settlement. As mentioned in Chapter Four, the effects of the resource paradox can be overcome by using attainment test information at intake to primary or secondary school. Also at the local funding level, the publication of NCA performance information and open enrolment will provide a strong deterrent to the danger of "rewarding failure" in schools. With the increasing acceptance of value-added techniques LEAs are now recommended to track pupils between Key Stages e.g. SCAA, 1997, and even consider incentive systems for exceptional results.

6.6 BACKGROUND TO THE CRITERIA OF NEED SURVEY

The second survey set out to consider how consistency can be ensured in decision making relating to the initiation of a statutory assessment and maps onto the aspect of Key Question 5 relating to the current practice in LEAs with regard to resource definition. The Green Paper (DfEE, 1997e) proposes that the proportion of pupils with statements should be moving towards 2% over the next four years. If there is to be stability and reduction in the growth of statements then it is crucially important to understand the criteria which LEAs are using to make a statutory assessment and the adequacy of funding arrangements for pupils remaining at stage 3 of the Code of Practice. This latter point has already been considered in the first survey and will be developed upon in the rest of this thesis.

The background to this second survey was as follows. During the Autumn term 1995, the Society of Education Officers (SEO) Special Needs Committee wrote to all Local Education Authorities to request:

- a copy of the Special Needs Policy Statement
- and any published or locally accepted criteria used to determine those pupils whose needs are so significant as to warrant a statutory assessment.

The SEO then invited me to prepare a summary of the responses by 42 LEAs (Marsh, 1996). The survey was conducted to provide supplementary information to the SEN *Initiative : Managing Budgets for Pupils with Special Educational Needs*, which was published in April 1996, (Coopers and Lybrand, 1996a). The aims of the enquiry were to investigate:

- 1. the levels of significant need that LEAs have identified;
- 2. the range of descriptors that LEAs have used in trying to identify pupils who may warrant a statutory assessment.

The remit of the SEO's request illustrates that the interpretation of their response has been clearly focused on the special needs discourse. Of the 42 responses from LEAs, 27 (64%) of them specified definite descriptors which are used to identify pupils who may warrant a statutory assessment. The key criteria are of three types which are not mutually exclusive (see Table 6.11):

- a) use of educational test results or age equivalents;
- b) use of National Curriculum Assessments (NCA) results;
- c) combination of educational tests and NCA.

Table 6.11 The use of Key Criteria by LEAs

Percentage of LEAs
85 %
63 %
52 %
33 %
11 %

Note: The percentage of LEAs refers to the 27 LEAs which specified descriptors to be used to identify pupils who may warrant a statutory assessment.

Table 6.11 also indicates that, at 1995, LEAs were wary of using results from the National Curriculum Assessments as their only criteria. This is understandable in view of the teacher association boycotts of the assessment arrangements during 1993 and 1994, the Dearing review (SCAA, 1994) of the National Curriculum and its Assessment and teacher concerns about the reliability and dependability of NCA.

The next two sections will address two forms of learning difficulty or disability mentioned in the section on the criteria for deciding to make a statutory assessment from the Code of Practice (DFE 1994, p. 54) which are:

- learning difficulties i.e. moderate learning difficulties (MLD) and severe learning difficulties (SLD);
- specific learning difficulties (SpLD).

6.7 LEARNING DIFFICULTIES

Before consideration of the criteria for general learning difficulties which encompass the largest percentage of pupils with special educational needs (see Table 7.5), it is important to remind ourselves of some fundamental issues which have already featured in Chapters One to Five. First, there is the danger that the criteria for learning difficulties will focus on a single dimensional measure which relates to the 'child deficit' model without a full consideration of other factors. The measure of the child's current level of functioning is, of course, only part of the evidence of the school's assessment, which the LEA should be collecting. The detailed content of this evidence gathered by the LEA will vary according to the child's age and the nature of his or her learning difficulty. In general these considerations may be thought of as including:

- the child's current level of functioning;
- the history of intervention by the child's school(s);
- the level and quality of support currently provided in school;
- the progress made by the child;
- involvement of parents;
- other factors e.g. home circumstances, attendance, etc.

Secondly, by using educational performance data there is the danger of conflating the concepts of 'need' and 'difference'. Performance tables have been used by the government to identify schools which are 'succeeding' and 'failing'. It is perhaps ironical that under the 'resource paradox' principle, schools which have been regarded as failing would receive extra resources on account of having more pupils with a 'personal deficit' if funded by National Curriculum Assessment results. There are even Formula Funding and Special Educational Needs 179 Chapter Six 00/PhD/AJM/April 1998

wider issues worthy of consideration, for example, what is education for and what is the purpose of providing additional resources for special educational needs? (see also Chapter Three). The government's view appears to support the case that academic considerations are of the highest priority with an importance being placed on raising educational achievement. This view would lend support for the funding of AEN to be concentrated on raising pupil attainments. However an alternative perspective would proffer that the main goal should be to foster such qualities as initiative, problemsolving ability, the ability to work with others and the ability to understand and influence society (Raven, 1994).

6.7.1 THE USE OF EDUCATIONAL TEST INFORMATION

It is clear that most LEAs in the survey have adopted the simplest and perhaps crudest method to assist in the formulation of criteria for deciding to make a statutory assessment. Table 6.11 indicates that 85 per cent of LEAs use educational test information or attainment age equivalents

For example **Stockport** have provided a table (see Table 6.12) to illustrate the various reading ages/centiles (range 1 to 20%) expected for different chronological ages based on the British Ability Scales Word Reading Test. This method is clearly a sketchy definition of learning difficulties as it concentrates solely on the first of the six criteria mentioned above i.e. the child's current level of functioning. The administrative use of this type of table is of relevance to education officers as the cut-off points are easy to work out and there is a clearer definition of 'need' at particular centile points. The table has obvious resource management advantages over more 'qualitative' expressions of

need, which may refer to the child being three years behind in literacy attainments at the age of ten years.

	B/	LS Word R	ading Age	i (years:moa	they Centi	ies
Chronological Age	1*	2***	3**	6 th	12**	20 th
Early years sub-	group lookin	g at markers	descriptors/	for below 8s	,	
7:0-7:2	below 5	below 5	5 : 3	5:9	6 : 1	6:3
8:0-8:5	5 : 5	5 :10	6 : 2	6 : 5	6 :11	7:3
9:0-9:5	5:8	6 : 1	6:4	6 :10	7 : 5	7:9
10 : 0 - 10 : 5	6 : 1	6:4	6 : 7	7 : 2	7:9	8:4
11:0-11:5	6:4	6 : 7	6 : 11	7:6	8:2	8 : 9
12:0-12:5	6:9	7 : 1	7 : 5	7 :11	9:1	9 :11
13 : 0 - 13 : 5	7 : 2	7 : 5	7:8	8 : 3	9:6	10:6
14:0-14:5	7 : 5	7 : 8	8:0	8:8	9:8	10 :11

Note: Learning Difficulties could relate to attainments in Reading, Spelling or Maths.

LEAs generally have reported the use of educational attainment information from Year

2 onwards. Berkshire have provided a description of the difficulties of setting criteria

for children below statutory school age.

The Authority recognises the importance of early intervention for children with general learning difficulties...Early intervention is to be advocated as costeffective. However, it is in the early months of schooling that the variability of development (even within the normal) and the problems of measurement and description make detailed statements of criteria likely to be too restrictive (Berkshire Criteria of Multi-Professional Assessment p 3). The identification of pre-school children with learning difficulties immediately highlights the tension between the attempt to control the increase of statements whilst providing early intervention for a number of pupils whose learning difficulties are difficult to ascertain in percentile terms. Lindsey (1995) has previously noted that the early identification of developmental delays, disorders or special educational needs is not as simple a process as early workers had hoped. On the contrary, the field is fraught with conceptual and methodological issues which unfortunately, are not always either recognised or addressed. For instance, there is strong body of evidence which supports differential predictability of children as opposed to the centre of a continuum. That is to say, the scores of children performing very well or very poorly at for example five years on early identification instruments, tend to have high and significant correlations with criterion measures such as reading at age seven or eight years. Those children scoring in the borderline "at risk" region tend to show low, non-significant correlations, with a more fluctuating developmental status relative to peers (Desforges and Lindsey, 1995).

Most LEAs are in agreement that a child aged 7, at the end of Key Stage 1, would be considered to have a significant need if attainments are recorded as being 5 years or below. Two LEAs differ slightly from this position: Greenwich refer to an age equivalent of 5 years 6 months which would approximate to the fourth percentile; and Cornwall specify an age equivalent of 4 years 6 months.

...attainments at or below the level of an average child 2.5 years younger in two or more of the following areas in standardised tests : communication skills, concept development, early literacy skills, early numeracy skills, self-help skills, motor skills. (Cornwall LEA Learning Difficulties Criteria : Age 7 years and under).

Rather than indicating specific age equivalents for each National Curriculum year level,

a number of LEAs have used wider definitions referring to centile cut-offs and the use Formula Funding and Special Educational Needs Chapter Six OU/PhD/AJM/April 1998 of cognitive ability (IQ) assessments. For example Waltham Forest will consider initiating a statutory assessment where there is clear evidence of :

the child's cognitive ability falls within that of the lowest 4% of the pupil population as measured by a standardised IQ test; the child is performing within the lowest 4% of the pupil population as measured by a standardised reading or mathematics test and progress is less than 4 months over a 12 month period.

Bury also refer to the 4th percentile in standardised tests as the level of significant need.

Lancashire, in common with many LEAs are currently in the process of revising their criteria and consulting with teacher associations. The present criteria refer to attainments and cognitive ability assessments which fall at or below the 2nd percentile. The proposed new criteria are tighter and place a greater emphasis on attainment levels

e.g.

For Children at Key Stage 2 and Above There should be evidence that the child's attainments are significantly lower than those of their peers. a) The child's attainments in either reading or number on appropriate standardised tests are at or below the 1st centile b) The child's attainments in both reading and number on appropriate tests are at or below the 2nd centile.

Some LEAs continue to use both cognitive ability and attainment criteria. For example **Shropshire** refer to either cognitive abilities falling at or below the 2^{nd} percentile or attainments in reading accuracy and/or spelling within the lowest 1% of the school population. Suffolk use national curriculum attainment information (to be discussed in the next section) and also make reference to the 2^{nd} percentile of cognitive abilities. Cheshire use the 2^{nd} percentile for attainments and also cognitive abilities 'well below average'. Although the usual definition for 'well below average' is more than two standard deviations below the mean (e.g. IQ less than 70), Cheshire have also stated that:

Children with scores between one and two standard deviations below the mean (e.g. IQ range 70-85) may also qualify if attainments are below the second centile for age. (Cheshire County Criteria for Statutory Assessment).

The next section will consider the use of National Curriculum Assessments which are used by 63% of LEAs (see Table 6.11).

6.7.2 THE USE OF NATIONAL CURRICULUM ASSESSMENTS

The use of National Curriculum Assessments (NCA), widely cited in the Code of Practice's criteria for deciding to make a statutory assessment, offers the LEA an efficient method of obtaining data at the individual pupil level. **Birmingham** provides a good example of local authority pragmatism. They have used National Curriculum levels as their principle measure of the child's progress in their *SEN Handbook* as a concerted attempt to avoid the use of psychometric assessment (Williams and Mallon, 1997). They had previously made the bold statement that:

... for reasons including those related to equal opportunities, the LEA will not approve any general use, for the purpose of placing children within this percentage 'band', of group or individual test of 'general ability' or 'intelligence' (Williams et al., 1994).

There was an indication from Birmingham LEA that work would be made towards developing more culture fair, curriculum related and locally appropriate assessment tools. As this has still not happened in any major way, the National Curriculum Assessments were therefore chosen for the present time.

The Code of Practice offers a cautionary warning:

... the bare facts of academic attainment will not be sufficient in themselves for LEAs to conclude that a statutory assessment is or is not necessary. Those facts must always be understood in the context of the attainments of the child's peers,

the child's progress over time and, where appropriate, expectations of the child's performance (para. 3:50).

The whole question of the reliability of NCA and what exactly it is telling us about pupils is extremely important and the answers are not readily available (Hutchison and Schagen, 1994). The term "reliability" is used as a desirable measure for NCA, by analogy with the usage in conventional, norm-referenced psychometric tests, for which it is reasonably well-defined. A number of writers have argued that the situation for NCA is not the same and have proposed alternative and perhaps looser terms for what we are trying to measure. Wiliam (1993) uses the term "dependability" and Schagen (1993) uses the term "reproducibility" – the extent to which the NCA overall outcome could be reproduced under different circumstances.

An article by Tubbs and Williams (1995) discusses the advantages and disadvantages of using NCA in the London Borough of **Southwark.** They concluded that although the system would need to be modified in the light of subsequent experience, the use of NCA was regarded as a useful starting point. It offered a sound basis for schools to bridge the link between assessment and intervention and also to assist in the planning for implementation of the Code of Practice. As the Code of Practice places a high emphasis on the importance of intervention, it was felt that NCA offered a better method of informing interventions than standardised tests.

The level of significant need for a pupil experiencing general or moderate difficulties is described by the Code of Practice in National Curriculum terms as:

the child is working at a level significantly below that of his or her contemporaries in any of the core subjects of the National Curriculum - for example, under the current ten level graduation of achievement, an eight year old child who is working towards level 1 or a 13-year old working at Level 2 (para. 3:57 ii).

Despite the latitude of the above definition, it is important to remember that the TGAT report (DES, 1988b) did not offer assumptions about the precise proportion of pupils which should be at any particular level. Rather it offered a rough speculation about the limits, for the end of each key stage, within which about 80% of the pupils may be found to lie. It is only by analysing the actual National Curriculum Assessment results that comments can be made about levels of significant need and how they relate to the criteria for deciding to make a statutory assessment. Table 6.13 shows the most common value and range of NCA values used by LEAs.

Table 6.13Mode and Range of National Curriculum Attainment Levels used
by LEAs as criteria for significant levels of need for pupils with
general learning difficulties

Year	Mode	Range
2	W	W
3	W	W
4	W	W-1
5	W	W-1
6	1	W-1
7	1	1-2
8	2	1-2
9	2	1-2
		· · · · · · · · · · · · · · · · · · ·

At age 7 (Year 2) there is common agreement by LEAs about the criteria to be used i.e. working towards level 1 (W). The revised National Curriculum introduced in

September 1995 made level 1 in reading and writing more demanding. Whereas in the 1995 results the use of the 'W' descriptor provided good discrimination at the 1st percentile, in 1996 the results in Table 6.14 provide evidence that the use of this descriptor will now identify at least 3 per cent of pupils in English and at least 2 per cent of pupils in Mathematics and Science. No results are available from the DfEE for aggregated subject scores i.e. scores for English, Maths and Science combined. Chapter Nine will consider the potential use of aggregated subject scores in the funding formula for special educational needs.

Tables 6.14 to 6.16 summarise the results for lower attaining pupils for ages 7, 11 and 14. It is now possible to compare the National Curriculum attainment level criteria, proposed by 63% of LEAs in the survey, across Key Stages 1 to 3 with actual percentages of pupils at each level.

Table 6.14 Results of the 1996 National Curriculum assessments of 7 year olds in England (DfEE, 1997a)

	Percentage of Pupils at each level				
	w	1	2		
English					
Teacher Assessment	3	18	62		
Reading Test	3	18	48		
Writing Test	5	15	73		
Mathematics		•			
Teacher Assessment	2	16	66		
Test	3	15	63		
Science			·····		
Teacher Assessment	2	14	69		

Note: The word 'test' refers to tests and/or tasks. The tasks were administered between January and four weeks before the end of the Summer term. The tests were administered during May.

At age 11 (Year 6), most LEAs have chosen the criteria of working at level 1 or working towards level 2. The exceptions are **Birmingham**, **Norfolk and Suffolk** who continue to use the tighter criteria of working towards level 1 (W). Table 6.15 confirms that the use of the level 1 criterion is a good discriminator at the 1st percentile.

Table 6.15 Results of the 1996 National Curriculum assessments of 11 year olds in England (DfEE, 1997b)

		Percentage of P	upils at each lev	el
	W	1	2	3
English				
Teacher Assessment	0	1	8	30
Test	0	1	6	30
Mathematics				
Teacher Assessment	0	1	7	31
Test	0	1	5	34
Science				
Teacher Assessment	0	1	6	28
Test	0	0	4	28

Note: The word 'test' refers to tests and/or tasks. The classroom based tasks for lower attaining pupils were administered between January and two weeks before the end of the summer term. The tests in English, mathematics and science were administered on specific days between 13 and 20 May.

At age 14 (Year 9), the mode attainment level used by LEAs from Table 6.13 is working at level 2 or working towards level 3. Table 6.16 indicates that this criterion is equivalent to the 2^{nd} percentile. Suffolk and Norfolk again use one level lower i.e. working at level 1.

Table 6.16Results of the 1996 National Curriculum assessments of 14 year
olds in England (DfEE, 1997c)

		Percenta	e of Pupils at	each level	
	W	1	2	3	4
English					
Teacher Assessment	0	1	3	11	24
Test	0	0	2	10	23
Mathematics					
Teacher Assessment	0	0	2	12	24
Test	0	0	2	11	23
Science					
Teacher Assessment	0	0	2	11	26
Test	0	0	2	9	26

Note: The word 'test' refers to tests and/or tasks. The classroom based tasks for lower attaining pupils were administered between January and two weeks before the end of the summer term. The tests in English, mathematics and science were administered on specific days between 8 and 14 May.

6.7.3 SUMMARY

The majority of LEAs appear to be using educational tests at the 2nd percentile as the criteria to determine levels of significant need for pupils experiencing general learning difficulties. Table 6.12 has shown that the additive percentages of other 'categories' of need, in total may far exceed the Code of Practice's "one child in fifty" (DFE Special Educational Needs: A guide for Parents p.18). If LEAs are wishing to control the growth of statements by the use of educational test information, then a tighter cut-off may need to be chosen for this sub-group of pupils with special educational needs e.g. 1st percentile. The use of attainment age equivalent without reference to percentile cut-offs can lead to technical difficulties when making direct comparisons across tests. For example using an age equivalent cut-off of 6 : 0 years:months at age 9 on the British Ability Scales (BAS) Word Reading, may identify a different proportion of the pupil population than using the same attainment age measured on the Weschler Objective

Reading Dimensions (WORD). Some LEAs have approached this problem by issuing a list of recommended, standardised tests for individual and group use.

LEAs generally show broad agreement in the National Curriculum levels of attainment at ages 7, 11 and 14, however there appears to be inconsistency about the percentile of pupils to be identified at each of the Key Stages. Following the recommendations from the Dearing Review of the National Curriculum (SCAA, 1994), the revisions introduced in September 1995 made level 1 in reading and writing more demanding. Results from the 1996 National Curriculum Assessments (NCA) in Key Stages 1 indicate that if LEAs are using the same levels specified in their 1995/6 documentation , then at age 7 this would be equivalent to at least the second or third percentile. At age 11, the majority of LEAs are using levels which are consistent with the 1st percentile, but at Key Stage 3 (age 14) the level used has a less restrictive criterion of the 2nd percentile. The implication of using National Curriculum levels at the end of the different key stages would suggest that a higher number of pupils will meet the criteria at age 7 and age 14 than at age 11 thereby abrogating the equity principle.

Table 6.10 has shown that the 52% of LEAs use a combination of NCA and educational tests. These LEAs should be aware of the conflicting percentages of pupils identified by NCA at Key Stages 1 and 2 as compared to the level specified by educational tests. The level of significant need, determined by NCA at Key Stage 1 $(2^{nd}/3^{rd} \text{ percentile})$ and at Key Stage 2 $(1^{st} \text{ percentile})$ is inconsistent with the level used by the majority of LEAs determined by educational tests $(2^{nd} \text{ percentile})$.

6.8 SPECIFIC LEARNING DIFFICULTIES

The Code of Practice notes that:

Some children may have significant difficulties in reading, writing, spelling or manipulating number which are not typical of their general level of performance (para. 3:60).

The area of specific learning difficulties (SpLD) or dyslexia is hard to define as illustrated by Pumfrey and Reason (1991). The survey provides further evidence of the increasingly widespread adoption of discrepancy definitions of specific learning difficulties by LEAs.

The concept of specific learning difficulties with which those who work in LEAs are more comfortable, is used when a child has an attainment level in some specific area of learning which is below what one would expect from his/her functioning in other spheres such as language, reasoning or practical skills. Where reading is concerned it is usually applied to a child whose score on a standardised reading test is below his/her score on an intelligence test by a specific amount (Presland, 1991).

A further point about the concept of SpLD relates to the principle of equity. Few would argue that services for children with specific learning difficulties are adequate. However there are other groups of children with special educational needs, particularly those described in the previous section 6.8, with mild/moderate learning difficulties, for whom provision may be worse and who do not exert a powerful pressure group to promote their cause (Riddell et al. 1994; Gross, 1996). There is now clear evidence that some pupils with special educational needs, in particular specific learning difficulties, whose parents may be middle class and articulate, have been over-represented in cases going to the Special Educational Needs Tribunal. The Tribunal was established by the Education Act 1993 as the body to which parents can appeal against decisions taken by LEAs during the statutory assessment process. The annual reports (Special Educational Needs Tribunal, 1995, 1996, 1997) record that there has been a 75% increase over the

two year period in the number of cases which were registered (i.e. from 1,170 in 1995 to 2,051 in 1997). In each of the three years the proportion of children whose main needs was literacy, including specific learning difficulties, approached 40 per cent (1995 40%, 1996 39.6%, 1997 36.3%).

Clearly the issue about which pupils qualify for a statutory assessment for specific learning difficulties is of high concern to LEAs, especially when there is a high cost to an LEA of taking a case through to Tribunal. This has been estimated by *Whiteshire* to be £3,000.

Frederickson and Reason (1995) are not impressed by the definitions proposed by the Code of Practice to assist LEAs in their selection of pupils for statutory assessment.

To invite individual LEAs to pick and mix from the potpourri of criteria offered in paragraphs 3:60 and 3:61 is to guarantee inconsistencies in definition across the country. The breadth and diversity of the criteria suggested, together with the lack of any clear conceptual coherence among them, make it difficult to think of adequate grounds on which LEAs could establish that a prima facie case for an assessment **did not** exist (p.197, author's emphasis).

In an attempt to provide better advice, Surrey have produced a document 'Specific Learning Difficulties/Dyslexia : Recommended Guidelines for Good Practice' which explores the issues in greater detail than can be afforded in this thesis. National statistics are not available for the proportion of statements which are maintained for pupils experiencing specific learning difficulties but Table 7.5 shows that this approaches a significant level in *Whiteshire* (28% i.e. 1.3% out of a total of 4.6% of statements).

The discrepancy criteria adopted by LEAs in this survey are either ability-achievement discrepancies or extreme discrepancies between attainment in different core subjects of the National Curriculum or within one core subject, particularly English (Code of Practice para. 3:61). In the ability-achievement discrepancy model the pupil's IQ is used to predict the expected score on a reading or spelling test. The difference between the expected score and the child's actual reading score is then calculated. It is then possible to work out how 'unusual' the size of the discrepancy is in relation to test standardisation data.

Although the combination of financial constraints and legal threats may have forced some LEAs to tighten definitions of SpLD based on IQ/RA discrepancies, it should be noted that this method is not accepted by all researchers in the field e.g. Frederickson and Reason, 1995; Solity, 1996. There is also a questionable moral and equity argument about giving additional resources to children based on a discrepancy argument. Put in its simplest terms, why should poor readers get more support just because they have a higher IQ than others or perform more successfully on some other criterion? Or to put it in another way, why should pupils with SpLD be more worthy of support over pupils whose general abilities are lower and are deserving of greater support to maximise their more limited opportunities of social empowerment through literacy? Frederickson and Reason quote research from the US which seriously questions whether expectations for future attainment can reasonably be based on measured IQ. These researchers are quite clear that it is not possible to distinguish between SpLD and poor readers on significant measures of their reading skills or response to teaching. Solity argues that curriculum based approaches, which demand systematic observation of how children learn and respond to teaching over time, are the most appropriate means of assessing children's perceived difficulties in learning to read.

The fact remains that despite doubts about the 'resourceworthiness' of SpLD pupils over pupils with other types of learning need, in practice LEAs are using a variety of methods to determine significant levels of need. A closer examination will now be taken of each of the methods illustrated in Table 6.17.

Table 6.17 Methods used by LEAs to determine significant levels of need for specific learning difficulties

Method	Percentage of LEAs
Ability-Achievement Discrepancies	40%
NC Level Discrepancies + Attainments	19%
Attainments only	19%
NC Level Discrepancies only	15%
Other	7%

6.8.1 THE USE OF ABILITY-ACHIEVEMENT DISCREPANCIES

Although more LEAs use the ability-achievement model than any other method, it should be noted that almost two thirds of the LEAs in the survey rejected this procedure. As previously mentioned, **Birmingham** explicitly do not approve of any general use of intelligence/cognitive ability tests for equal opportunities reasons and a concern that the tests are not culture-fair. Some LEAs have fairly tight criteria which specify definite attainment ages, intelligence quotients or standard deviations below expectation e.g. **Berkshire, Cheshire, Gateshead, Lancashire, St Helens, Shropshire, Stockport.** Whereas other LEAs have more loose criteria e.g. **Bury, Wakefield, Bedfordshire, Suffolk** and make references to extreme discrepancies between or within National Curriculum core subjects or statistically significant differences between ability

and attainment scores without specifying exact values.

Cheshire list a number of conditions for a specific learning difficulty in reading, all of

which must be met e.g.

The pupil is of at least average intelligence with a standardised score of not less than 90 or equivalent on appropriate tests of intellectual ability. The pupil obtains a reading accuracy score below 9 years on a recognised standardised test. EITHER the pupil obtains reading accuracy or comprehension scores at or below the 2nd centile for children of the same age (e.g. Reading Quotients of 70 or less); OR assessment by an educational psychologist reveals that the pupil's attainment in reading is at a level which is 2 standard deviations below that to be expected on the basis of the pupil's general capabilities.

This definition uses the concept of 'minimum level of competence' whereby a specified attainment level is used to determine which pupils meet the criteria for a statutory assessment. **Cheshire** have a similar list of conditions for spelling which include: a spelling age of less than 8 years, either a spelling score at or below the 2^{nd} centile (e.g. Spelling Quotient of 70 or less) and reading scores at or below the 5^{th} centile (e.g. Reading Quotient of 75 or less), or a spelling performance 2 standard deviations below that to be expected on the basis of the pupil's general intellectual capabilities and reading at or below the 5^{th} centile.

Not all LEAs specify that the pupil has to be of at least average intelligence. Lancashire use the concept of underachievement and do not refer to a minimum ability level. A 2% discrepancy cut-off between ability and attainment i.e. equivalent to a 25 point discrepancy, is currently used in Lancashire which would relate to 2 standard deviations below the mean and the 5th centile in attainments. This has been amended in

September 1996 to incorporate a discrepancy at the 1st percentile in response to the Formula Funding and Special Educational Needs 195 Chapter Six 0U/PhD/AJM/April 1998 escalation in the requests for a statutory assessment. Stockport and Shropshire also do not refer to the average range of intelligence. Stockport refer to attainments at the 3^{rd} centile or a discrepancy at the 3^{rd} centile (1.9 standard deviations) whereas Shropshire use a 40 point discrepancy which equates to 3.3 standard deviations or to be expected in approximately one child in 2000 (0.05%). St Helens refer to evidence of a child with "good ability" and use 1.5 standard deviations as their discrepancy factor which would equate approximately to the 6th percentile. Berkshire use a percentage cut-off of 1% (30 point discrepancy) which is equivalent to approximately 2.3 standard deviations and make mention of children within the normal range of cognitive ability.

6.8.2 THE USE OF NATIONAL CURRICULUM CORE SUBJECT DISCREPANCIES AND ATTAINMENT TEST SCORES

As part of the recorded evidence which the LEA should seek in relation to pupils experiencing specific learning difficulties, the Code of Practice asks whether:

there are extreme discrepancies between attainment in different core subjects of the National Curriculum or within one core subject, particularly English. LEAs should be especially alert if there is evidence that, within the core subject of English, a child has attained average or high average levels in Attainment Target 1, speaking and listening, but significantly lower levels in AT2, reading, and/or AT3, writing.

LEAs which used National Curriculum core subject discrepancies in combination with standardised attainment test scores included **Enfield**, **Richmond**, **Cornwall**, **Devon and Somerset**. **Cornwall** use different attainment criteria for three different levels of ability: high, average and low. The mean attainment ages specified by LEAs at different National Curriculum Years are shown in Table 6.18.

Table 6.18 Mean and Range of Attainment Ages used by LEAs as criteria for pupils with specific learning difficulties

Year	Mean years:months	Range Years:months	Level for general access to reading materials
2	below 5	below 5	6:9
3	5:7	5:4 to 6:0	7:6
4	6:1	5:5 to 7:0	8:2
5	6 : 4	6:0to 7:0	8:11
6	6:7	6:4to 8:5	9:7
7	7:3	6:9to 8:5	10 : 7
8	7:7	7 : 1 to 10 : 0	11:0
9	7:10	7 : 5 to 10 : 0	11:10

Note: The final column refers to research by Sawyer et al. (1994) performed in Dorset LEA which indicates the levels of literacy, as measured on the New Neale Analysis of Reading Ability, at which a child may be considered to have no special educational needs in reading, as pupils can generally access reading materials in their classroom at this level without any school based help.

Some LEAs specified attainment test scores only and also referred to the level required for general access to the curriculum (Sawyer et al. 1994), e.g. Richmond and Croydon.

Croydon state that:

Pupils would be considered for formal assessment if they fell below the levels identified (listed in an attached table) and were also unable to access the appropriate curriculum for the average child of their age.

Other LEAs use National Curriculum core subject discrepancies only without any reference to attainment test scores e.g. Greenwich, Southwark, Birmingham and Norfolk. However there does not appear to be any consensus as to the value of the discrepancy to be used. The results from the National Curriculum Assessments are not able to assist in this 'benchmarking' as they do not record any discrepancy statistics. Regrettably in 1995 LEAs were unable to perform their own analyses, as the Key Stage 2 and 3 data, which had been collated by local examination boards, was at a school and not pupil level. However in 1996 *Whiteshire* collected the data from their own schools and an analysis of NCA discrepancies will be presented in Chapter Nine (Table 9.15).

Preliminary analysis of 1992 Key Stage 3 pupil level data, using the same sample as reported in the paper by Marsh (1995a), indicated NC discrepancies in levels between teacher assessment of English and the standard assessment task scores from the other two core subjects of Maths and Science (see Table 6.19).

Table 6.19 Discrepancies between National Curriculum English subject level and those for Maths and Science (1992 Key Stage 3 results, n=1104)

NC Discrepancies	Percentage of Pupils
3 Levels	0.8%
2 Levels	6.1%

Table 6.19 suggests that 6.1 per cent (n=70) of pupils at age 14 have at least a 2 level discrepancy between English and Maths or Science e.g. En2 Ma4 Sc4, and 0.8 per cent (n=9) of pupils have at least a 3 level discrepancy e.g. En3 Ma6 Sc5. The sample of 1,104 pupils included 17 pupils (1.5% of the total sample) with a statement for SpLD. Of these 17 statemented SpLD pupils only 1 had a 3 level discrepancy and only 4 pupils had a 2 level discrepancy. Put in another way, only one of the nine pupils, identified as having a 3 level discrepancy, was in receipt of a statement for SpLD. This result appears to suggest that, at least in the 1992 Key Stage 3 sample, the criteria of NC between core subject level discrepancies is a weak indicator of whether a pupil receives SpLD provision. Clearly more research is required to verify whether the use of NC discrepancies is any better **between** attainment targets particularly within the core subject of English. In the light of the current lack of evidence it is not surprising to encounter LEAs using a variety of values for level discrepancies. **Birmingham** use the definition of a 3 level discrepancy:

Preliminary analysis of 1992 Key Stage 3 pupil level data, using the same sample as reported in the paper by Marsh (1995a), indicated NC discrepancies in levels between teacher assessment of English and the standard assessment task scores from the other two core subjects of Maths and Science (see Table 6.19).

Table 6.19 Discrepancies between National Curriculum English subject level and those for Maths and Science (1992 Key Stage 3 results, n=1104)

NC Discrepancies	Percentage of Pupils
3 Levels	0.8%
2 Levels	6.1%

Table 6.19 suggests that 6.1 per cent (n=70) of pupils at age 14 have at least a 2 level discrepancy between English and Maths or Science e.g. En2 Ma4 Sc4, and 0.8 per cent (n=9) of pupils have at least a 3 level discrepancy e.g. En3 Ma6 Sc5. The sample of 1,104 pupils included 17 pupils (1.5% of the total sample) with a statement for SpLD. Of these 17 statemented SpLD pupils only 1 had a 3 level discrepancy and only 4 pupils have at least a 2 level discrepancy. Put in another way, only one of the nine pupils, identified as having a 3 level discrepancy, was in receipt of a statement for SpLD. This result appears to suggest that, at least in the 1992 Key Stage 3 sample, the criteria of NC between core subject level discrepancies is a weak indicator of whether a pupil receives SpLD provision. Clearly more research is required to verify whether the use of NC discrepancies is any better **between** attainment targets particularly within the core subject of English. In the light of the current lack of evidence it is not surprising to encounter LEAs using a variety of values for level discrepancies. **Birmingham** use the definition of a 3 level discrepancy:

In most cases the LEA will be looking for evidence of a discrepancy of three or more NC levels, with attainments in the problem area well below the average for the age group.

Southwark propose 2 level discrepancies at age 7, 3 levels at age 9, 3 to 4 levels at age 11 and 4 level discrepancies at age 14. **Norfolk** describe a significant discrepancy as being the difference of at least two levels between attainment targets and/or core subjects but do not differentiate by age.

6.8.3 SUMMARY

Most LEAs in the survey use some form of discrepancy criteria i.e. ability-achievement discrepancies or National Curriculum Assessment discrepancies to calculate levels of significant need for pupils experiencing specific learning difficulties. However there does not appear to be a consensus as to the level of discrepancy or level of attainments to be used. Table 6.19 has illustrated that the range of attainment ages can differ quite widely between LEAs. It is likely that specific learning difficulties will retain its high profile. If LEAs wish to control statementing costs then they may need to reconsider their existing procedures, including the use of tighter criteria, as the evidence suggests that there has been a definite consolidation of parental advocacy in this area of SpLD.

6.9 FURTHER COMMENTS

The trend over a number of years has seen a rise in the number of pupils identified as experiencing SEN which has also been highlighted by the *SEN Initiative* (Coopers and Lybrand, 1996a) and the Green Paper (DfEE, 1997e). The increase has been both at the level of significance to merit a statement of special educational needs and also below

this level within 'the 18%'. This chapter has looked at the current practice in LEAs for resourcing additional educational needs and for determining criteria of need for making a statutory assessment. Although there is diversity in the design of individual funding formulae, there is also a commonality in the approaches used by LEAs at a macro level. For example an expanding number of LEAs are using educational tests and/or professional audits to determine whether a stage four Code of Practice assessment is necessary and for inclusion in their funding formulae.

This increasing use of needs related indicators suggests that LEAs have adopted the 'special needs pupil' discourse in their attempts to provide practical answers to the complex issues posed by LMS and the Code of Practice. Although the Code of Practice reinforces the view advanced in the Warnock Report that special educational needs arise from the interactions between children and particular environments as well as from factors 'within the child', the response by LEAs has been to perpetuate a child deficit model. This may be a disappointing response but it is highly predictable in the face of government legislation which promulgates the importance of policies which relate to the individual child.

Statements, with their legal requirement on LEAs to deliver the provision described within them, seem a powerful way of ensuring that individual pupils get what they need. In fact some commentators would argue it is precisely this feature of special educational needs legislation that ensures vulnerable children are protected from inadequate resourcing levels. This approach would be reasonable if the government used numbers of statements as an indicator of need linked to the additional provision of resources to LEAs, although it would be incompatible with the aim of budget control.

However the reality is that if the number of statements continues to rise then, within the context of finite LEA budgets, further increases will squeeze other areas e.g. in the amount distributed through the age weighted pupil unit. Special educational needs may now be on the brink of experiencing a sea change in policy formation by LEAs, as they become more concerned with budgetary control than with the identification of individual need. An example of this has been in *Whiteshire*, where for the first time since the implementation of the 1981 Education Act in September 1983, the Education Committee agreed to a budget decrease of £1 million in their statementing costs for 1997/98.

A variety of methods are being adopted by LEAs in their endeavours to stabilise and control the increase in statements. These include the use of moderating panels (Gray, 1997), together with criteria of need and attempts to increase the accountability of resources allocated for non-statemented SEN, as outlined in this chapter. Indeed, perhaps the time has come to bring an end to statementing completely (Williams and Maloney, 1998).

CHAPTER SEVEN THE RELATIONSHIP BETWEEN THE CONTINUUM OF SPECIAL EDUCATIONAL NEEDS AND DIFFERENTIATED RESOURCE LEVELS : CASE STUDIES FROM TWO LOCAL EDUCATION AUTHORITIES

The main aim of this chapter is to examine the relationship between special educational needs (SEN) and resource levels and to consider whether it is worthwhile for LEAs to differentiate financially between different levels of need (Key Questions 6 and 7). The EMIE survey on additional educational needs (Marsh, 1997a) reported in Chapter Six, shows that many LEAs distribute their non-statemented SEN resources as a standard unit cost. That is to say, each identified non-statemented SEN pupil is allocated the same amount of money irrespective of the degree and the nature of the learning difficulty. Initially there will be a discussion of the relationship between the continuum of special educational needs and level of provision thought to be required to meet these needs. The second part of the chapter will consider different approaches to the allocation of non-statemented SEN resources taken by two LEAs. It will draw on qualitative data, including pupil case studies, derived from semi-structured interviews in eight schools which were conducted with headteachers, special educational needs coordinators (SENCOs) and heads of department in English, Mathematics and Science. In addition to the main aim other key issues to be addressed will be: the mechanisms for distributing resources for non-statemented special educational needs, the level of and accountability for funding and the use of learning support assistants or outreach teachers.

7.1 THE RELATIONSHIP BETWEEN THE CONTINUUM OF SEN AND DIFFERENTIATED RESOURCE LEVELS

This section will examine in detail the vertical equity principle of providing differentiated funding by looking at the criteria, policies and approaches adopted by the two LEAs.

Chapter Three has already considered the Code of Practice on the Identification and Assessment of Special Educational Needs (DFE, 1994) which recognises that there is a continuum of needs, emphasised by the Warnock report (DES, 1978), and a continuum of provision (para. 1:2). The Code of Practice suggests a five-stage model of assessment: stages 1 to 3 are concerned with meeting pupils needs within their mainstream school; stages 4 and 5 are directed towards statutory assessment under section 167 of the 1993 Education Act and the maintenance of a statement of special educational needs. Although Booth (1994) has questioned the uncritical acceptance of the continua of 'needs' and 'provision', he appeared to be concentrating on the principle of inclusion for all pupils within mainstream education regardless of the severity of their need. The purpose of this chapter is to provide an investigation into the practice of allocating differentiated levels of resources for pupils with SEN in mainstream schools rather than engaging in the integration/inclusion debate.

If the view of the Warnock committee is accepted that a continuum of SEN exists, then it might be expected that this should be reflected in a continuum of resourcing. Generally, this has not been the case. It has been argued that typically resources are allocated in a discontinuous way to a continuum of needs. One of the outcomes of the Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 1981 Education Act has been that, whilst the needs of the minority (the 2% or so with statements) have, quite properly, been the focus of much attention, there hasn't been the same thoroughness in application when dealing with the remaining 18% in mainstream schools.

7.1.1 POLICIES TOWARDS DIFFERENTIATED FUNDING

The relationship between needs and resources is illustrated in Circular 4/73 (DES, 1973) and Circular 11/90 (DES, 1990) and has been examined in Chapter Five. Circular 4/73 was concerned with the more flexible principle of staff-pupil ratios for each category of 'handicap' rather than the rigid concept of class sizes. Circular 11/90, on the other hand, suggested a staffing model which incorporated estimates of staff time, (both teacher and learning support assistants), needed per pupil for five bands of learning difficulty. However this circular made no mention of pupils with special educational needs but without statements.

Some LEAs (e.g. Kent, Northamptonshire and Avon) have attempted to produce integrated special provision arrangements involving professional audits across the full range of special educational needs to include pupils with and without statements (e.g. see Stewart, 1992 and Villette, 1993). The purpose of the audits is to help distribute available funds equitably across schools according to need. Actual pupils are identified and placed within the continuum of SEN at one of several possible levels (Kent, Northamptonshire and Avon all use six levels). The audit form, therefore, represents a bid for resources and attempts to provide the basis for a consistent and coherent approach to identifying, recording and reviewing pupils' SEN across the LEA. The Department for Education and Employment (DfEE) have approved the audit approach on a time limited basis if certain criteria are met:

- moderation across the LEA so there are common standards
- evidence to support decisions simply completing a form is insufficient
- ability to respond to changes carrying forward the result of an audit from one year to the next unlikely to be acceptable
- the opportunity for some sort of appeal from schools dissatisfied with the outcome of the audit
- random checking of judgements built into the moderation process.

The audit approach has some obvious drawbacks: the time it takes especially at the beginning, and the difficulty of making such a process sufficiently objective and consistent. Most LEAs have adopted simpler methods. The Additional Educational Needs survey reported in Chapter Six has indicated that 92% of LEAs use free school meals as a proxy measure of special educational needs. However the survey supports a similar finding by Robertson (1995) that there has been a general movement towards the use of more direct educational criteria for allocating non-statemented SEN resources, either by the use of educational measures such as reading test surveys, or by the use of moderated SEN registers or audits.

7.1.2 APPROACHES TO DIFFERENTIATED FUNDING IN TWO LEAS

The remaining part of this chapter describes a small scale research study which will examine in detail different approaches taken by two LEAs (*Mercia* and *Whiteshire*) to Formula Funding and Special Educational Needs 205 Chapter Seven OU/PhD/AJM/April 1998 allocate resources for non-statemented SEN. Mercia uses a professional audit and Whiteshire makes use of educational measures. The research study had two main objectives:

- to explore the views of professionals about the different resourcing policies adopted within the two LEAs;
- to investigate the match between special educational needs and the level of provision thought by professionals to be required to meet these needs.

An outline of the methodology and how these objectives were addressed has already been provided in Chapters One and Two in the research programme under Key Questions 6 and 7. The wider aim of the study was to examine whether it is worthwhile for LEAs to construct a LMS funding formula for special educational needs to attempt to differentiate financially between different levels of need.

LEA 1 (*Mercia*) is a shire county with a school population of 80,000. It has an average level of pupils (1997 41%) with 5 or more GCSEs at grades A-C and a free school meals entitlement percentage for primary pupils below the national average (13%). LEA 2 (*Whiteshire*) is also a shire county with a school population of 200,000. It also has a percentage of pupils at the national average (1997 42%) with 5 or more GCSEs at grades A-C. *Whiteshire* also has a free school meals entitlement percentage for primary pupils at around the national average (24%).

Four schools were selected within each LEA (8 schools in total) and these were all visited during the summer term 1995. The intention was not that the sample should be

randomly selected but that the schools should be broadly representative of mainstream schools. As I was already employed by *Whiteshire*, I was able to select four schools from across the Authority which were both representative and which were within my personal network of contacts. The selection of schools in *Mercia* were on the basis of recommendation from education officers, who felt that the schools had a good special educational needs policy and would also be receptive to a researcher from outside the LEA. The latter method of sampling has been termed reputational case selection (Goetz and LeCompte, 1984). The four schools from each LEA were divided into two secondaries and two primary/middle. Table 7.1 illustrates the size and school type together with other information relevant to the resourcing of special educational needs pupils.

Table 7.1Table to show Non-Statemented SEN Budgets for 1995/96 andFree School Meal Entitlement for schools in the two sample LEAs

Marcia		Non- Statemented SEN Budget	Free School Meals Entitlement	No of pupils with Statements	Percentage of statements
School	Number on roll	Ł	%		%
A Secondary	939 Y7-Y11	15,000	10	15	1.6
B Secondary	990 Y7-Y13	9,200	4	12	1.2
C Middle	415 Y5-Y 8	8,300	20	17	4.1
D Lower	445 R-Y 4	7,100	3	2	0.5
Whit	cshire.			<u> </u>	
E Secondary	1149 Y7-Y11	154,000	23	45	3.9
F Secondary	851 Y7-Y13	39,900	2	2	0.2
G Junior	279 Y3-Y 6	44,600	53	10	3.6
H Primary	239 R-Y 6	10,000	11	7	2.9

Formula Funding and Special Educational Needs Chapter Seven

OU/PhD/AJM/April 1998

The next section will provide a descriptive comparison of the level of resources in the two LEAs.

7.2 DESCRIPTIVE COMPARISON OF THE LEVEL OF RESOURCES WITHIN THE TWO LEAS

One of the main differences between the two LEAs is the level of funding which is available for non-statemented special educational needs. Analysis of the Section 122 budget statements which were submitted to the Department for Education for 1994-95 indicated that *Mercia's* budget for non-statemented SEN pupils is only 1.3% of the aggregated schools budget (ASB) compared to *Whiteshire's* 6.2% (see Table 7.2). (The ASB is the amount of money left for delegation to individual schools after mandatory excepted items and LEA central services have been deducted).

 Table 7.2
 Differences in Funding Amounts in the Two LEAs for 1994/95

LEA	No of Pupils	Total ASB	SEN Budget Sor Primery Pupils without Statements	SRN Dudget for Secondary Papils without Statements	Total SEN Budget for Puplla without Statements	Primary Mari, NSMEN unit cost	Secondary Max. NSSEN unit cost
Mercia	80,000	fmillion 135.1	1.0%	0.3%	1.3%	£ 509	£ 218
Whiteshire	200,000	325.3	2.5%	3.7%	6.2%	323	1,204

Education officers from *Mercia* claim that 5% of the ASB has already been included in the amount delegated to schools as part of generally available provision. Therefore the 1.3% is an artificially low figure. *Whiteshire* does not make this claim. Table 7.2 also shows the relative distribution between the primary and secondary phases. Even Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 allowing for the 24 middle schools which have been deemed primary, *Mercia* allocates a much larger proportion of the available budget (approximately 80%) for primary pupils without statements. This compares to *Whiteshire's* allocation of 40% to the primary phase. The impact of this distributional method is seen in the maximum unit costs available for primary and secondary pupils. In *Mercia* the maximum unit cost for a primary pupil is £509 compared to £323 in *Whiteshire*. However for secondary pupils *Whiteshire's* maximum unit cost is nearly six times greater then *Mercia's*.

The maximum unit cost for non-statemented SEN (NSSEN) within the secondary sector are nearly six times higher in *Whiteshire* than in *Mercia* i.e. £1,204 compared to £218 (see Table 7.2). In the primary sector the maximum unit cost for a non-statemented SEN is greater in *Mercia*. However whereas *Whiteshire* has a single unit cost for all pupils with special educational needs but without statements (£323), *Mercia's* funding for each pupil decreases for every five pupils i.e. the unit cost for the first five pupils with special educational needs but without statements in a school is £509, for the next 6 to 10 pupils it is £381, for the next 11 to 15 pupils it is £255, and for all other Code of Practice stage 3 pupils, it is £127.

The effect of these funding arrangements are shown in Table 7.1 which illustrates the non-statemented SEN budget for the eight schools in the survey. When the secondary schools from the two LEAs are paired together for school type i.e. A and E (Y7-Y11) and, B and F (Y7-Y13), they highlight the large differences in the non-statemented SEN funding. School E receives ten times more in terms of financial support than school A. Similarly, although on a smaller scale, school F receives over four times as much as

school B. As expected from Table 7.1 the differences are not so marked in the primary sector even though direct comparisons are not possible as the four primary/middle schools in the sample are all of different school types and pupil populations and have different free school meal entitlements.

The level of resources in the two LEAs are illustrated further in Table 7.3 which shows the percentage of the pupil population with statements. Despite the relatively high resourcing levels for non-statemented special educational needs in *Whiteshire*, the overall total percentage of statements (4.6%) is now considerably more than the 'one child in fifty' as suggested in the Code of Practice. The comparable statistic for *Mercia* is 3.1% of which approximately 40% attend special schools which is a broadly similar percentage to that seen in *Whiteshire* (35%).

Table 7.3Percentage of pupils in special and mainstream schools in Merciaand Whiteshire at January 1997

LEA	Percentage of Pupil population with statements						
	Mainstream Schools	Special Schools	Total				
Mercia	1.9 %	1.2 %	3.1 %				
Whiteshire	3.0 %	1.6 %	4.6 %				

The data in Tables 7.3 and 7.4 suggests that the impact of the higher resourcing levels in *Whiteshire* has not been effective in maintaining and stabilising the statementing rate which are an important element of the total SEN budget. The *SEN Initiative* (Coopers and Lybrand, 1996a) has identified an increased national pressure for statements of

special educational needs, which has also been reflected in *Whiteshire*. The number of statements in the *Whiteshire* have been increasing by an average of 10% per year since 1989 (see Table 7.4). The increase is explained by the difference between the inflow percentage (i.e. number of new statements) and the outflow percentage (i.e. number of statements which were ceased). The Citizen's Charter Performance Indicators released in March 1998 (Audit Commission, 1998) recorded *Whiteshire* as having 4.6% of pupils with statements (one the highest ranked LEAs in England) and *Mercia* as having 3.1% of pupils with statements, compared with a national average of 3.5%.

 Table 7.4
 The Number of Statements in Whiteshire from 1988 to 1997

Year	No of Statements maintained	Year on Year Variation	Percentage Year on Year Variation	Number of Statements issued (inflow)	Inflow Percentage	Number of Statements ceased (outflow)	Outflow Percentage
1988	4104			810	- 10		
1989	4433	329	8.0%	968	23.6%	639	15.6%
1990	4997	564	12.7%	1269	28.6%	705	15.9%
1991	5406	409	8.2%	1124	22.5%	715	14.3%
1992	5950	544	10.0%	1305	24.1%	761	14.1%
1993	6556	606	10.2%	1440	24.2%	834	14.0%
1994	7518	962	14.7%	1468	22.4%	506	7.7%
1995	8110	592	7.9%	1816	24.2%	1224	16.3%
1996	9227	1117	13.8%	2253	27.8%	1136	14.0%
1997	9573	346	3.8%	1704	18.5%	1358	14.7%
Average per year		608	9.9%	1416	24.0%	875	14.1%

Source : SEN2 returns (January)

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998

7.3 CASE STUDIES TO EXPLORE PROFESSIONAL VIEWS ABOUT LEA RESOURCING POLICIES FOR SPECIAL EDUCATIONAL NEEDS

7.3.1 DATA COLLECTION INSTRUMENTS AND INTERVIEW PROCEDURES

Policy documents were obtained from the two LEAs relating to special educational needs and used as background material about the LEA. Other data was collected by means of a semi-structured questionnaire (see Appendices A, B and C) which the respondents saw prior to the interview and by means of a semi-focused interview as described by Merton and Kendal (1957). The interviews with the SENCO and heads of departments focused on individual pupils with special educational needs.

Within each secondary school the headteacher, special educational needs co-ordinator (SENCO), and heads of English, Mathematics and Science were interviewed. Within each primary/middle school the headteacher and SENCO were interviewed. In one school the headteacher also took on the role of SENCO.

The professional interviews were transcribed and analysed. Three central themes emerged from the interviews:

- policies for funding pupils with special educational needs but without statements;
- designated special provision; and
- learning support assistants or outreach teachers.

Whiteshire had clearly defined outreach teams for the special needs 'categories' of moderate learning difficulties (MLD), specific learning difficulties (SpLD), and

emotional and/or behavioural difficulties (EBD). These 'labels' were used in the analysis of the individual pupil data for both authorities.

7.3.2 POLICIES FOR FUNDING NON-STATEMENTED SPECIAL EDUCATIONAL NEEDS : AUDIT AND FORMULA

Mercia considers that it is important to agree a practical and working definition of terms such as "special needs" and "learning difficulty". The contention is made that only then will it be possible for all schools to define these terms in a consistent way and for the LEA to determine the level and range of needs in each school and to establish a method of funding provision which is widely understood and seen to be fair. *Mercia* has a set of principles within which their SEN policy has been interpreted and developed. Some of the key principles include that:

- provision should be determined by reference to the best interests of the individual pupil though the initial focus of provision should be the mainstream school;
- the segregation or removal of an individual pupil from the local community may diminish the quality of experience for the whole community;
- provision should therefore be aimed to maximise the entitlement of all pupils to the full range of normal experiences in their local community, insofar as this is consistent with the provision of effective education and the efficient use of resources.

The LEA's approach has been to develop a model which is a focus on the *arrangements* made by schools to meet the identified educational needs of pupils, rather than on aspects of need or other within-child factors. It claims explicitly to relate the identification and assessment of special needs to the recording of arrangements made to

meet those needs and to the resources required for those arrangements. The arrangements are described in Bands into which children can be placed according to an ascending scale of learning difficulties. At one end of the scale of difficulties (Band 1) are those children with marginal problems - for example, slight reading problems which might be remedied by a small amount of help each day. This would correspond with stages 1 and 2 of the Code of Practice. Band 2 arrangements are those that would correspond to stage 3 of the Code of Practice. Bands 3, 4, 5 and 6 describe increasingly complex special educational arrangements made for pupils with statements of special educational need corresponding to stage 5 of the Code of Practice.

The framework thus attempts to avoid the problems of categorisation of children according to the nature of their needs. The criticism which may be levied at this approach is that the system is really only another labelling device. The question which needs to be asked is whether there are any negative implications for the child, arising from the adoption of the banding arrangements. For instance how do class/subject teachers perceive a Band 2 pupil as being different from a Band 1 pupil. Do Band 2 pupils only receive segregated 1:1 withdrawal support which may single them out from their peers? The LEA's description of the difference is that the Band 2 pupil should be in receipt of the equivalent of 1 hour of individual teaching support per week. There is no stipulation from the LEA whether the support should be in the form of withdrawal 1:1 provision or in-class support. In practice schools often convert this into 3 hours of Learning Support Assistant resources (LSA) and the support is given in a combination of methods i.e. 1:1 withdrawal, in-class support and close consultation with the class/subject teacher. When a school wishes to put forward a pupil for proposed Band 2

arrangements, this must be carried out at the time of the annual Audit of Special Educational Needs which takes place during October. A minimum level of evidence is required by the LEA which includes:

- a record of baseline assessment having been carried out and leading to a definition of the priority areas of concern;
- working records giving daily/weekly dated evidence of implementation of the planned programme. These records should be available for at least the second half of the summer term and autumn term (unless the pupil is new to the school);
- programme planning and evaluation sheets to cover the duration of the Band 1 arrangements. The expectation is that these should document programmes for at least the previous term, although again exceptions to this are made for pupils newly arrived to the school.

If it is proposed to move a child from Band 1 to Band 2 then an LEA support teacher would discuss the Band 1 arrangements with the Special Educational Needs Coordinator (SENCO). If an agreement is reached the pupil's name is then added to the Band 2 summary sheet under the 'proposed' column. A selection of common measures of attainment are also entered on the summary sheet according to the curriculum area for which the special arrangements have been made. A sample of records for proposed Band 2 pupils are then taken to Agreement Trials which is a panel consisting of Head Teacher, SENCO and support teacher representatives. Their function is to ensure that :

- the guidelines for moving pupils from Band 1 to Band 2 are in place;
- there is consistency in applying the measures within the area teams.

A set of criteria for areas of difficulty is then applied to all the proposed Band 2 pupils. Educational test scores, previously submitted from schools, are used at a second stage of moderation by Mercia to provide further evidence for the selection process of which pupils are to be defined as a Band 2 or Code of Practice stage 3. For example, pupils could qualify under any one of 13 'categories' of need. The categories included low scores on the early years checklist, a reading age lower than the tenth percentile, any score on a behaviour checklist or physical difficulties checklist, low attainment target levels in Maths or generally low attainment target levels in the three core subjects of English, Maths and Science. Mercia maintained that the high number of 'categories' was necessary to ensure that a wide range of learning difficulties was included. In 1994/95 the number of pupils proposed for Band 2 arrangements was 5 per cent of the school population as opposed to 15 per cent of pupils receiving Band 1 arrangements. Approximately four pupils out of five were then selected by the LEA for additional funding by the use of checklist criteria or low attainment levels. Significantly the 1995/96 audit included almost 26 per cent more Band 2 pupils than that of 1994/95 which may be a reflection of the large differential in funding levels between a Band 2 pupil (\pounds 509) and a Band 1 pupil (\pounds 29).

There appeared to be several encouraging comments about *Mercia*'s overall policies towards special educational needs.

I think they've got a great desire and willingness to support schools and think its limited purely by the funding they receive. They try very hard to they listen to us they try very hard to respond to the comments of schools. (Mercia Headteacher)

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 Other Headteachers from *Mercia* spoke mainly in positive terms about the audit. However there appeared to be a general view that the audit was very time intensive upon teacher time.

I think what they've tried to do is to focus the need on a basis not measured by free school meals but measured by educational need. I think that would be an area I would welcome.... I think the move of the audit to do that has been helpful not only as much as it's helped to target money in the appropriate direction but it's also helped the school I think, in a way to clarify its own views as to what individual students actually need. So the whole process of completing the audit isn't simply a paper exercise although some schools to be fair have become overwhelmed by the paper work. (Mercia Headteacher)

The comments about the time taken to conduct the audit are repeated by two further

respondents.

... I was horrified by the amount of paper work that it generated and the amount of time it removed people from the classrooms. That's the biggest concern...whilst the special needs co-ordinator and her colleagues are working on the audit then quite clearly they are not doing what they should be doing. However the second time round it seemed crisper and didn't seem to take the amount of time I imagined it took in September '93... of course it does mean that we have more funding coming into the school because of the thoroughness of the audit here. So it has been particularly successful in generating special needs ring fenced money. (Mercia Headteacher).

We're just awash with information, some of which isn't needed and we're spending more time on gathering information than actually doing..... that's the danger. (Mercia SENCO)

Another Headteacher reinforced the view that the time required for the audit could

really not be justified in terms of the teacher time taken away from the children.

The audit is a cumbersome process and I've this constant fear that in order to meet audit requirements we are robbing resources that should be going directly to children. This is especially true at Band 2 and I wonder whether we would do better not to comply with the authority arrangements and simply choose to put money in directly to the children and not get the £8000. I often wonder what proportion of the £8000 we spend on administering the authority's arrangements. I have directly asked the group that looks at special needs: have you analysed whether or not the process that you're putting forward actually helps the situation for the children? (Mercia Headteacher) This fear was supported by another respondent.

I know some schools have kind of voted with their feet and have said we're not going to bother with Band 1 because the money we get is actually not significant compared with the amount of work we have to do in order to get that... then you get this feeling that it is not about the kids its actually about a lot of other things. (Mercia SENCO).

Other general comments about the audit were: that it was a system in which funding was given retrospectively and the notion was questioned that money should only be given where provision has been documented.

....because it is a retrospective funding system where you spend and get it back later effectively does make you nervous about it and I think that can effect the quality of provision which is given to a child. (Mercia Headteacher)

We as a school have gained significantly in terms of funding from the audit as opposed to through free school meals because part of that is that it is audit of provision and it's catch 22 because you have to be making the provision before you get the funding. We have gained considerably whereas other schools have lost out for example some of the town schools where they a high proportion of children on free school meals have lost money. Now how good that provision was I can't answer but because we make good provision and because we do the audit thoroughly we gain and I'm not altogether sure about that. I'm delighted for our school but it's a lot of work we have to produce mountains of paper work. When the audit was designed I think it was for primary and they don't realise how much pulling together there has to be at a secondary. (Mercia SENCO)

Mercia's revised policy on special educational needs came into effect in 1994. It has received a high profile nationally and has been mentioned in publications referring to good practice. The policy has attempted to make the conceptual shift to move away from a focus on 'within-child' factors, towards an emphasis on the practical arrangements required to meet individual needs. However the policy has not succeeded when viewed in terms of the principle of cost containment. The percentage of statements in *Mercia* has increased from 2.3% to 3.1% during the period 1994 to 1997 (Audit Commission, 1998).

Whiteshire's SEN statement of policy and practice includes three broad categories of principles:

- general principles for good practice;
- principles for assessment; and
- principles for provision.

Some of the LEA's principles are listed below:

Every pupil should be valued equally and should have access to educational opportunities and a broad and balanced curriculum. For all pupils, the purpose of education is the same, the goals are the same, but the individual children's needs in progressing towards them, will be different.

The LEA will, as a matter of principle, seek to support children with special educational needs in their local mainstream schools.

Resourcing arrangements for SEN should be flexible, recognise the role and responsibilities assigned to schools and support service, and be responsive to the wishes of parents.

Each school should demonstrate a commitment to meeting the SEN of its whole school population, and should develop a whole school approach to pupils with SEN which reflects the school's commitment to the curriculum entitlement of all pupils.

Pupil access to educational resources should be determined by individual needs. Provision should be flexible and responsive to the assessed and changing needs of children.

Whiteshire use educational tests with "cut-off" criteria rather than administering a professional audit to distribute the allocation for non-statemented special educational needs. There is a separate formula for the primary and secondary sectors known as the primary and secondary SEN index. In general terms the primary index uses a balance of

educational and social disadvantage factors whereas the secondary index only Formula Funding and Special Educational Needs 219 Chapter Seven OU/PhD/AJM/April 1998 incorporates educational tests. An extensive review of the secondary index was completed in 1993 (see Table 2.1) and recommended that a social disadvantage factor should be included to bring it into line with the primary formula, including the possible use of National Curriculum Assessments (NCA). The proposed revised formula in 1993 included group eligibility to educational welfare benefits (EWB) weighted at 25%. The remaining 75% would be allocated on the basis of educational special needs factors which would possibly incorporate NCA at Key Stages 2 and 3 as they became available. However the working group noted that the use of Key Stage 3 results may be subject to the 'resource paradox' where a school which is successful in raising its academic standards would be penalised for so doing. A more detailed description of *Whiteshire's* formula will appear in Chapter Eight together with an attempt to improve its design structure.

The second important theme to be identified from the professional interviews was the policy of delegated special provision which applied to *Mercia*.

7.3.3 DELEGATED SPECIAL PROVISION : ALLOCATION OF RESOURCES FOR STATEMENTS

As already discussed in the previous section the proportion and number of pupils with statements has steadily increased since the implementation of the 1988 Education Act (see Table 7.4 and also Marsh, 1997b). The proportion of pupils with statements who attend mainstream schools has also increased significantly. Norwich (1994) reported that in 1992 over 40 % of pupils with statements aged 5-15 years were in mainstream

schools in England with a considerable variation across the LEAs, from 11 % in East Sussex to 84 % in Cornwall. In 1998 the Audit Commission reported that the mainstream proportion of pupils with statements had increased to almost 60 % of all statements. The wide variation across LEAs continued with only 18% of pupils with statements being educated in mainstream schools in Sandwell compared to 89% of pupils in Cumbria. Comparable mainstream statement percentages, calculated from Table 7.3 for *Mercia* and *Whiteshire*, are 61% and 65% respectively. Despite the increase in mainstream statements it is significant to note that the number of pupils educated in special schools in England has remained virtually constant during the period 1991 to 1997 (DfEE, 1997e). In *Mercia* (1.4% to 1.2%) and *Whiteshire* (1.8% to 1.6%) there has been a slight reduction in the percentage of pupils attending special schools during the period 1994 to 1997 (source: Audit Commission Performance Indicators).

Initially mainstream schools in *Whiteshire* received additional support to provide for pupils with statements largely through the development of outreach support teams. Sometimes the outreach teams were attached to particular special schools, existing support service teams or units. These arrangements are still in operation at 1998 for primary schools in *Whiteshire*. A major weakness of the arrangements is that since the outreach staff are deployed from individual schools, units or services rather than on a District or Area basis, a mainstream school might have had statemented pupils supported by different outreach teachers from different locations. Additionally the mainstream school is not involved in selection or recruitment of outreach staff. This can lead to difficulties for the mainstream schools in their management of a coherent whole school policy and practice for SEN. As schools' confidence has grown in the area of supporting pupils with statements, particularly within secondary schools, consideration has been given by both *Mercia* and *Whiteshire* to the delegation of resources to enable schools to build on their current progress and promote the integration of pupils with SEN. The policy of delegated or designated special provision (DSP) is a procedure whereby the authority determines the number of places it is to fund for pupils with statements each year. This is a guaranteed monetary allocation with additional funding given on an individual pupil basis for pupils with statements exceeding the 'planned place' element. In *Mercia* DSP has been allocated to primary and secondary schools whereas in *Whiteshire* only secondary schools received a delegated amount. Although DSP is aimed at pupils with statements, pupils with special educational needs but without statements may also benefit if they are in the same class or subject grouping as the pupils receiving the additional support.

Mercia Headteachers generally spoke very favourably about DSP and felt that the initiative had enhanced the life of the school. It made planning much more effective and enabled the school to build up expertise in particular areas.

I think that the designated special provision arrangement is a good initiative. It's an arrangement that we know very clearly where we stand. Taking on the DSP arrangements has enhanced our own special needs provision. It's given it a solid base which I don't think we would have achieved without it. It has also enhanced the life of the school as well because in taking it on we have attracted a number of other children to the school. We have a child with cerebral palsy, we have couple of Asperger's Syndrome children all of whom have added to the life of the school. We want to extend with another specification possibly on the autism continuum and we want to develop expertise there. (Mercia Headteacher)

The field work was conducted when DSP in *Whiteshire* was at the consultation stage with schools, teacher association and governing bodies. The two secondary headteachers from *Whiteshire* were supportive of the proposal but concerns were mentioned about the efficiency of resources, in particular about the use of non teaching assistants instead of outreach teachers. This theme will be considered in more detail in the next section.

I'm generally in favour but however my only concern is that if it is delegated to secondary schools to what extent they will employ the outreach teachers who are working in those schools at the minute. They may well go down the road of non-teaching assistants because it's so much cheaper and whether that will produce as good an outcome is anybody's guess. We certainly value the outreach teachers we have but whether the school will be able to employ four of them is another matter. (Whiteshire Headteacher).

7.3.4 LEARNING SUPPORT ASSISTANTS OR OUTREACH TEACHERS

A major difference between the two LEAs is the use and employment of classroom assistants or learning support assistants to support both pupils with statements and pupils with special educational needs but without statements. Under the DSP arrangements *Mercia* schools have the flexibility to purchase learning support assistants (LSA) or outreach teachers. The case study schools have converted the four hours of teaching time to twelve hours of non-teaching or LSA time. In *Whiteshire*, for historical reasons, a much greater reliance is made upon outreach teachers. Having employed qualified teachers since the implementation of the 1981 Education Act in 1983, understandably the teacher associations in *Whiteshire* are sceptical and resistant to any change in the current arrangements.

The employment of non-teaching classroom assistants has increased rapidly since the implementation of the 1981 Education Act and is still growing (Goacher et al, 1988; Clayton, 1991). The decision by the two LEAs whether to employ classroom assistants

appeared to be based on the level of funding which was seen to be available to schools. As Lorenz (1992) points out:

Thus whether resources for children with special needs have been delegated to schools by the LEA or retained centrally, the need to make "efficiencies" has become a predominant consideration. Clearly by employing assistants rather than teachers or even nursery nurses, schools and LEAs can make real savings.

Respondents from *Mercia* took the view cited by Lorenz, that it was more cost effective to employ classroom assistants in terms of the numbers of personnel which could be employed. This could be interpreted as implying that the 'hidden 5%' in *Mercia*'s budget did not seem to have an impact on the level of spending by schools. The effectiveness of using non-teaching staff was also often questioned.

We've got a number of classroom assistants who are well meaning people who come on a APT&C scale. We've done some training with them that has been organised by the LEA for the local schools. They are very useful and very helpful but obviously they haven't got quite the education experience that teachers have got. ...It would be much more costly but perhaps a lot more effective to have an additional teacher in the classroom but of course that is something we can't afford to do to any great extent. (Mercia Headteacher)

We have a very good team of special needs assistants some of whom literally walked in off the streets but have been trained up in house and I think deliver a very successful support team network..... I don't think that special needs has been funded sufficiently well and one example I suppose would be the reason the school has continued to employ unqualified people instead of special needs qualified teachers because you can employ half a dozen classroom assistants against one teacher. I would argue we need both for very different purposes. (Mercia Headteacher)

...our Year 8 pupils are in four sets. Next year for financial reasons they've got to be in three and we're looking at a bottom set of 25 kids which may or may not be supported. It's always an annual sort of.... we have to put forward what we'd like in terms of support but it's the quality of that support. And that's no disrespect to the special needs assistants but I think when you've got 25 in there you need special needs teachers as well as yourself to team teach. I think that's really a quite dynamic way of doing it. (Mercia Head of Mathematics) Similar concerns have been expressed by Baskind and Thompson (1995) who stated that if schools and LEAs are beginning to employ cheaper, non-professional personnel to support the teaching and learning systems set up in individual institutions, they should be aware that to date there is little research into the effectiveness of this group of educationalists.

Other important issues which are pertinent to the use of either type of support in the classroom are the 'ownership' of special educational needs pupils and a perceived inefficient use of resources whereby there may be more than one support member of staff in the classroom.

My concern about that is that it deskills the mainstream teacher because he or she is likely to say those students are your concern......How do you make 50 odd colleagues aware of the Code of Practice without beating them metaphorically with it, because of course that means people don't read they look at documents or whatever. But how do we increase the awareness and avoid at the same time the deskilling that I referred to earlier - because I do see that as a serious issue in some of my colleagues.... the special needs children are not my concern I've got a classroom assistant here ...she (sic) will deal with it. (Mercia Headteacher)

HMI's reported back from one school in Whiteshire that on more than one occasion

they noted the presence of three teachers in a class: the class teacher, support teacher

and an outreach teacher.

The one criticism they made (HMI visit) is very difficult to put right if we stick with the same system. That is they thought there was a certain amount of duplication of effort between our support teachers and the outreach teachers who were ostensibly there to work with statemented pupils. But because we know the outreach teachers very wellwe have four outreach teachers who work full time here and are not dotting about, they regard themselves as members of our staff and I've encouraged them to do that and because of that they don't limit themselves to the one or two statemented pupils, so in some classrooms there may be three teachers. (Whiteshire Headteacher) The question of whether learning support assistants (LSAs) or outreach teachers should be employed is clearly a sensitive issue. Although the use of LSAs could be justified on efficiency grounds, the main criterion for evaluation should be effectiveness. It was clear that respondents from *Mercia* had doubts in this area. As a post script to the study *Whiteshire* has since adopted a three level system to grade and remunerate the skills and experience of the learning support assistant. This is an attempt to provide a better focus for the resources.

Mercia and Whiteshire's policies for funding non-statemented special educational needs show important differences in style and approach and are illustrative of the two theoretical perspectives used in this thesis. Although both LEA's policies attempt to identify individual pupils experiencing SEN, Mercia's professional audit maps more readily onto the 'school and teacher effectiveness' discourse by focussing on the teaching arrangements. Whiteshire's use of educational tests is more typical of the 'special needs pupil' discourse as the emphasis is upon deficits within the child i.e. low performance in tests.

Mercia also recognised a window of opportunity and created a climate for change not only in resourcing special educational arrangements but also in the management structure of SEN. On the other hand *Whiteshire* took a more considered stance and preferred to hold onto the historical approach to funding, arguing that the most important feature of the SEN formula was stability of funding. This viewpoint was taken to encourage schools to remain within the LEA rather than to seek grant maintained status under the terms of the 1988 Education Act.

7.4 INDIVIDUAL PUPIL CASE STUDIES TO EXPLORE PROFESSIONAL VIEWS ABOUT THE MATCH BETWEEN SPECIAL EDUCATIONAL NEEDS AND RESOURCE LEVELS

This section will now consider individual pupil case studies, firstly to provide further exemplification and comparison of the two LEAs' policies; secondly, to furnish evidence on the important issue of the extent to which professionals can agree the matching of resource levels to need. Different levels of additional teaching arrangements provided for both statemented and non-statemented SEN pupils were examined within each of the eight schools (two secondary and two primary schools from each LEA). In addition to the LEA records of the number of statements, *Whiteshire* also kept data on which type of learning need (mainstream and special) was specified on a pupils' statement, see Table 7.5.

Table 7.5Percentage of overall statements within Whiteshire by type of
learning need as at January 1997

Type of Learning Support	Percentage of pupil population with statements
Moderate Learning Difficulties	1.7 %
Specific Learning Difficulties	1.3 %
Emotional and/or Behavioural Difficulties	0.6 %
Severe Learning Difficulties	0.3 %
Physical Difficulties	0.3 %
Visual/Hearing Impairment	0.2 %
Other	0.2 %
Total	4,6 %

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 Table 7.6 shows the cash values for a pupil with significant learning and/or behavioural difficulties in the two LEAs. (Table 7.2 shows the unit costs in the two LEAs for pupils with special educational needs but without statements). *Mercia* attempted to rationalise the funding value by first deciding on the cost of SEN arrangements for pupils with statements. The assumption was made that for each group of 10 pupils the following resources were required:

- 1 teacher (i.e. approximately £24,000 to include on-costs);
- 1 Nursery Nurse (NNEB) (i.e. approximately £11,500 to include on-costs);
- administrative time;
- fixed equipment.

The total cost for 10 pupils was estimated to be £46,000 or £4,600 for each pupil. *Mercia* then used this weighting (4.6) as the base for funding up to Year 2 pupils i.e. 4.6 multiplied by the age weighted pupil unit (AWPU) £1035. Slightly different weightings were applied to the different age groups: e.g. Y3-Y6 (4.08) and Y7-Y9 (3.5). These weightings therefore included the AWPU and an additional element for special educational needs which took account of the increased AWPU for secondary pupils. Table 7.6 shows that in *Mercia* the resource levels for a primary pupil were greater than for a secondary pupil. This was not the case in *Whiteshire* where there was no account taken of the differential AWPU costs. The provision needed for a pupil with a statement was calculated using a base of 0.1 of a teacher. The value of £2,400 (i.e. £24,000*0.1) used in Table 7.6 was explained by one headteacher:

 The top of the scale is about £20,000 and then there are on-costs of 15³/₄%.

 There are also other costs built into the formula: he or she attracts a share of adult meals, a share of travelling expenses, a share of recruitment expenses and quite importantly he or she also attracts a share of the incentive allowance

 Formula Funding and Special Educational Needs
 228

 Chapter Seven
 228

scheme which is over and above the average salary. The overall cost of a teacher is therefore about £24,000.

Table 7.6Resource Levels for Pupils with Statements in Mercia and
Whiteshire for 1994/95

		Mercia			Whiteshire	
Age	AWPU	Proding for Statement	Totai	AWPU	Funding for Statement	Total
Y6	£1053	£3170	£4223	£1088	£2400	£3488
Y7	£1595	£2027	£3622	£1471	£2400	£3871

To examine the relationship between individual pupils' needs and the resourcing level received a small sample of pupils from each school were selected, (total n=73). This sample included both pupils with statements and pupils with special educational needs but without statements. Information was collected by completion of a proforma during the interviews with the SENCOs and head of departments (Appendix B). The pupils were chosen by the SENCOs to be a descriptive but not necessarily representative sample.

The sample of 73 pupils selected by the SENCOs were of the following learning types:

- MLD n=38
- EBD n=16
- SpLD n=9
- Other n=10 (i.e. speech and language difficulty =3; physical difficulties =3; visual impairment = 2; hearing impairment = 1; medical conditions =1).

As noted previously in this chapter, *Whiteshire* used learning categories to determine the type of outreach teaching support to be delivered to a particular pupil. Illustrative case studies and quantitative data for each of the three main learning difficulty areas as indicated in Table 7.5, i.e. moderate learning difficulties, specific learning difficulties and emotional and/or behavioural difficulties, will be provided to include both pupils with special educational needs but without statements and pupil with statements. The conclusion will provide a discussion as to whether these learning categories are useful in practice for resource allocation or whether they are against the spirit of the 1981 Education Act. Professional views will be explored about the match between special educational needs and actual resource levels, (n.b. a school week is taken as 25 hours unless otherwise stated).

Table 7.7 shows the numbers and percentages of pupils from each school in the study at each of the Code of Practice assessment stages. Apart from the greater percentage of pupils at stage 5 in *Whiteshire*, both in the LEA as a whole and in the sample, the other main difference is the percentage of pupils ascertained to be at stage 3. The percentage of stage 3 pupils in *Mercia* is more than double the stage 3 percentage in *Whiteshire*. In the financial year 1995/96 only 71% of pupils put forward by schools to be at stage 3 were in fact selected by the moderation procedures described in the previous section. Therefore the difference in the percentage of pupils at stage 3 between *Mercia* and *Whiteshire* would be far greater without the LEA moderation by *Mercia*. This seems to suggest that the funding mechanism employed by the two LEAs does play a significant role in shaping a school's response to the Code of Practice and to which stage a pupil might be placed. In *Mercia* schools complete their audit in order to gain access to more resources from the LEA for their stage 3 (Band 2) pupils. In *Whiteshire* the cash resources have already been allocated to the schools by way of the educational test

results and there is no further resource advantage in designating them as stage 3 pupils. One implication of the higher percentage of stage 3 pupils in *Mercia* is that the LEA may find themselves with an increase in the number of requests for stage 4 statutory assessment initiations when the two termly reviews at stage 3 have taken place and the evidence suggests that unsatisfactory progress has been made. This assertion is supported from evidence obtained by the Audit Commission (1998) signifying an increase in statements over the period 1994 to 1997 (2.3% to 3.1%).

Table 7.7Numbers of Pupils at each of the Code of Practice Stages for
schools in the two sample LEAs

Mercia	No			Co	ie of P	nactice	Assess	ment S	Nores		
	on roll	No	5 %	N	4	No	3 1 %	N	2 9/4	No	1 %
A Secondary	939	15	1.6	No 1	0.1	40	4.3	No *	*	170	13.2
B Secondary	990	12	1.2	1	0.1	29	2.9	*	*	90	9.1
C Middle	415	17	4.1	2	0.5	21	5.1	*	*	40	9.6
D Lower	445	2	0.5	1	0.2	13	2.9	*	*	78	17.5
Totals/Averages	2789	46	1.6	5	0.2	103	5.8	*	*	332	11.9
Whiteshire										200000000000000000000000000000000000000	<u></u>
E Secondary	1149	45	3.9	1	0.1	9	0.8	17	1.5	200	17.4
F Secondary	851	2	0.2	1	0.1	4	0.5	5	0.6	12	1.4
G Junior	279	10	3.6	1	0.4	11	3.9	18	6.5	24	8.6
H Primary	239	9	3.8	3	1.3	8	3.3	11	4.6	2	0.8
Totals/Averages	2518	64	2.5	6	0.2	32	1.3	51	2.0	238	9.5
Overall Totals/Averages	5307	110	2.1	11	0.2	135	2.5	51	1.0	570	10.7

Note: Mercia use a six stage assessment model which include pupils with statements. Mercia Band one is equivalent to the Code of Practice Stages 1 and 2.

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998

7.4.1 MODERATE LEARNING DIFFICULTIES

Table 7.8 indicates the additional teaching and non-teaching hours which have been allocated to individual pupils (n=38) who are at a variety of different Code of Practice stages. The cost column has been calculated to estimate the equivalent amount in pounds per year of the additional teacher and/or LSA hours. On-costs of approximately 16% have been included to allow for national insurance/superannuation contributions. One teacher hour for one pupil was calculated as being equivalent to approximately £25 i.e. £24,000 / (25 hours * 38 weeks). There appeared to be a variety of remuneration costs for LSA in the two LEAs. These ranged from a salary of £8,000 to £9,000 in *Mercia* to hourly payments of £4.50 in *Whiteshire*. If the LSA had a nursery nurse qualification (NNEB), then the National Joint Council (NJC) scale was used, points 7 to 15, which at December 1995 was approximately £8,200 to £10,800. An estimate of one LSA hour for one pupil was therefore calculated as being equivalent to approximate of approximately £8 i.e. £7,500 / (25 hours * 38 weeks).

The additional assumption was made that if the support was given in-class then at least one other pupil in the class group would also benefit to a similar amount. In reality the additional support may in fact be shared by a several other pupils. The other assumption is that there are 25 hours available in a school week for support and 38 academic weeks per year.

Example of cost calculation per year

Pupil A 0 hours of teacher support per week 13 hours of LSA support per week Cost = [(No of teacher support hrs*£25/gp size) + (no of LSA hrs*£8/gp size)]*38wks Cost = [(0*£25/not defined) + (13*£8/2)]*38 = £1976

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998

LÆA	School	Year	Practice	sen	Reading Age	Additional Teaching	Group size	Additional LSA hours	Group size	Professional	Cost
M			Binge		0.04	bours	<u> </u>	- 13			4
	B	10	5	mld	9.04	0	1	13	2	ok	1976
M	B		5	mld	9.04	0		13	2	ok	1976
<u>M</u>	В	9	5	mid	9.00	1	1	13	2	ok	2926
M	<u>A</u>	9	5	mld	7.11	4	2	4	2	ok	2508
<u>M</u>	A	8	5	mid	6.11	5	2	1	2	ok	2527
W	F (Owen)	7	5	mld	10.00	2.75	2	0	1	ok	1306
M	A	7	5	mld	8.06	0	1	17	2	ok	2584
M	B (Joe)	7	5	mld	7.09	0	1	12	2	ok	1824
M	B	7	5	mld	7.06	0	1	12	2	ok	1824
M	<u>A</u>	7	5	mid	6.11	0	1	16	2	ok	2432
M	A	7	5	mld	6.10	0	1	17	2	ok	2584
Ŵ	Н	4	5	mid	6.07	5	5	0	1	ok	950
W	н	4	5	mld	6.05	5	3	0	1	ok	1583
M	D	4	5	mid	6.03	0	1	10	2	ok	1520
W	Н	2	5	mld	6.06	2	6	0	1	less	317
M	D	2	5	mid	5.09	0	1	10	2	ok	1520
W	Н	2	5	mld	6.06	1	6	0	1	less	158
М	A	10	3	mid	10.00	2	2	2	1	ok	1558
M	A (Ruth)	9	3	mld	9.08	3	2	3	2	ok	1881
M	A	9	3	mid	8.07	1	5	2	2	ok	494
M	В	7	3	mld	9,02	0	1	6	2	ok	912
M	В	7	3	mid	8.11	0	1	0	2	more	0
M	В	7	3	mld	7.11	4	1	0	1	more	3800
W	н	6	3	mld	8.06	2.5	3	0	1	ok	792
W	н	5	3	mld	8.01	2.5	4	0	1	ok	594
W	G (Susan)	5	3	mld	7.06	10	2	5	2	more	5510
W	H (Darren)	5	3	mld	7.00	2.5	4	0	1	ok	594
М	C	5	3	mld	6.06	0	1	2	2	ok	304
W	Н	4	3	mld	7.03	2	4	0	1	ok	475
W	н	3	3	mld	8.01	2.5	4	0	1	ok	594
W	Н	3	3	mld	6.11	2.5	4	0	1	ok	594
W	Н	2	3	mld	6.06	2	6	0	1	σk	317
w	Н	2	3	mld	6.01	2	6	0	1	ok	317
W	Н	1	3	mld	<6.00	4	6	0	<u>-</u> -	ok	633
М	A	10	2	mld	10,06	0	1	2	2	ok	304
М	A	7	2	mld	10.00	0	1	16	2	ok	2432
M	A	9		mld	10.06	2	2	0	1	ok	950
м	A	8	1	mld	10.00	4	2	0	1	ok	1900

Table 7.8 Pupils assessed as experiencing moderate learning difficulties

Note: Age Weighted Pupil Unit (AWPU) cost has not been included, see Table 7.6

 ⁴ Schools A to D are from Mercia (M) and Schools E to H are from Whiteshire (W)
 ⁵ Professional assessment (see also Tables 7.9 and 7.10) indicates whether the teacher was satisfied with the level of support (ok), thought the support was too generous (less) or thought that more support was required (more).

The remaining part of this section will present a sub-sample of individual pupil vignettes to illustrate the professional assessment of resource levels with actual levels of support. These individual case studies will concentrate on the costing of resource levels and will provide evidence to answer Key Question 6 i.e. what is the relationship between special educational needs and resource levels and how does this match professional views?

The conclusion will be drawn that there appears to be no professional consensus about the levels of resources required for the different 'types' of need or for the different levels of need. As expected the amount of resource is generally greater for pupils at Code of Practice stage 5 than for pupils at stage 3. However significant anomalies exist for the resource levels both thought to be required and currently designated for pupils of similar levels of learning difficulty. The evidence to answer Key Question 6 has been obtained from within the framework of the 'special needs pupil' discourse. However that is not to undermine the importance of the 'school and teacher effectiveness' discourse i.e. by providing suitably differentiated curriculum materials and the evaluation of specialised teaching approaches/strategies.

Joe (Mercia) Y7

Joe has a statement for moderate learning difficulties. The official allocation from *Mercia* is £3,622. This was interpreted by the school as being the equivalent to 4 hours of individual teaching support i.e. £24,000 *4/25 or roughly equivalent to £3,840. A conversion then took place to 12 hours of classroom assistant support or LSA. The Formula Funding and Special Educational Needs 234 OU/PhD/AJM/April 1998

resource estimate in the 'cost' column has been calculated to be £1824 because the LSA is in practice shared by the whole class and the assumption has been made that at least one other pupil receives an equivalent amount of support. This was explained by the SENCO.

Joe gets 4 hours teacher support which has been determined by the statement. This has been converted to 12 hours of classroom assistant support. This is difficult to organise because of his timetable in that it tends to be an academic subject then a practical subject then an academic. So it's difficult to organise support. Obviously he doesn't need the support in practical subjects usually. I am happy with this level of support especially as I've combined it with another statemented pupil in the same class and so there's an additional adult in the room at all times and really you cannot use one adult with a student for the whole lesson because they lose their independence.

Owen (Whiteshire) Y7

Owen also has a statement for moderate learning difficulties. His statement was prepared in December 1991 and he has received outreach support from a teacher attached to the moderate learning difficulties special school since that time. During the current academic year this was for a total of 2³/₄ hours which comprised of 1 hour in a class of 30 for History, 1 hour of individual teaching during Physics, and ³/₄ of an hour during Information Technology in a class of 16. His current literacy attainment levels at the start of the Summer term were approximately at the ten year level which would correspond to the twentieth percentile.

Ruth (Mercia) Y9

Ruth is assessed by the school to be at Code of Practice stage 3 and is considered to be experiencing mild learning difficulties. She receives 6 hours of in class support per

week i.e. 3 hours of teacher support and 3 hours of classroom assistant support. Her reading attainments were assessed as being at the nine and a half level which would correspond to the tenth percentile. The head of the English Department described the teaching arrangements for his subject:

Ruth is in a group of 16 students and in Year 8, 9 onwards we put students in sets. She's in set 4 out of 4. Out of the 16 students one is statemented and 10 of the other students are at stages 1,2, or 3. So there are a lot of students in the group who have got different types of learning difficulties and some behavioural difficulties as well but they're lively bright kids and they can be quite a handful. I have three lessons with the group and I have support from a teacher for two of the three. One lesson I don't have any support. We have individual study programmes for the students and the support teacher has designed these. Ideally I would like support in all three lessons.

Although the majority of the professional assessments indicated a satisfaction with the levels of resource there are significant inconsistencies in the continuum of provision for pupils experiencing moderate/mild learning difficulties. For example Ruth, who is assessed to be at Code of Practice stage 3, has more provision than Joe who has the protection of a statement. These pupils are from the same LEA but attend different schools.

The evidence from Table 7.8 suggests that the professional opinion about the required level of support for pupils with similar levels of learning difficulty is very varied. For example, *Susan* and *Darren*, who are both in Year 5 and at Code of Practice stage 3, have reading attainments of between 7 : 6 and 7 : 0 years:months and are allocated very different levels of resource when costed on an annual basis . *Susan* receives 10 hours of in-class teacher support and 5 hours in-class LSA support compared to *Darren* who only receives 2¹/₂ hours of teacher support in a group of 4 pupils. Despite *Susan*, receiving the cost equivalent of £5510, and having higher reading attainments, it is Formula Funding and Special Educational Needs 236 OU/PhD/AJM/April 1998

considered by the SENCO that more support is required, whereas the professional view of *Darren's* cost equivalent of £594, is felt to be satisfactory. Further inconsistencies in the continuum of provision for pupils experiencing moderate/mild learning difficulties are illustrated by the three pupil vignettes. These pupils are from the same LEA (*Mercia*) but attend different schools. In *Whiteshire, Owen* also has a statement, but his learning difficulties, as measured by reading attainments, are in fact at the twentieth percentile and the cost of the resource (£1306) is less than *Ruth's* stage 3 resource level (£1881).

7.4.2 SPECIFIC LEARNING DIFFICULTIES

Although information from *Mercia* was not available for the numbers of pupils with statements for specific learning difficulties as obtained for *Whiteshire* in Table 7.5, it soon became clear that there was a large difference between the practice of the two LEAs. For example, of the 12 statements in secondary school B in *Mercia* there were no pupils experiencing specific learning difficulties, eleven were for pupils experiencing moderate learning difficulties and there was one visually impaired pupil. Secondary school E in *Whiteshire* received specific learning difficulty outreach teaching support for 28 pupils out of the 45 statements. Table 7.3 indicates that there were 2.8% of pupils with statements receiving their support in the mainstream school in *Whiteshire* compared to 1.7% in *Mercia*. The 1.1% difference seems to be made up of mainly specific learning difficulty pupils as indicated in Table 7.5.

Table 7.9 Pupils assessed as experiencing specific learning difficulties

LEA	School	Year	Code of Practice Biage	SBN	Reading Age	A sidelional Teachtag kours	Circup die	Additional LSA hours	General size	Professional	Coat £
M	A	11	5	spld	8.07	4	1	0	1	ok	3800
W	Е	9	5	spld	10.10	5	2	0	1	less	2375
W	Е	9	5	spld	10.10	5	2	0	1	ok	2375
W	F (Peter)	8	5	spld	9.04	1	1	0	1	less	950
М	A	8	5	spld	7.01	5	2	5	2	ok	3135
W	G	5	5	spld	7.06	2	1	10	2	more	3420
М	С	5	3	spld	6.08	0	1	2	2	more	304
М	D (Tina)	4	3	spld	7.00	2	4	3	4	more	703
W	G (Andy)	4	3	spld	6.03	10	2	5	2	more	5510

Note : Age Weighted Pupil Unit (AWPU) cost has not been included, see Table 7.6

Peter (Whiteshire) Y8

Peter receives individual support from a specific learning difficulties outreach teacher for one hour per week. His reading attainments are approximately at the nine and half year level or approximately at the tenth percentile. His cognitive abilities were assessed as being within the low average range of abilities. His learning difficulties are not considered to be significant by the school.

He gets I lesson of outreach teaching support per week ... It seems to me that there any other pupils with a far greater need, whilst we acknowledge that it's been useful for Peter we just find it unusual that he's getting that level of support. He's just weak academically but he's a very willing lad, very nice lad, he'll always do his homework and do it to the best of his ability but he's just weak across the board..... He's not what I would regard one of the difficult pupils at all in terms of learning (SENCO).

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 Tina has been assessed to be at Code of Practice stage 3. Her reading attainments are at the seven year level or approximately at the tenth percentile. She is fortunate to be in a class where there is a higher level of support than in other classes in the school.

She gets both teacher and non-teacher support because all the year 4 Band 2's are in the same class so they get a tremendous amount of support.... so that the teacher for certain parts of some days has got an extra teacher and an ancillary..., the teacher can plan her days when that happens. So Tina will have at least the equivalent of two hours individual help per week. If her group size is 4 then she'll get the equivalent of 8 hours. The size of the groups will vary according to needs. In practice it look like 2.5 hours teacher support and 3 hours ancillary. The group sizes vary from 3 to 5. I think 2 hours per week even if it was individual support is not good enough really... she would need some more because to do her best somebody at least to prompt her and to keep her on task. (Headteacher)

Table 7.9 indicates the significant differences in the levels of support which were available in the sample schools for pupils at Code of Practice stages 3 and 5. There does not appear to be a professional agreement as to an appropriate level of resourcing for pupils who appear to have similar attainment levels. For example, *Tina* and *Peter* both have reading attainments assessed at approximately the tenth percentile. *Tina* is assessed to be at stage 3 whereas *Peter* has a statement. Another pupil in the same year group as *Tina* is pupil *Andy*. *Andy*, has been assessed to be at Code of Practice stage 3, and is shown to have the cost equivalent of £5510 compared to *Peter* whose cost equivalent is £950. *Peter's* time is considered by the school to be excessive whereas pupil *Andy's* school feel that more support is needed than is presently available.

7.4.3 EMOTIONAL AND/OR BEHAVIOURAL DIFFICULTIES

This area of learning difficulties was considered by the majority of respondents to be particularly important as very often there were significant hidden costs involved. These costs were often in addition to any teacher/LSA support time which was allocated. One SENCO commented that in one week she had been involved in 12 hours of meetings and telephone discussions with: the pupil, parents, school staff and other professional agencies. None of this time was specified in the pupil's individual education plan as support time.

Mercia recognised EBD within their audit arrangements by requesting schools to complete a behaviour checklist for any pupils considered to be at Band 2 (Code of Practice stage 3). Following a moderation exercise any pupil selected for support would receive the unit costs detailed in Table 7.2. *Whiteshire* did not recognise EBD directly in their formula but considered that such pupils would be identified *de facto* by the factors within the formula. However concern was shown by respondents in *Whiteshire* about the unitary resourcing costs.

In terms of teacher time you've got a situation whereby an MLD child can be quite happily catered for in a group but very often an EBD child, because of the nature of the problem, needs the attention of the individual teacher surprisingly often. So I could happily sustain an argument that said an EBD child would attract more money than a MLD child or a SpLD child who can be handled in a group situation. Now when you get your EBD child you can't put that child in a group like that. He/she requires individual support and the time has got to be made available after play-times, after dinner-times when they can come in and let steam off. You're talking counselling in a sense. (Headteacher)

LEA	School	Year	Code of Practice Stage	sen	Reading Age	Additional Teaching boxes				Professional assessment	Cost t
M	В	9	5	ebd	10.06	4	2	0	1	more	1900
W	G	6	5	ebd	11.01	1	2	0	1	more	380
М	A	8	4	ebd	8.04	1	1	7	2	more	2014
М	C	6	4	ebd	8.07	0	1	6	2	more	912
М	A	11	3	ebd	10.00	0	1	3	2	ok	456
М	A	10	3	ebd	8.07	2	2	1	1	more	1254
W	E	9	3	ebd	10.10	0	1	0	1	more	0
M	В	9	3	ebd	10.06	0	1	6	2	ok	912
М	B	9	3	ebd	10.06	0	1	0	1	more	0
M	В	9	3	ebd	10.03	0	1	6	2	more	912
W	F	9	3	ebd	10.00	0	1	0	1	more	0
W	F	9	3	ebd	9.00	0	1	0	1	more	0
W	F	8	3	ebd	10.06	0	1	0	1	more	0
W	F	7	3	ebd	10.06	0	1	0	1	more	0
W	E	7	3	ebd	10.01	Ō	1	0	1	more	0
W	G (David)	3	3	ebd	6.00	0	1	3	6	more	76

Table 7.10 Pupils assessed as experiencing emotional and/or behavioural difficulties

Note: Age Weighted Pupil Unit (AWPU) cost has not been included, see Table 7.6

The actual teaching arrangements for a pupil considered to be at Code of Practice stage

3 expressing emotional and behavioural difficulties were described by a SENCO.

David (Y3)

He does not get a lot of direct support. He works in a group of 5 or 6 with a NTA for 3 hours a week for his learning difficulties. The classteacher and I have worked together on some behaviour programmes and the classteacher has instigated a home/school book for behaviour.

Formula Funding and Special Educational Needs Chapter Seven OU/PhD/AJM/April 1998 He needs an experienced EBD teacher for possibly two separate hours per week preferably to work on a 1:1 basis at least at the beginning and doing a lot of personal and social education, social skills and making friends and considering other people and that sort of thing. I don't think a NTA could provide the individual support. A NTA could provide support in the class if one of the targets was staying in his seat, or shouting out but I think the actual programme of work would need to be developed by someone more experienced.

This was the only area of learning difficulties within the case study which provided a consistent level of agreement between the teachers who were consulted. Table 7.10 illustrates that in 14 out of the 16 pupils, identified as experiencing emotional and/or behavioural difficulties, the professional view judged that more support or resources were required to meet the pupils needs. However a certain ambivalence prevailed in that seven of the pupils, all of secondary age, did not receive any additional support at all, despite being selected by the SENCOs as causing a high level of concern within the school for behavioural reasons.

7.5 EVALUATIVE COMPARISON OF THE TWO LEAS

The differences in LEA funding mechanisms have already been discussed in detail in Chapter Six. This chapter has highlighted and contrasted two approaches, namely the audit and educational tests. I shall now use the principles or criteria listed in Chapter Four to provide an evaluative comparison.

With respect to the criterion of administrative simplicity, Mercia's audit is a complicated and complex process which requires a team of trained LEA support

teachers to moderate the requests from schools for a higher level of arrangements for particular pupils. The handbook of guidance provided to *Mercia's* schools although comprehensive and time consuming, does meet the principle of procedural equity i.e. there is a consistent application of agreed rules. Vertical equity, however is not met as there is no differentiation of funding. The criterion of effectiveness is dependent on the purpose of allocating additional resources and it is not clear from the LEA's policy documents whether *Mercia* wished to raise educational achievement for SEN pupils or to provide compensatory resourcing for social disadvantage.

The main advantage of the audit approach is that it is founded on a professional assessment of pupil need based on the arrangements which schools should make to meet those needs. In this respect it links in extremely well with the Code of Practice and the principle of responsiveness to needs. Schools within Mercia should have had few problems in adapting to the new requirements of the Code. The main criticism about the audit has been the time necessary to complete the procedures and therefore it can be said to be inefficient. If the main purpose of the audit is perceived by schools to be a method of distributing resources then support for its bureaucracy is going to be limited, simply because the level of resources is relatively low. However the LEA has played a major role in promoting and marketing the audit as a formative and summative assessment technique which provides a focus on the identification of children's needs. This should be of value to the school when drawing up an individual education plan for a particular pupil. The reality is, of course, despite the statutory duties towards pupils with special educational needs as required from the 1993 Education Act, (now superseded by the 1996 Education Act), in practice schools do afford different priority

levels to SEN. If SEN is placed of high value and given adequate resource levels by the governing body, then it is likely that the audit will have a positive impact within a school. On the other hand if SEN is not given such a high priority then there is more chance that the audit will be viewed as an unnecessary additional administrative exercise.

The principle of stability of funding has been approached by using transition arrangements to change over from the previous system of allocation by free school meals data to the audit. For example in Year 1 25% of the available budget was allocated by the audit and 75% by the free school meals. In Year 2 the proportion was set as 50%:50% until in Year 4 the whole budget for non-statemented SEN was allocated by the audit. The principle of cost containment in *Mercia* has not been met as the percentage of statements has continued to increase.

In general terms *Mercia's* audit approach does offer the possibility for sharper accountability as schools record the teaching arrangements made for individual pupils. However there was still concern expressed by respondents from *Mercia* about the issue of accountability and about the presentation of the formula.

I think it would help if the 5% was a transparent part of the formula. I was trying to look yesterdayto see if I could find that clearly identified in any of the financial regulations, building up the formulabut I couldn't quickly find it....so it's not I think, publicised enough that this sum of money should actually be allocated for specific special needs. (Mercia Headteacher)

Whiteshire, in comparison, have used an 'off the peg' assessment approach which utilises previous assessment practices adopted by the LEA over the years. The advantage of this approach is that the measures are objective and simple to implement and are not subject to 'observer bias', whereby there has been a tendency for the numbers of pupils identified by the audit to increase year to year because of the link with resource allocation. The disadvantage of using tests is that the use of cut-off scores may present dangers of categorisation and non identification of some pupils thereby placing an undue emphasis on within-child factors rather than full consideration of contextual factors.

Whiteshire had similar problems to Mercia with regard to cost containment and the LEA experienced an increase in statements from 3.7% to 4.6% during the period 1994 to 1997 (Audit Commission, 1998). Respondents in Whiteshire were also surprised about the lack of accountability from the LEA. As one Headteacher stated:

I think it needs identifying for special needs ... yes otherwise I think there's a danger it's not used. I've always felt that the authority should have required schools to give a greater account of how they do spend that money. I think they've been rather remiss on that ... I mean nobody has ever checked up on me how we've spent it ... and I don't see why not. The authority has said we believe strongly in supporting special needs we are putting 6 point something percent of the budget towards that but nobody says tell me how you've spent it. (Whiteshire Headteacher)

Whiteshire's formula will be evaluated in greater detail against the eight principles in Chapter Ten.

7.6 CONCLUSIONS

This chapter has examined the policy and practice of two LEAs which have different

resourcing mechanisms for distributing their budgets for special educational needs.

Mercia's professional audit of needs which focuses on teaching arrangements, is generally welcomed by the professionals who were interviewed. However strong reservations were made about the high level of administrative time which was necessary to complete the assessment process. *Whiteshire* used educational testing information for distribution purposes. Although this is a simpler process respondents were critical about the unit resourcing costs which meant that all pupils who qualified for additional money received the same amount irrespective of the nature or degree of their need.

The purpose of additional funding for special educational needs will determine a number of further considerations. If the purpose is for equity reasons then the use of social disadvantage data collected at the school level, which is favoured by most LEAs, might be justified on the grounds that this readily available information is well correlated with educational achievement data (Sammons, 1991). However it is unclear from policy documents whether Mercia and Whiteshire have attempted to shift the focus to the purpose of raising educational achievement. In practice Mercia's professional audit uses data which is collected totally at the individual pupil level and Whiteshire uses both social disadvantage and educational test data in the primary sector and test information only in the secondary sector. Differential costs for varying levels and type of need only become an important issue when the amount of funding is perceived to be of significant value. In Mercia the funding for non-statemented special educational needs is generally not considered to be high and therefore respondents did not consider financial differentiation a priority. Table 7.2 shows the level of funding which was available for non-statemented SEN pupils. Although the funding was much

higher in *Whiteshire* (6.2% of the ASB cf. 1.3% in *Mercia*), it does not appear to have had an impact on the numbers of pupils with a statement of SEN.

Respondents from both LEAs were reluctant to quantify the resource levels which they felt were required by the pupils. The views of the SENCOs and the heads of department were undoubtedly shaped by historical provision. Understandably with the pressures of a full teaching schedule, few of them had thought in detail about some of the financial questions posed in this study. Their views are therefore recorded qualitatively i.e. more, ok, less resources required. The headteachers were in a better position to answer some of the more detailed financial questions but lacked the detailed individual pupil information. This information had been delegated to the SENCOs as suggested by the Code of Practice. If the amount of SEN funding which is received by the school is seen to be of significant value then it is perhaps worthwhile for the LEA to devise a method of differentiating financially between the levels of need. LEAs may consider to use the Code of Practice stages of assessment as a basis for funding pupils. This carries the inherent danger, already experienced in Mercia, of fuelling an inflation in the identification of pupils. As a consequence of LEAs working with finite budgets there would be a reduction in the unit costs for each stage or the need to apply more stringent criteria each year to reduce the numbers of identified pupils.

The evidence from the case studies indicates that there is no professional consensus about the level of resources required for the different 'types' of need or for the different levels of need. It has shown that significant anomalies exist for the resource levels both thought to be required and currently designated for pupils of similar levels of learning

difficulty even within the same authority. This finding may be a reflection of historical spending/funding by schools/LEAs as respondents appeared to be searching for a baseline of resourcing when considering their answers (see Wedell, 1983). A tension immediately exists for LEAs who are keen to match resources to the continuum of need. Allocating different resource levels to different types of need may reinforce 'categories' of learning difficulty. This is clearly against the spirit of the 1981 Education Act, and may not be beneficial to the overall educational needs of pupils. For example, the much higher level of identification for pupils experiencing specific learning difficulties in Whiteshire will have an impact on other educational sectors both within and outside the field of special educational need. Another tension exists over the funding of 'categories' of need as the study has also emphasised the general agreement that there is underresourcing of pupils identified as experiencing emotional and/or behavioural difficulties. There are significant hidden pastoral costs in providing support for these pupils which ought to be allocated a sufficient level of resource. LEAs are therefore faced with a difficult dilemma. They will be criticised if they provide non differentiated unit costs for a whole range of special educational needs thereby following the 'school and teacher effectiveness' discourse. They will also be criticised if they attempt to provide a finely tuned system of resourcing which reinforces categories of need and places undue emphasis on within child variables rather than consideration of contextual variables (the 'special needs pupil' discourse).

Chapter Six has previously shown that some LEAs are keen to promote a method of resourcing which targets at the individual pupil level and are prepared to allocate an adequate level of funding which is set under the SEN budget heading. The implication of this policy is that it carries with it an element of accountability. It would seem reasonable, therefore for these LEAs to attempt to set up a differential funding mechanism albeit the lack of professional consensus about the level of resources required to meet special educational needs. Although *Mercia*'s professional audit uses individual pupil data, the LEA have provided only one per cent of their ASB specifically under their non-statemented SEN budget heading and have perhaps justifiably kept to non differentiated resource levels but within bands. If LEAs do not see it as their role to monitor the use of SEN resources then it may be prudent for them to use the most simple of the resourcing mechanisms i.e. the use of free school meal data to generate a unitary cost. Governing bodies would then be charged with making the local decisions about the use of SEN resources and the onus for ensuring that the governing body renders accountability would rest with the parents. OFSTED inspection reports potentially provide information to parents on the amount and effectiveness of the SEN provision.

The study by Coopers and Lybrand (1996a) offers further insights into three conceptual models of SEN delivery: purchaser/provider; consortium and partnership. *Whiteshire* and *Mercia* illustrate more aspects of the purchaser/provider model rather than the consortium or partnership approaches. The Delegated Special Provision arrangements, now undertaken by both LEAs, is a good example of the purchaser/provider model. An example of the partnership model is the way in which LEAs and schools in partnership decide on the responsibility for SEN generally. This was not the case in *Mercia* and *Whiteshire* where the amounts allocated to non-statemented special educational needs seemed to be determined by historical arrangements and were not chosen by collective

or joint agreement. There was no evidence in this case study of leadership from *Whiteshire* or *Mercia* to their schools. Both LEAs appeared to be very "hands off" in terms of managerial style and left the responsibility directly to schools themselves (see Evans et al., 1995). This is perhaps understandable in the climate of maximum delegation and could be interpreted within the consortium context espoused by Coopers and Lybrand.

This chapter has argued that the purpose and the accountability of the additional funding for special educational needs is paramount. It has provided evidence to answer Key Question 6 and has concluded that there does not appear to be a consistent professional view of resourcing. To Key Question 7 the conclusion is that financial differentiation is only a concern in an LEA where the level of funding for non-statemented SEN is set at a high level e.g. over 5 per cent of the ASB. These findings have implications for the design of an improved funding formula in *Whiteshire* to be discussed in Chapters Eight and Nine. Financial differentiation is a worthwhile consideration in *Whiteshire* as the NSSEN budget is comparatively high (6.2% of the ASB). However this study has been unable to provide suggestions as to how the differentiation should operate, due to the lack of a professional consensus about the resources required to meet varying levels of special educational needs.

CHAPTER EIGHT THE DESIGN STRUCTURE OF AN IMPROVED SEN FORMULA IN WHITESHIRE

This chapter will address the third subsidiary aim of the thesis i.e. to investigate how a special educational needs funding formula for mainstream schools within an English Local Education Authority (LEA) (*Whiteshire*) can be best constructed which meets a specified range of principles. In particular Key Questions 8 and 9 will be examined which relate to the construction of an 'improved' SEN formula within *Whiteshire*. The first section of the chapter will provide a critique of the existing formula and will consider the 'normative' or value questions within the LEA which are listed under features of the formula. Concerns about the features are influencing decision making about amendments to the formula. The second section will offer an 'improved' alternative allocation model which has been based on three components: a SENCO allocation, a social disadvantage allocation and an allocation per SEN pupil. Examples of three versions of the model will be given i.e. Allocation Models 1 to 3 and budgets will be modelled for individual schools using the NSSEN budget amount for 1996/97. Reference will also be made to LEA documents and consultative papers.

8.1 CRITIQUE OF PRESENT SEN FORMULA

This section considers the existing formula in *Whiteshire* and provides a critique. Separate formulae exist for the primary and secondary sectors, so these will be looked at individually. An evaluation will take place of the two formula components i.e. the SEN pupil allocation and the social disadvantage allocation, and also of the primary/secondary funding differential.

8.1.1 DESCRIPTION OF THE PRIMARY FORMULA

Prior to the implementation of Local Management of Schools in September 1989, the LEA allocated 120 full time equivalent teachers for "defined needs" to be distributed by education officer discretion to 'deserving' primary schools. Clearly this system was open to abuse as it was opaque and no criteria were available to schools to account for the allocation. In 1986 a working group within the Authority prepared a report on 'The Staffing of Primary Schools' for elected members who sat on the General Purposes subcommittee. In the event the recommendations of this report were not implemented as the resourcing implications were considered to be beyond the available budgetary provision. However the report did contain a section on the resourcing of pupils with special needs which provided the foundations for the existing formula. The working group took the view that there was a wide variation in the proportion of pupils with special needs across the Authority and that extra costs would be required to raise educational achievement and generally to widen educational opportunities. (For instance the percentage of pupils entitled to free school meals was within the range: 85% to 0%). The 1986 report suggested that a special needs profile should be constructed for each school based on a combination of educational disadvantage and social disadvantage measures i.e. using reading quotients of a test (Primary Reading Test (PRT) France, 1981) which is given to all pupils in Year 2 (weighted to 70%) and the percentage of free school meals (weighted to 30%). The weightings were arrived at by consensus

within the working group.

Formula Funding and Special Educational Needs Chapter Eight OU/PhD/AJM/April 1998 Whiteshire undertook a review in 1988 to determine the first version of the formula to be submitted to the Department for Education for approval within the LEA's Local Management of Schools scheme and to be implemented in September 1989. The 1988 review put forward minor modifications to the formula i.e. the weightings were amended to 50%:50% because of the concern that schools which improved their results would be penalised (the 'resource paradox' effect); and resources were only allocated to schools with a proportion of special needs in excess of 10% of the school roll. The latter amendment was an attempt to increase the unit cost from approximately £200 if no cut off was used to approximately £300 per special needs pupil.

A further review took place in 1990 (see Table 2.1) and included two further changes. A second educational factor was incorporated i.e. an in house spelling test – the Primary Dictation Test (PDT) – which was administered at the same time as the reading test. Also the social disadvantage factor was altered to include the wider base of eligibility to welfare benefits. The formula became known as the SEN Index and is illustrated below:

$$\frac{50 \text{ x WBE}}{100} + \frac{50 \text{ x r}}{100} = \text{SN}$$

where

WBE = % entitlement to welfare benefits

r = % of pupils on a combination of tests (PRT and PDT). The percentage was calculated using a three year rolling average by identifying pupils with either a) a Reading Quotient of 95 or less based on the Primary Reading Test or b) a score of 12 or less on the Primary Dictation Test e.g. scores of PRT 94 PDT 15, PRT 96 PDT 11 and PRT 80 PDT 3 would all qualify.

In 1996/97 31% of pupils were identified under this SEN index. From 1989 to 1995 a 10% cut off was applied to the percentage of qualifying pupils in each school. Understandably, there was a high level of concern expressed by schools with a SEN percentage below 10% and therefore consultation took place with Governing Bodies and Headteachers in Autumn 1994. An amendment to the formula took place as a result of this consultation, and from 1995/96 the first 10% of pupils have been funded at a lower rate, £102 compared to £314 for pupils in schools above the 10% cut-off. The unit cost for the lower rate was determined by the budget amount to be delegated to schools which was previously spent to deliver a centrally run literacy team (the Reading and Language Service).

8.1.2 DESCRIPTION OF THE SECONDARY FORMULA

In the secondary sector the SEN index has its origins in the curriculum related staffing proposals (Walsh et al., 1985). In 1986 the Authority decided to make provision for an additional 180 full time equivalent teaching posts in order to implement the proposals. The formula has remained in place since 1986 and is based on NFER's Cognitive Abilities Test (CAT), (Thorndike et al., 1986) which is taken by pupils in Year 7. The three test scores are aggregated together and the percentage of pupils scoring less than a specified score is applied to the average number of pupils in Years 7 to 9 in order to determine the number of pupils qualifying under the index. Approximately 20% of Y7-Y9 pupils are identified under the index. A major review took place during 1991 to 1993 by the Secondary Special Needs Working Group (see Table 2.1). The review undertook to examine a serious criticism about the secondary index in that resources are focused mainly towards pupils with mild or moderate learning difficulties within the

lowest 20% of abilities and attainment (Lee, 1992b). This resourcing policy is a misunderstanding of Warnock's findings on the incidence of learning difficulties. Table 7.5 has already shown that a significant number of statements are prepared for pupils with specific learning difficulties (SpLD) (1.3%) and pupils identified as experiencing emotional and/or behavioural difficulties (EBD) (0.6%), who may not, of course be within the lowest 20% of abilities and attainment, in comparison to pupils with moderate learning difficulties (MLD) (1.7%). The recommendations of the 1993 review did not get implemented because the deputy chief education officer, who did not sit on the working group, considered that the revised formula had become too complicated.

8.1.3 OTHER SPECIAL NEEDS ALLOCATIONS

The Authority also uses other special needs allocations to include amounts for transient pupils and exceptional roll turnover. These two elements are funded outside the SEN Index and are not within the remit of the research programme. The umbrella term 'additional educational needs' (AEN) is used to refer to the wide range of factors to be taken into account when funding schools for special educational needs and social disadvantage.

The amounts distributed under the LMS formula for Additional Educational Needs (AEN) in 1997/98 are listed in Table 8.1.

Table 8.1The Amounts distributed under the LMS formula in Whiteshire for
non-statemented Additional Educational Needs (1997/98)

	Additional Educational	Allocation per	Amount
	Needs Factor	qualifying pupil	
Primary	SEN Index below 10%	£ 104	£ 1.3 million
	SEN Index above 10%	£ 314	£ 8.5 million
	Transient pupils	£ 545	£ 0.18 million
	Exceptional roll turnover	£ 36	£ 0.08 million
	Primary Total Amount		£10.06 million
Secondary	SEN Index	£1,244	£12.9 million
	Transient pupils	£ 542	£ 0.02 million
	Exceptional roll turnover	£ 45	£ 0.03 million
	Secondary Total Amount		£12.95 million

The case for formula funding rests on the assumption that the formula is well designed and there is a rationale behind the selection of the components. As I had participated in many working group meetings and also visited a large number of schools during my employment as an educational psychologist, it became apparent to me that there were a number of issues of concern to schools and to the Authority about the current resource arrangements. These issues related to :

- the purpose of additional allocations;
- the principles or criteria for evaluating the formula;
- the funding of schools or individual pupils;
- the accountability for SEN resources;
- the level of SEN resourcing in primary schools including the 10% "cut-off";
- the means of resourcing for SEN in Key Stage 1 (Years R-Y2) and Key Stage 4 (Years10-11);
- the double funding of pupils with statements of special educational needs;

- the differentiation of resources across the continuum of SEN, including the relationship between funding for statemented and non-statemented SEN banding and the size of the steps between the bands;
- the use of educational/social indicators, e.g. the use of proxy measures and/or SEN audits, and their relative weightings;
- the size of the population to be resourced;
- the balance between primary and secondary funding.

Perhaps the main overarching criticism of the existing formula relates to the lack of a statement from the LEA as to the purpose or purposes of the additional allocation. It was clear to me, as a participant in the working groups within *Whiteshire*, that members of the group were unable to answer the question: why should we spend more resources on some pupils than on others? In other words the LEA was unable to specify whether the resources were meant to be for 'equity' or 'effectiveness' reasons or both.

Also when the LEA has considered the question of purpose, there has been an assumption that variations in the intake of pupils do exist across schools in the Authority. A school with a high level of special needs pupils is likely to incur additional expenditure e.g. in terms of direct support teaching and in providing differentiated materials so that the pupils will gain access from a broad and balanced curriculum. If the variations in pupil populations did not exist then there would be no need to allocate additional funding and AEN funding would be subsumed under pupil numbers or age weighted pupil units (AWPUs). In *Whiteshire* it is clear that there are large variations in

the incidence of SEN as measured by various indicators. The school ranges for different factors are shown in Table 8.2.

Table 8.2The Percentage School Ranges in Whiteshire for Free SchoolMeals Entitlement, SEN Index and Statements at January 1996

Factor	Prin	iary	Secon	ndary
	Maximum	Minimum	Maximum	Minimum
Free School Meals Entitlement	85.1%	0.0%	58.2%	2.5%
SEN Index	80.7%	0.0%	58.2%	5.3%
Percentage of statements	11.1%	0.0%	43.0%	0.5%

I shall now evaluate features and the choice of indicators in *Whiteshire's* current formula against the principles or criteria set out in Chapter Four and also those listed by Hill and Ross (in press). Hill and Ross list a number of desirable statistical properties of additional educational needs indicators e.g. validity, reliability, feasibility, cost, parsimony and non-manipulability, which map readily with the evaluative criteria. Reference will also be made to the seminal study by Ross (1983) whose work in the field of social area indicators of educational need led to the 'Ross Index' which has been used extensively throughout Australia and New Zealand. A summary of the evaluation is shown in the matrix (Table 8.3) and will be justified later in sections 8.1.4 and 8.1.5.

Table 8.3Matrix to Illustrate Features of Whiteshire's Present SEN Funding
Formula against Evaluative Criteria

		Ci	riteria for	Evaluatio	g a Fundi	ng Form	ula	
Formula Festure	Simplicity	Equity	Effective- ness	Responsive- ness to needs	Efficiency	Stability	Cest Contem- ment	Account- ability
SEN Pupil Allocation	3	2	2	1	1	3	1	1
Social Disadvantage	3	2	1	1	3	3	3	1

Note: 3 - criterion satisfied

2 - criterion partly satisfied

- criterion not satisfied

8.1.4 EVALUATION OF THE SEN PUPIL ALLOCATION AND CHOICE OF INDICATORS

The SEN pupil allocation factors in the existing formula are simple and transparent. Three indicators have been chosen by the LEA and the results are readily available and understandable to schools, i.e. the primary formula includes a reading (PRT) and spelling test (PDT) taken in Year 2 and the secondary formula is based around the cognitive abilities test (CAT) taken in Year 7. Given NSSEN funding is extended to other Key Stages, the simplicity principle would be enhanced even further if the formula could be applied across each of the four key stages using similar indicators.

In Chapter Four I also refer to the principle of simplicity in terms of low administrative costs i.e. with respect to the amount of professional time needed to access the data required for inclusion in the formula. Chapter Seven has detailed critical accounts from respondents in *Mercia* of the audit process and how time was being taken away from

teaching to complete the required administration. In this context *Whiteshire's* present formula has low costs in that the data is collected over a much shorter period of time by the administration of group tests. This criterion will also map onto Hill and Ross's feasibility property.

Whiteshire's present formula would meet the procedural equity definition referred to in Chapter Four, but does not meet the vertical form of distributional equity which refers to differentiation of resources for differing needs, as a common unit cost is allocated to each qualifying pupil (see Table 8.1).

In one sense it is difficult to evaluate the existing formula in terms of the principles of effectiveness and efficiency because of the lack of LEA documentation concerning the aims and objectives and the lack of record keeping relating to the progress of SEN pupils. However if the assumption is made that the purpose of the SEN pupil allocation is to raise school achievement, then a good correlation with future low attainment would demonstrate effectiveness and efficiency. A good correlation would also meet Hill and Ross's validity property. The school level correlation between the primary literacy tests (i.e. PRT and PDT) and the 1996 Key Stage 2 National Curriculum Assessments is 0.62° which is not that impressive in this context. The relatively low correlation with later educational attainments signifies poor validity and provides scope for the choice of a different SEN pupil indicator to replace the primary literacy tests. The school level correlation between the Cognitive Abilities Test and 1993 GCSE performance is higher

⁶ The correlation was calculated at a school level by comparing the PRT/PDT percentage of pupils with the sggregated percentage of pupils scoring below level 4 in the English, Mathematics and Science test/tasks.

at 0.82⁷. However caution needs to exercised interpreting correlations of this type because the calculation was not performed at an individual pupil level and the incidence of SEN does not necessary equate with low performance on tests as discussed in section 8.1.2. Unfortunately it was not possible to obtain data from *Whiteshire* to calculate correlations at the pupil level.

Ross (1983) uses the terms accuracy and leakage to provide a more detailed definition of validity. Accuracy is described as the degree to which a school at a given percentile on the distribution of school indicator scores contains students with characteristics which are associated with educational disadvantage. Leakage borrows its name from the concept of 'resource leakage' used by Benson et al. (1974 p.85), to describe a situation when 'too much money leaks to students who are doing well enough by ordinary standards'. In *Whiteshire* a 'cut off' is in operation in the Primary SEN Index in an attempt to improve leakage, whereby the first 10% of SEN pupils in a school receive a lower allocation (£104) than pupils above 10% (£314) (see Table 8.1). The impact of applying a 'cut-off' actually has the effect of decreasing accuracy.

The criterion of efficiency can also be considered in relation to the way in which schools interpret the use of the formula indicators. For example any use of educational attainment tests in a SEN formula could be said to reinforce the 'resource paradox', previously discussed in Chapter Four, whereby a school which raises its educational

⁷ The correlation was calculated at a school level by comparing the total average GCSE score for each school (i.e. A=7, B=6, C=5, D=4, E=3, F=2, G=1) with the average CAT score (Thomas and Mortimore, 1994).

achievement as measured by the Y2 screening tests, will receive a reduction in funding. If indicators are used which schools can manipulate, the formula could be said to be inefficient, ineffective and inequitable. For instance there is anecdotal evidence that some teachers from *Whiteshire* may have suggested to Year 7 pupils to underachieve in the CAT to accrue more resources for the school.

The criterion of responsiveness to needs is not met by the existing SEN pupil indicators. Whiteshire uses a 20 per cent qualifying criterion for the secondary SEN Index i.e. the three separate scores from the cognitive abilities test (CAT) are aggregated together and the lowest 20 per cent of pupils are identified. Each pupil is then allocated £1,244 whether at the 20^{th} centile or at the 3^{rd} centile. Here lies the dilemma for the LEA. If the purpose of the formula is to predict the incidence of SEN in each school then it would be reasonable to use an indicator of social disadvantage and to allocate a unit cost to be used at a school level e.g. free schools meals entitlement or eligibility for welfare benefits. However the message sent to schools by the secondary formula and by its analysis, is that *individual* pupils are being identified. This is in accord with one of Whiteshire's own principles, that the index should be sufficiently differentiated (see Chapter Two). By adhering to the principle of responsiveness to needs, the LEA is demonstrating an expectation that there should be a relationship between the amount of resource and the degree of learning difficulty, i.e. a pupil with mild learning difficulties but without a statement of SEN at the 3rd centile, is likely to need more provision that a pupil at the 20th centile.

By using a three year rolling average to calculate the SEN pupil allocation, the present formula meets the criterion of stability of funding. The importance of this criterion was stressed on several occasions by the members of the SEN working groups in Whiteshire. It is reasonable to assume that any change to the formula would impact on funding levels. If this wasn't the case then the reasons for change would be reduced. However it was the scale of the changes which understandably created the most concern both to headteachers and education officers. Headteachers clearly saw their role as protecting and maintaining their resource levels and would not accept a reduced budget even though other more 'deserving' schools would benefit. Education officers were keen to keep the budget variance to a minimum in an attempt to retain as many schools as possible within the control of the LEA. By January 1997 only 15 out of 704 primary and secondary schools (2.1%) were grant-maintained. Whiteshire was clearly proud of this fact that so few schools had gained grant-maintained status and the stability of funding in the current SEN Index which used three year rolling averages was seen as a definite attribute.

Lastly, the principles of cost containment and accountability do not appear to met by the current arrangements. The principle of accountability in relation to *Whiteshire* has already been discussed in Chapter 7.2. The SEN formula is only part of the LEAs response to budget management yet the evidence shows that the LEA are experiencing significant problems in this respect. The *SEN Initiative* (Coopers and Lybrand, 1996a) recommended that the SEN budget should be a multi-stranded but unified budget within the LEA to include all expenditure on pupils with SEN, i.e. to include items such as expenditure on special schools and transport of pupils with SEN (see Chapter Six). In

Whiteshire the total SEN budget for 1997/98, as defined by the SEN Initiative, is £91 million and has seen a £13 million increase (17%) since 1994/95 (see Table 8.4). The total SEN budget equates to 17.7% of the GSB (national average 13.3%) and is the largest percentage budget for the shire counties in the national AEN survey reported in Chapter Six.

Table 8.4	The Total SEN	Expenditure	in Whiteshire a	s a Percentage of GSB
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	1994-95	1995-96	1996-97	1997-98
GSB	£497 million	£492 million	£504 million	£513 million
Total SEN Expenditure	£78 million	£80 million	£88 million	£91 million
Total SEN as % of GSB	15.6%	16.3%	17.5%	17.7%

Source : CIPFA Statistics

I shall now summarise the concerns relating to the choice of a SEN pupil indicator. The educational tests for the primary sector take place at Year 2 and only assess reading (PRT) and spelling (PDT) and no account is made of the other core curriculum areas of Science and Mathematics. Pupils in years R to Y2 are allocated funding retrospectively. The literacy tests have limited validity at a school level with later educational attainment. Also the parsimony property is not met as there is a good correlation (0.72) at a pupil level (n=1036) between PRT and PDT and therefore only one of these indicators could be used. The spelling test is also open to manipulation by the schools as no moderation is undertaken by the LEA with regard to the marking scheme.

Secondary schools use the Cognitive Abilities Test (CAT) which by definition is a test of potential ability and does not concern itself with curriculum based assessment or educational attainments. The CAT has better validity with later educational attainment at a school level and should not be open to manipulation by the school as the tests as marked externally. However the test administration arrangements are left to the individual school and offer the opportunity for 'tester bias' whereby the school may encourage low scores by stating that there is no need to do well in these tests or by omitting the practice test which should be carried out on the previous day. Cost is also a factor with the secondary tests as the external marking is charged at approximately £1 per pupil or £18,000 for a full Year 7 cohort.

Further options for the choice of indicators will discussed in section 8.2.

8.1.5 EVALUATION OF THE SOCIAL DISADVANTAGE ALLOCATION AND CHOICE OF INDICATORS

The existing Primary SEN Index uses a social disadvantage indicator i.e. education welfare benefit eligibility, which meets the simplicity for low administrative costs criterion as the data is already collected for other purposes. The Secondary SEN Index does not include a social disadvantage indicator. As with the SEN pupil allocation, the simplicity principle would be enhanced if a social disadvantage indicator could be applied across each of the four key stages.

Eligibility for welfare benefits (EWB) meets the procedural equity definition referred to in Chapter Four, but as with the SEN pupil allocation, it does not meet the vertical form of distributional equity as a common unit cost is allocated to each qualifying pupil (see Table 8.1). Furthermore EWB does not meet the criterion of effectiveness as it is an indicator of incidence rather than of individual need and it is a poor predictor of educational ability. The EWB correlation with CAT for individual pupils is 0.22 (Marsh, 1995a).

The criterion of efficiency is met well by the social disadvantage indicator as it is not open to manipulability. EWB also meets the principles of stability of funding and cost containment. However it does not meet the other criteria of responsiveness to needs or accountability.

The review of the Primary SEN Index in 1990 amended the social disadvantage factor within the formula, from free school meals uptake to the wider base of WBE. However there has been a substantial increase in the percentage of pupils qualifying for education welfare benefits which has reduced the effective targeting of these resources in primary schools. Since 1991 although there has been a 6% increase in overall primary pupil numbers, by contrast the number of pupils who are eligible to welfare benefits has risen from 28% to 39%, see Table 8.5.

Table 8.5Percentage of Pupils Eligible for Welfare Benefits at January 1991to 1996

% WBE for Primary Pupils		
28.2%		
33.0%		
35.6%		
36.9%		
38.0%		
39.0%		

Clearly the more pupils that are identified will reduce the amount per pupil allocated by the social disadvantage component. The elected members in *Whiteshire* considered the decrease to be unacceptable from a political viewpoint, therefore other indicators of social disadvantage were explored.

The search for another acceptable indicator of social disadvantage is a good example of the property Ross (1983) referred to as 'leakage', previously described in section 8.1.4. One such indicator is free school meals entitlement (FSME) which has a more restrictive qualifying criterion. Parents who are in receipt of income support and, from October 1996, the new income-based Jobseeker's Allowance, are entitled to claim for free school meals. This factor of dependent children of claimants receiving Income Support is also used by the Government as one of three elements within the Additional Educational Needs (AEN) component of the Education Standard Spending Assessment (SSA). (The other AEN factors used by the Government are dependent children in a lone parent family and 'ethnicity').

In *Whiteshire* the percentage of primary pupils entitled to free school meals is 25%, (see Table 8.6), compared to 39% of primary pupils eligible for welfare benefits. The national survey on AEN funding, reported in Chapter Six, showed that 92% of LEAs use Free School Meals as a proxy indicator of social disadvantage.

Table 8.6The Percentage of Pupils Entitled to Free School Meals and
Eligible for Welfare Benefits in Whiteshire Schools at January
1996.

	FSME	WBE
Primary	25.0%	39.0%
Secondary	21.9%	36.4%

The sharper focusing of resources by using FSME is supported by very good correlations with WBE which are between 0.96 and 0.98 at a school level, see Table 8.7.

Table 8.7School level correlations between Free School Meals Entitlementand Welfare Benefit Eligibility

	Primary	Secondary
Correlation	0.96	0.98

One purpose of a social disadvantage allocation is to assist schools in facilitating partnership and liaison with other agencies and with parents and/or to enhance curriculum opportunities for children of parents on low income. In this respect, the causal relationship with educational needs factors (i.e. educational tests) is not as important in this part of the formula as it would be in the individual SEN pupil component.

The correlation between a social disadvantage indicator and the educational needs indicator is particularly important in the secondary sector because the present secondary index is based solely on the CAT. There are good correlations at the school level between social disadvantage indicators and the educational test indicators in both the primary and secondary sectors, see Table 8.8. It was not possible to obtain data from the LEA to examine the correlations at a pupil level. The range of the school level correlations is between .81 and .90 and is illustrative of Hill and Ross's parsimony property i.e. if two indicators are well correlated with each other without loss of accuracy, then it is prudent to use only one of them. The actual choice can then be based on other criteria, for instance cost of administration, which is less for FSME as the data is required for other purposes (e.g. DfEE Form 7 school census).

Table 8.8Correlations between the Social Disadvantage Indicators and
Educational Tests at a School Level

	Free School Meals Entitlement (FSME)	Welfare Benefit Eligibility (WBE)
Primary	.81	.82
Secondary	.88	.90

Note: The correlations relate to:

Primary schools - Percentage of pupils entitled to FSM with the percentage of pupils scoring below 95 on the Primary Reading Test or below 12 on the Primary Dictation Test.

Secondary schools - Percentage of pupils entitled to FSM and WBE with the percentage of pupils scoring below a sum of 251 on the three scales of the Cognitive Abilities Test.

The present Primary SEN Index does not make a specific allocation for Key Stage 1

pupils but uses the Y2 screening test results as a proxy for identifying pupils with Formula Funding and Special Educational Needs 269 Chapter Eight OU/PhD/AJM/April 1998 learning difficulties in the Reception year to Y2. The main problem with this procedure is the 'resource paradox' or an aspect of Hill and Ross's 'non-manipulability' property and fails an effectiveness criterion in this respect. The way to reduce these 'perverse incentives' is to use indicators which rely on information obtained about a school's pupils before a particular Key Stage. This is often referred to baseline assessment and can be applied across all Key Stages. This methodology has been used nationally in school effectiveness and school improvement research and has been incorporated in *Whiteshire's* value-added approach to the interpretation of GCSE results.

A consultation on proposals to establish a National Framework for baseline assessment for Reception pupils has been conducted by the School Curriculum Assessment Authority during the autumn term 1996. Also during the autumn term 1996, *Whiteshire* piloted a baseline assessment procedure for reception pupils, the PIPS Project (Performance Indicators for Primary Schools), which is managed by Durham University. PIPS may provide useful information for inclusion in future revisions of the SEN formula.

In the meantime perhaps the best proxy indicator of need within Key Stage 1 is to use social disadvantage data. This 'objective' data is not under the direct influence of schools and therefore is 'non-manipulable' by schools. The research evidence seems to suggest that at a school level, the entitlement to free school meals is a good predictor of low pupil attainments (for correlations see table 8.8). Consequently it may be reasonable to use FSME as the interim indicator to fund KS1 pupils. Further policy discussions in *Whiteshire* will determine whether there is enough confidence in baseline

assessment information as a replacement for FSME. The Government have stated that baseline assessment should be compulsory in LEAs by September 1998.

8.1.6 THE PRIMARY / SECONDARY DIFFERENTIAL

One of the consequences of Local Management of Schools has been to highlight the historic funding differentials between the primary and secondary sectors which will be discussed under the criterion of equity. This can perhaps be best illustrated by reference to the funding levels for non-statemented SEN pupils in Y6 and Y7 in *Whiteshire*, see Table 8.9.

Table 8.9The Funding of Y6 and Y7 pupils with non-statemented SEN
(NSSEN) in Whiteshire (1997/98)

	Age Weighted Funding per pupil	Amount allocated by SEN Index.	Total amount per NSSEN pupil
Primary Year 6	£1,158	£314	£1,472
Secondary Year 7	£1,534	£1,244	£2,778

The amount allocated by the present SEN index to a Y7 pupil with non-statemented SEN is approximately 90% more than that for a Y6 pupil. Further funding considerations which influence the primary/secondary imbalance are the considerably higher numbers of pupils with statements in mainstream secondary schools. The percentage of pupils with statements of SEN in secondary schools is 3.8% compared to 1.9% in primary schools. *Whiteshire* decided to delegate the expenditure for secondary pupils with statements from the Autumn term 1996 which resulted in a further £5.6 million being allocated to secondary school budgets for 1997/98. The LEA expected that this additional allocation of money should help to assist schools in organising their whole school response to pupils with SEN, whether with a statement or without a

statement. For example, a Year 7 pupil with a statement, in addition to the $\pounds 2,778$ allocated according to Table 8.4, will also receive the delegated allocation equivalent of 0.0875 FTE or approximately $\pounds 2,500$, to include on-costs of 16%.

The argument for early intervention rests on the premise that if support is given early enough this should obviate the need for a statement. To implement a policy of early intervention would require an enhanced budget allocation to NSSEN primary pupils, over and above an allocation based on the proportion of pupils on roll in the primary and secondary sectors. The current number of pupils on roll (R to Y11) in *Whiteshire* are in the proportion 62% primary to 38% secondary. The existing SEN Index distributes the NSSEN budget allocation in the proportion 44% to primary and 56% to secondary.

A consultation of governing bodies and headteachers in *Whiteshire* conducted in the Autumn term 1994, determined there was overwhelming support for the concept of early intervention through targeting resources in the primary phase as all saw this as having the potential to reduce SEN in later years. However there was concern that a move to a common approach to resourcing pupils' special educational needs across the primary and secondary phases would lead to a redistribution of resources rather than an increase in the resources available. There was also concern that a redistribution of resources would lead to a reduction in the effective impact on the previous Curriculum Related Staffing (CRS) model, which the LMS formula has so far sought to reflect.

8.2 THE DESIGN OF AN IMPROVED SEN FORMULA

This section will consider the design structure of an 'improved' SEN formula. Initially the elements or components of the formula will be presented together with options about the indicators which could be used for each component. Three allocation models, to include worked examples, will be presented. An evaluation will also take place according to the principles listed in Chapter Four.

The Components of the new SEN Formula

A major concern about the present formula relates to the purpose of the additional resources. There is also a lack of clarity and focus in the existing formula which is compounded by the fact that a separate formula exists for both of the primary and secondary sectors. Evidence from the previous chapters relating to the purposes of additional funding and a view of what schools need to resource suggests the application of three notional elements or components across both the primary and secondary sectors. These components relate to specific areas given emphasis by the Code of Practice (DFE, 1994a).

1) A basic allocation per school for SENCO responsibility

This component is to ensure that schools have scope to respond effectively to the Code of Practice and maps to both the 'special needs pupil' discourse and the 'school and teacher effectiveness' discourse. As all schools have a resource allocation the component does not suffer from low 'accuracy' (Hill and Ross, in press) as is apparent with the '10% cut-off' policy. It could provide some non-contact time or an additional responsibility point to recognise the role required as an SEN Co-ordinator.

2) An allocation based on social disadvantage in the population served by the school

This component would assist schools in facilitating partnership and liaison with other agencies and with parents and to enhance curriculum opportunities for children of parents on low income. The component would map best to the 'school and teacher effectiveness' discourse.

3) An allocation per pupil identified as experiencing SEN

This component, which maps to the 'special needs pupil' discourse, would assist schools in arranging additional support for individual pupils who are experiencing special educational needs.

The three components will now be discussed individually in terms of the choice of indicator and three allocation models will be proposed which will draw on the components identified above. Each model will use a different set of factors and weightings to illustrate a variety of funding approaches. The further model (Allocation Model 4) will be discussed in Chapter Nine which will draw on aspects from each of the three models. Additionally, each model will be analysed with regard to the principles for the evaluation of a formula.

Allocation Model 1 uses the levels of funding in the Primary and Secondary SEN Indices as at 1996/97 i.e. Primary £9.6 million and Secondary £12.3 million. Allocation Model 2 will seek to protect the effective impact of the CRS policy for secondary schools, which is essentially ringfenced, whilst using the remainder of the non-statemented SEN secondary budget, £7.9 million (i.e. £12.3 million minus £4.4 million) to be distributed according to the three allocation components.

Allocation Model 3 attempts to provide a more equitable balance between primary and secondary NSSEN resources by using pupil numbers and will also consider a policy proposal to provide early intervention for pupils with special educational needs but without statements.

8.2.1 THE SENCO ALLOCATION

A consultation of the governing bodies and headteachers during the Autumn term 1994 showed that primary schools, on the whole, supported the concept of a basic allocation per school to resource the tasks generated by the Code of Practice. Some of the larger primary schools and some secondary schools did not support the idea and were particularly against the notion of a single basic allocation. In general responses to the consultation were divided between those who favoured a single basic allocation related to pupil numbers.

The three allocation models will use as examples an average sized primary school, which in *Whiteshire* is 200 pupils, and an average sized secondary school, which in *Whiteshire* is 750 pupils (Y7 to Y11). Model 1 uses a per pupil allocation of £12.50 which generates a sum of £2,500 for a 200 place primary school and £9,400 for a 750

place secondary school. Models 2 and 3 will use alternative options for the SENCO allocation. Model 2 uses a single basic allocation of £1,500 for all schools, which is the value of an additional responsibility point plus on-costs of 16%. This amount is also equivalent to approximately 60 hours of teaching time per year. Model 3 uses a banding system for allocation, based on School Group sizes, i.e. under 150 pupils = Group 1, 151 to 350 pupils = Group 2, 351 to 650 pupils = Group 3, and over 650 pupils =Group 4 or above, see Table 8.10.

Model	Factor Used	Amount per Qualifying Pupil	Allocation to a 200 place primary school	Allocation to a 750 place ¥7-¥11 secondary school
Model 1	Pupil Numbers	£12.50	£2,500	£9,400
Model 2	Basic Allocation	£1,500	£1,500	£1,500
Model 3	School Size			
	Under 150	£750		
	151-350	£1,500	£1,500	
	351-650	£2,250		
	Over 650	£3,000		£3,000

The school size banding system will be used as a method of allocation for each of the three components in Model 3. This system provides an extension to the five bands of resource allocation already in use in *Whiteshire's* LMSS formula which was developed from the guidance given in Circular 11/90 (DES, 1990).

8.2.2 THE SOCIAL DISADVANTAGE ALLOCATION

A major consideration in the design of a revised formula was the development of a common approach across both primary and secondary phases. In 1993 the Schools and Quality Development Sub-Committee in *Whiteshire* requested the LMS Members' Working Group to consider:

...the possibility of developing an overall approach to resourcing for SEN across the totality of provision for both statemented and non-statemented pupils.

Responses to the 1994 consultation paper indicated there was qualified agreement on the inclusion of a social disadvantage factor in the development of a common SEN funding allocation. However there was a level of concern about the use of proxy measures to identify social disadvantage and a perception that these have not been adequately linked to SEN.

The case for using the indicator of free school meals entitlement for the social disadvantage component has been made in section 8.1.5. The next question relates to the level of resource allocation required to assist schools in facilitating partnership and liaison with other agencies.

If activity led principles (see Chapter Five) are used to inform this part of the formula rather than intuitive percentage weightings, then we need to ask and attempt to answer the following questions:

• what is the actual time needed to develop and carry out policies directed at improving parental partnership?

• what extra resources are required to enhance the National Curriculum and out-ofschool activities for pupils from families claiming income support?

In the absence of data to address the above questions, a percentage approach will be adopted in the calculations. Table 8.11 illustrates the percentage of the total NSSEN budget allocated to the three components in each of the proposed models.

Table 8.11 The Non-statemented SEN Budget Allocated for SENCO, Social Disadvantage and SEN Pupils in each of the Three Proposed Models

		Primary		Secondary		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
SENCO	£1.6	£0,9	£0,8	£1.0	£0.1	£0.3
Allocation	million	million	millio n	million	million	million
	(17%)	(9%)	(6%)	(8%)	(1%)	(3%)
Social	£2.5	£4.8	£3.2	£1.4	£4.0	£2.0
Disadvantage	million	million	million	million	million	million
Allocation	(26%)	(50%)	(25%)	(11%)	(50%)	(25%)
SEN Pupil	£5.5	£3.9	£8.9	£9.9	£3.8	£5.6
Allocation	million	million	million	million	million	million
	(57%)	(41%)	(69%)	(81%)	(49%)	(72%)
Total	£9.6 million	£9.6 million	£12.9 million	£12.3 million	£7.9 million	£7.9 million

Note: Model 2 and Model 3 for Secondary excludes an amount of £4.4 million set aside for Curriculum Related Staffing (CRS) purposes. Model 3 total Primary NSSEN budget is increased by £3.3 million by reallocation from the overall AWPU budget for both primary and secondary schools (see Table 8.23). Further explanation of the rationale underlying Model 3 will be illustrated in section 8.2.6 and Tables 8.21 and 8.22.

Model 1 uses an allocation of £50 per pupil eligible for education welfare benefits. County averages (see Table 8.6) have been used to calculate the examples given for a 200 place primary school (county average 39%) and a 750 place secondary school (county average 36%). Model 2 uses the indicator of free school meals and adopts a weighting of 50% of the overall NSSEN budget i.e. in the primary sector this amounts to $\pounds 4.8$ million and the amount in the secondary sector is $\pounds 4.0$ million, see Table 8.11. Using the county data from Table 8.6, the amount per qualifying primary and secondary pupils entitled to a free school meal would be $\pounds 150$ and $\pounds 235$ respectively.

Model 3 uses a weighting of 25% for the social disadvantage allocation of the overall NSSEN budget. It should be noted that Model 3 also includes an enhanced allocation in support of a policy of early intervention for SEN pupils (see section 8.2.6). The social disadvantage allocation would be ± 3.2 million in the primary sector and ± 2.0 million in the secondary sector (see Table 8.11). Model 3 also incorporates a banding system for allocation, similar to that used for the Model 3 SENCO allocation (Table 8.10). The bands approximate to quartiles of the percentage of qualifying primary and secondary pupils and are illustrated in Table 8.12.

Model	Factor Used	Amoust per	Allocation to a 200 place	Allocation to a 750 place Y7-Y11
Model 1	EWB	Qualifying Pupil £50	printary school £3,900	secondary school £13,700
Model 2	FSME	Primary £150 Secondary £235	£7,500	£38,600
Model 3	FSME %			
Primary	over 52%	£160		
	37% to 51%	£120	<u></u>	
	23% to 36%	£ 80	£4,000	
	less than 23%	£ 40		
Secondary	over 41%	£190		
	27% to 40%	£140		
	18% to 26%	£ 95		£15,700
	less than 18%	£ 45	,	

 Table 8.12
 Options for the Social Disadvantage Allocation Used in the Three Models

8.2.3 THE SEN PUPIL ALLOCATION

The discussion paper published by EMIE (Marsh, 1997a) of the AEN funding survey reported in Chapter Six, gave details in an Appendix (B) about the indicators chosen by LEAs for inclusion in their formulae. It is clear from the survey that a wide range of educational indicators are presently in use. The three allocation models in this chapter will continue to make use of the educational tests which *Whiteshire* have conducted. The next chapter will consider the use of National Curriculum Assessment information for possible inclusion.

Formula Funding and Special Educational Needs Chapter Eight OU/PhD/AJM/April 1998 In Model 1 the SEN pupil allocation has been set to similar levels as in the current SEN Index. For primary schools the SEN pupil allocation for the first 10% of pupils is £102, the same level as in the 1996/97 formula. However because of the budget amount set aside for the first two components of the revised formula, i.e. £1.6 million for the SENCO allocation and £2.5 for the social disadvantage component, the amount left for pupils over 10% on the primary SEN Index has therefore reduced from £314 to £155. Likewise for secondary schools, because of the amounts for the SENCO allocation (£1.0 million) and for social disadvantage (£1.4 million), this has reduced the amount for KS3 pupils from £1216 to £1035, see Table 8.13.

The main differences between Model 2 and Model 1 are concerned with the balance between primary and secondary funding and with the funding of KS1 and KS4 pupils. In both models an amount equivalent to 180 teaching posts (i.e. \pounds 4.4 million) could be set aside to protect the secondary Curriculum Related Staffing policy. Allocation Model 2 will also provide specific funding for KS1 and KS4 pupils. The amount of resource left for KS2 pupils under the SEN Pupil Allocation, after amounts have been deducted for the other formula elements, is \pounds 2.2 million and is at a such a level which does not lend itself towards differential funding at the first 10% and over 10%. Therefore a standard amount of \pounds 125 has been used in the model.

The main differences between Model 3 and Model 2 are providing:

- an enhanced level of funding to the Primary SEN Index
- a differentiated approach by the use of banding arrangements towards the three funding components of the formula.

8.2.4 ALLOCATION MODEL 1

Model 1 uses the 1996/97 budget amounts for non-statemented SEN, i.e \pounds 9.6 million for primary schools and \pounds 12.3 million for secondary schools, see Table 8.13.

	Pactor Uned	Amount per qualifying pupil	Allocation to a 200 place primary school	Total allocation to primary schools	Allocation to a 750 place Y7-Y11 secondary school	Total allocation to secondary schools
SENCO Allocation	Pupil Numbers	£12.50	£2,500	£1.6 million	£9,375	£1.0 million
Social Disadvantage	WBE	£50	£3,900	£2.5 million	£13,500	£1.4 million
SEN Pupil Allocation KS1						
SEN Pupil Allocation KS2	Y2 PRT/PDT	1 st 10% £102 over 10% £155	£6,380	£5.5 million		
SEN Pupil Allocation KS3	Y7 CAT	£1,035			£93,150	£9.9 million
SEN Pupil Allocation KS4						
Allocation under Model 1			£12,780	\$9.6 million	\$116,025	£12.3 million
Allocation under present SEN Index			£15,228	£9.6 million	\$109,440	£12.3 million

Notes:	WBE	Welfare Benefit Eligibility
	CAT	Cognitive Abilities Test (NFER-Nelson)
	PRT	Primary Reading Test (NFER-Nelson)

PDT Primary Dictation Test

FSME Free School Meals Entitlement

Worked examples for Model 1 are shown below for a 200 place primary school and a 750 place secondary school in *Whiteshire*. These values have been chosen as they approximate to the 'average' sized school. The mean percentage of qualifying pupils in *Whiteshire* have been used for calculation purposes.

Table 8.14Allocation under Model 1 for a 200 place primary school with 39%WBE and 24% of pupils identified on the Year 2 Educational Tests

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO	N/A	£12.50	200	£ 2,500
Allocation				
Social	39%	£50	78	£ 3,900
Disadvantage				
SEN Pupil	24%	1 st 10% £102	20	£ 2,040
Allocation 1				
SEN Pupil	24%	Over 10% £155	28	£ 4,340
Allocation 2				
Total				£12,780

Table 8.15 Allocation under present arrangements for a 200 place primary school with 31% identified by the SEN Index

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation	N/A	N/A	N/A	N/A
Social Disadvantage	N/A	N/A	N/A	N/A
SEN Pupil Allocation 1	31%	1 st 10% £102	20	£ 2,040
SEN Pupil Allocation 2	31%	Over 10% £314	42	£13,188
Total				£15,228

Tables 8.14 and 8.15 show that a 200 place primary school, with 31% identified by the SEN Index, would lose £2,448 (16.1%) under Model 1 compared to the present arrangements. The main reason for this budget loss is the reduction in the amount for pupils 'over 10 per cent' from £314 to £155. The equivalent of £4.1 million was Formula Funding and Special Educational Needs 283 Chapter Eight 0U/PhD/AJM/April 1998

removed from the SEN Pupil Allocation to fund the SENCO allocation (± 1.6 million) and the social disadvantage allocation (± 2.5 million). Tables 8.16 and 8.17 give similar calculations for a 750 place secondary school.

Table 8.16Allocation under Model 1 for a 750 place secondary school with
36% WBE and 20% of pupils identified on the Year 7 Cognitive
Abilities Test

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation	N/A	£12.50	750	£ 9,375
Social Disadvantage	36%	£50	270	£ 13,500
SEN Pupil Allocation KS3 only (450 pupils)	20%	£1,035	90	£ 93,150
Total				£116,025

Table 8.17Allocation under present arrangements for a 750 place secondary
school with 20% of pupils identified on the Year 7 Cognitive
Abilities Test

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation	N/A	N/A	N/A	N/A
Social Disadvantage	N/A	N/A	N/A	N/A
SEN Pupil Allocation KS3 only (450 pupils)	20%	£1,216	90	£109,440
Total				£109,440

The NSSEN allocation under Model 1 for a 750 place secondary school would increase

by £6,585 (6.0%) compared to the present arrangements. The benefits for a 750 Formula Funding and Special Educational Needs 284 Chapter Eight 284 OU/PhD/AJM/April 1998 secondary school of receiving a SENCO allocation based on all pupils and an allocation for social disadvantage outweigh the reduction in the unit cost for the SEN pupil allocation from £1,216 to £1,035. An evaluation of all of the three allocation models bases on the principles or criteria for evaluating a formula will be discussed in the summary (section 8.3).

8.2.5 ALLOCATION MODEL 2

An illustration of Model 2 is shown in Table 8.18. A summary of the main differences between Model 2 and Model 1 are provided below:

- the secondary funding is split between non-statemented SEN component and the Curriculum Related Staffing component, i.e. £7.9 million and £4.4 million as discussed in concern 3;
- a basic amount of £1,500 to be allocated to each school for SENCO responsibilities (see Table 8.10);
- free school meals entitlement (FSME) to be used as the social disadvantage indicator;
- FSME to be used on a temporary basis as a proxy indicator for learning difficulties experienced by Key Stage 1 pupils. Baseline assessment information is likely to provide a better source of data for future reviews of the LMS formula.
- KS2 pupils to be funded by the use of the 6+ screening tests without the WBE component.
- KS3 and KS4 pupils to be funded by the use of the CAT results.

Table 8.18 Illustration of Model 2

	Factor Used	Amount per qualifying pupil	Allocation to a 290 place primary school	Total allocation to primary schools	Allocation to a 750 place ¥7-¥11 secondary school	Total allocation to secondary schools
SENCO	Basic	£1,500 per	£1,500	£0.9 million	£1,500	£0.1 million
Allocation	Allocation	school			·····	
Social	FSME	Pri £150	£7,500	£4.8 million	£38,775	£4.0 million
Disadvantage		Sec £235				
SEN Pupil	FSME	£125	£2,875	£1.7 million		
Allocation KS1		·				
SEN Pupil	Y2	£125	£3,250	£2.2 million		
Allocation KS2	PRT/PDT					
SEN Pupil	¥7	£240			£21,600	£2.3
Allocation KS3	CAT					million
SEN Pupil	¥7	£240			£14,400	£1.5 million
Allocation KS4	CAT					****
Allocation under Model 2 less CRS Allocation			615,125	£9.6 million	\$76,275	\$7.9 million
+ CRS Allocation	Y7 CAT	\$460	N/A	N/A	+ £41,400 = £117,675	£4.4 million
Totals under present SEN Index			\$15,228	£9.6 million	£109,440	£12.3 million

Worked examples for Model 2 are shown below for a 200 place primary school and a 750 place secondary school in *Whiteshire*. Again the mean percentage of qualifying pupils have been used for calculation purposes.

Table 8.19	Allocation under Model 2 for a 200 place primary school with 25%
	FSME and 24% of pupils identified on the Year 2 Educational
	Tests

Formula Component	Percentage of pupils	Amount per qualifying pupil	Na of papils	Allocation
SENCO Allocation	N/A	£1,500 per school	N/A	£ 1,500
Social Disadvantage	25%	£150	50	£ 7,500
SEN Pupil Allocation KS1 (90 pupils) based on FSME	25%	£125	23	£ 2,875
SEN Pupil Allocation KS2 (110 pupils)	24%	£125	26	£ 3,250
Total				£15,125

A comparison of Tables 8.15 with 8.19 shows that an 'average' primary school would lose £103 (0.7%) under Model 2 compared to the present arrangements. The reduction in the amount for SEN pupils from £314 to £125 appears to be balanced for this school by the additional allocations for the SENCO and for social disadvantage. The equivalent of £5.7 million was removed from the SEN Pupil Allocation to fund the SENCO allocation (£0.9 million) and the social disadvantage allocation (£4.8 million). Table 8.20 gives a similar calculation for a 750 place secondary school. Table 8.20Allocation under Model 2 for a 750 place secondary school with
22% FSME and 20% of pupils identified on the Year 7 Cognitive
Abilities Test

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation	N/A	£1,500 per school	N/A	£ 1,500
Social Disadvantage	22%	£235	165	£ 38,775
SEN Pupil Allocation KS3 only (450 pupils)	20%	£240	90	£ 21,600
SEN Pupil Allocation KS4 only (300 pupils)	20%	£240	60	£ 14,400
Total				£ 76,275
Add CRS Allocation based on KS3 (450 pupils)	20%	£460	90	£ 41,400
Overall Total				£117,675

A comparison of Tables 8.17 with 8.20 shows that the NSSEN allocation under Model 2 for a 750 place secondary school would increase by \pounds 8,235 (7.5%) compared to the present arrangements. The benefits for the 'average' secondary school of receiving an allocation for social disadvantage (£38,775) outweigh the reduction in the unit cost for the SEN pupil allocation from £1,216 to £240 in the KS3 and KS4 phases and to £460 in the curriculum related staffing protected factor.

8.2.6 ALLOCATION MODEL 3

One of the LMS formula requirements is that 80% of the ASB has to be based on pupil numbers termed age weighted pupil units (AWPUs). An amount (5%) can be allocated within the pupil-led part of the formula on the basis of additional weightings for pupils with SEN but without statements. In the existing SEN Index no allowance has been made for this 5% as the resources allocated to NSSEN are located in the non-pupil led part of the formula.

Model 3 uses the 5% criterion to designate a set amount for pupil led NSSEN. The maximum amount which could be used for pupil led NSSEN is 5% of the primary/secondary ASB (£344 million or £17.2 million). Model 3 provides an illustration of an allocation of £15.6 million (4.6% of the primary/secondary ASB) to the pupil led NSSEN component. The Social Disadvantage allocation (25% of the total NSSEN budget) and the CRS allocation would still remain in the non-pupil led part of the formula as in the present SEN Index. Pupil numbers could then be used as a basis for determining the balance of NSSEN funding between the primary and secondary sectors, see Table 8.21.

Table 8.21 Proposed Budget Totals for the Different Formula Elements in Allocation Model 3

	Prìr	nary	Seco	ndary
	Pupil Led	Non-Pupil Led	Pupil Led	Non-Pupil Led
SENCO Allocation	£0.8 million		£0.3 million	
Social Disadvantage Allocation		£3.2 million (25%)		£2.0 million (25%)
SEN Pupil Allocation	£8.9 million		£5.6 million	
Totals	£9.7 millon	£3.2 million	£5.9 million	£2.0 million
CRS Allocation				£4.4 million

Table 8.21 illustrates a possible approach to provide a more equitable method of funding primary and secondary NSSEN. The primary/secondary split of the £15.6 million pupil led component, when based on pupil numbers, i.e. 62%:38% is £9.7 million:£5.9 million. In addition Model 3 proposes that the non-pupil led social disadvantage component should be 25% of the overall budget total, i.e. £5.2 million. Table 8.22 shows the pupil led and non-pupil led budget totals for primary and secondary schools. The overall NSSEN budget would increase by £3.3 million (1.0% of the primary/secondary ASB) to £25.2 million. This increase would enable a more equitable budget distribution across the primary and secondary phases and could be achieved either by waiting until additional funding becomes available or using 'recycled' resources from the double counting of pupils with statements in the present SEN Index. More controversially, for the purposes of this chapter, Model 3 provides an example of the impact of the redistribution of £3.3 million from the age weighted

funding component (primary and secondary) to the SEN Index. The CRS policy is protected, as it is in Allocation Model 2, by allowing £4.4 million to be external to the NSSEN budget total.

Table 8.22Primary and Secondary Pupil led and Non-Pupil led Budget Totalsin Allocation Model 3

	Pupil led	Non-Pupil led	Total under Model 3	Total under present SEN Index
Primary	£9.7 million	£3.2 million	£12.9 million	£9.6 million
Secondary	£5.9 million	£6.4 million	£12.3 million	£12.3 million

The proposed increase to the NSSEN budget allocation in Model 3 would appear to be against the funding option of maintaining a high AWPU and current levels of targeted SEN funding. However in *Whiteshire* the pupil led budget allocation is already well above the 80% required minimum, even without counting the delegated expenditure on pupils with statements, which is currently within the non-pupil led part of the Authority's formula. Moreover the amount of the primary/secondary ASB based on the AWPU element, is above the national average (83.7% compared to 81.5% for English LEAs). The impact of removing £3.3 million from the overall AWPU budget is illustrated in Table 8.23 for a 200 place primary school and a 750 place secondary school.

Table 8.23 The impact of redistributing £3.3 million from the AWPU budget in Whiteshire for a 200 place primary school and a 750 place secondary school

	AWPU Budget	Adjusted AWPU Budget	Difference
For all Primary Schools (n=592)	£152.2 million	£150.4 million	£1.8 million
For all Secondary Schools (n=98)	£129.2 million	£127.7 million	£1.5 million
200 place Primary school	£233,473	£230,735	£2,738
750 place Secondary school	£1,270,145	£1,255,249	£14,896

The adjusted AWPU budget reduced the overall amount by ± 1.8 million for primary schools and ± 1.5 million for secondary schools. The impact on a 200 place primary school AWPU budget is a reduction of $\pm 2,738$ (1.2%) and for a 750 place secondary school there is a reduction of $\pm 14,896$ (also 1.2%).

The increased levels of NSSEN resource proposed in Model 3 should enable primary schools to make a better response to meeting the needs of SEN pupils, particularly at Code of Practice stage 3. A clear statement from the Authority to schools about expectations to meet SEN from generally available provision, should assist with other measures, in stabilising the need for the costly procedures involved in a statutory assessment.

An illustration of Model 3 is shown in Table 8.24. A summary of the main differences between Model 3 and Model 2 are provided below:

- a reallocation of 4.6% of the primary/secondary school budget, i.e. an increase of £3.3 million, to the SEN Index from the AWPU amount. This budget reallocation is clearly a controversial issue, but shows one method of improving the primary/secondary imbalance of funding previously discussed and illustrated in Table 8.5.
- 4 bands based on pupil numbers for the SENCO allocation, see Table 8.10.
- 4 bands based on the percentage of pupils entitled to free school meals for the social disadvantage allocation, see Table 8.12.
- The use of KS1 National Curriculum Assessment information to fund KS2 individual SEN pupil allocation. This issue will be discussed in greater detail in Chapter Nine.
- Pupils with statements of special educational needs to be counted only once i.e. to receive delegated SEN amount for statemented support but not the SEN Pupil Allocation.

Table 8.24 Illustration of Model 3

	Factor Used	Amount per qualifying pupti	Allocatio a in a 200 place primary school	Total allocation to primary achools	Allocation to a 750 place ¥7-¥11 secondary school	Total allocation to secondary schools
SENCO Allocation	Pupil Nos 4 Bands	£750 to £3,000	£1,500	£0.8 million	£3,000	£0.3 million
Social Disadvantage	4 Bands 4 Bands	Pri £40 to £160 Sec £45 to £190	£4,000	£3.2 million	£15,675	£2.0 million
SEN Pupil Allocation KS1	FSME	£275	£6,325	£3.9 million		
SEN Pupil Allocation KS2	4 Bands KS1 NCA	£90 to £1600	£7,010	£5.0 million		
SEN Pupil Allocation KS3	Y7 CAT	£350			£31,500	£3.4 million
SEN Pupil Allocation KS4	Y7 CAT	£350			£21,000	£2.2 million
Allocation under Model 3 lass CRS Allocation			£18,835	£12.9 million	£71,175	£7.9 million
+ CRS Allocation	77 CAT	6469	NA	NA	+ 441,400 = \$112,575	£4.4 million
Tutals under present SEN Index			£15,228	£9.6 million	£109,440	£12.3 million

Notes : NCA

A National Curriculum Assessments

FSME Free School Meal Entitlement

CAT Cognitive Abilities Test (NFER-Nelson)

Worked examples for Model 3 are shown below again for average sized schools in *Whiteshire* with the mean percentage of qualifying pupils being used for calculation purposes. In order to model the SEN pupil allocation using KS1 National Curriculum Assessments information the following assumptions have been made: there are 1.5% of pupils at each of the two highest bands of funding, 2% of pupils at the third band of funding and 8% of pupils at the lowest band of funding.

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation Band 2 see Table 8.7	N/A	£1,500 per school	N/A	£ 1,500
Social Disadvantage Band 3 see Table 8.13	25%	£80	50	£ 4,000
SEN Pupil Allocation KS1 (90 pupils) based on FSME	25%	£275	23	£ 6,325
SEN Pupil Allocation KS2 (110 pupils) based on NCA see Table 9.3				
Band 6	1.5%	£1,600	2	£ 3,200
Band 7	1.5%	£1,000	2	£ 2,000
Band 8	2%	£500	2	£ 1,000
Band 9	8%	£90	9	£ 810
Total				£18,835

Table 8.25Allocation under Model 3 for a 200 place primary school with 25%FSME

A comparison of Tables 8.15 with 8.25 shows that a 200 place primary school would gain £3,607 (23.7%) under Model 3 compared to the present arrangements. This gain is expected as an 'additional' £3.3 million was reallocated from AWPUs to the primary NSSEN budget to redress the primary/secondary funding imbalance. Table 8.26 gives a similar calculation for an 'average' secondary school.

Table 8.26Allocation under Model 3 for a 750 place secondary school with
22% FSME and 20% of pupils identified on the Year 7 Cognitive
Abilities Test

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation Band 4 see Table 8.7	N/A	£3,000 per school	N/A	£ 3,000
Social Disadvantage Band 2 see Table 8.13	22%	£95	165	£ 15,675
SEN Pupil Allocation KS3 only (450 pupils)	20%	£350	90	£ 31,500
SEN Pupil Allocation KS4 only (300 pupils)	20%	£350	60	£ 21,000
Total				£ 71,175
Add CRS Allocation based on KS3 (450 pupils)	20%	£460	90	£ 41,400
Overall Total				£112,575

A comparison of Tables 8.17 with 8.26 shows that the NSSEN allocation under Model 3 for a 750 place secondary school would increase by £3,135 (2.9%) compared to the present arrangements. The benefits for the 'average' secondary school of receiving an allocation for social disadvantage (£15,675) outweigh the reduction in the unit cost for the SEN pupil allocation from £1,216 to £350 in the KS3 and KS4 phases and to £460 in the curriculum related staffing protected factor.

8.3 SUMMARY

The budget allocation under the three models for a primary and secondary school, with NOR and NSSEN percentages at average levels for the Authority, are shown in Table 8.27.

Table 8.27	NSSEN Budget Allocations under Models 1, 2 and 3 for a 200
	place Primary School and a 750 place Secondary School

	200 place Primary School	Primary School % Budget Variation	750 place Secondary School	Secondary School % Budget Variation
Existing SEN Index	£15,228		£109,440	
Model 1	£12,780	-16%	£116,025	+6%
Model 2	£15,125	- 1%	£117,675	+8%
Model 3	£18,835	+24%	£112,575	+3%

Table 8.27 illustrates the percentage changes to the NSSEN budget allocation for a 200 place primary school and a 750 place secondary school with 'average indicator scores' under the different models. The budget variation has been calculated by comparing the budgets under the various models with the NSSEN budget allocated under the existing SEN index.

In addition to the examples shown for a 200 place primary school and a 750 place secondary school, budget modelling was also carried out for all primary and secondary schools in *Whiteshire* for Models 1 and 2 using the values set out in Table 8.13 and 8.18.

Tables 8.28 and 8.29 show the maximum gain and loss under Models 1 and 2, the maximum absolute percentage budget variance, the mean absolute percentage variance and the mean absolute budget variance for all primary and secondary schools.

Table 8.28 Summary of Budget Modelling for all Primary Schools in Whiteshire under Models 1 and 2 (n=592) compared to the existing SEN Index

Primary Schools	Model 1	Model 2
Maximum Gain	+£8,873	+£17,847
Maximum Loss	-£20,934	-£25,648
Maximum absolute % variance	222%	1122%
Mean absolute % variance	17.0%	17.6%
Mean absolute budget variance	£2,759	£2,848

Note: The absolute variance is calculated by comparing the NSSEN budget under the existing SEN Index with Model 1 or 2

For primary schools the maximum gain and loss was much higher under Model 2 than under Model 1 because of the larger amount (£4.8 million cf. £2.5 million) being allocated to the social disadvantage component. A school with a high FSME percentage would gain under Model 2 whereas a school with relatively low FSME numbers compared to their previous SEN pupil allocation under the present arrangements would lose. The maximum absolute percentage variances are high under both models due to the SENCO allocation being available to schools which previously had very low NSSEN budgets. For example, under Model 1 the school with the maximum absolute variance of 222% has a number on roll of 40, a SEN index of 8% and a current NSSEN budget of £407. The SENCO allocation by itself, for this small school generated an increase in the budget of £500 i.e. $40 \times £12.50$. Under Model 2 the school with the maximum budget variance of 1122% has a number on roll of 14, a SEN index of 3.4% and a current NSSEN budget of £142. The standard SENCO allocation of £1,500 in Model 2 was the main reason for the schools budget to increase to £1,738. The mean absolute percentage variance and the mean absolute budget variance was similar under both models 1 and 2.

Table 8.29 Summary of Budget Modelling for all Secondary Schools in Whiteshire under Models 1 and 2 (n=98) compared to the existing SEN Index

Model 1	Model 2
+£10,997	+£36,912
-£18,603	-£23,844
25.5%	22.9%
3.1%	8.1%
£4,701	£10,124
	+£10,997 -£18,603 25.5% 3.1%

Table 8.29 illustrates a summary of the budget modelling for all secondary schools. Again the maximum gain and loss was higher under Model 2 than under Model 1. The school with the maximum gain under Model 2 had 1171 on roll and a SEN index of 26% and FSME of 44.7%. The FSME component by itself generated £122,179 which formed a cushion against the reduction of the SEN pupil allocation from £1216 to £240. The maximum absolute percentage variances are not as high for secondary schools due to less variance in the NSSEN budgets and numbers on roll. The mean absolute percentage variance and the mean absolute budget variance was higher under Model 2.

The three budget allocation models will now be compared with the present SEN index, in terms of the criteria for evaluation described in Chapter Four. All four models (i.e. the present index and Models 1 to 3) meet the criteria of simplicity and efficiency, in terms of the professional time needed to collate the information necessary to construct the formula. With reference to the criteria of effectiveness lack of LEA documentation about the purpose of the additional funding under the present SEN index, makes this The design of Models 1 to 3 to include the three distinct difficult to evaluate. components of a SENCO allocation, a social disadvantage allocation and a SEN pupil allocation makes evaluation of the principle of effectiveness much easier. It could be argued that the Hill and Ross's indicator property of parsimony is not met by having factors to cover both social disadvantage and individual SEN pupils. However the case to include a social disadvantage indicator gains weight if the LEA is clear that its purpose should be targeted at the school level. The evidence suggests that social disadvantage is not a good predictor of educational achievement at the pupil level. (The correlation between free school meals entitlement and CAT falls to 0.20 at an individual pupil level, Marsh, 1995a).

A high priority was attached to the principle of stability of funding within *Whiteshire*. A valid method to compare the stability of the budget models is to use the mean absolute percentage variance. Table 8.28 shows that for primary schools the mean absolute

percentage variance between Models 1 and 2 with the present SEN index is similar i.e. 17.0% and 17.6%. The same calculation for secondary schools (see Table 8.29) gives a mean absolute percentage variance of 3.1% for Model 1 and 8.1% for Model 2. Policy makers are then left with the difficult value decision of whether the percentage budget variance is 'reasonable' and can be accommodated by transition arrangements.

It has been argued throughout this thesis that the criteria of accountability and cost containment are not met by the present SEN index. The use of differential funding arrangements in the SEN pupil allocation gives the potential for a higher level of accountability to be achieved by Model 3. Also the principles of responsiveness to needs and vertical equity will be better met. There is a better opportunity for cost containment to take place by the prevention of stage four assessments, as a high level of resource (\pounds 1600) is already being provided for those stage 3 pupils with the greatest needs. The advantages of Model 3 will be developed further in Model 4 which will be described in detail in Chapter Nine.

CHAPTER NINE FURTHER CONSIDERATIONS OF THE SEN FORMULA

In the previous chapter a design structure has been proposed which has three components: a SENCO allocation, a social disadvantage allocation and an individual SEN pupil allocation. Three allocation models were examined. This chapter will consider the fourth subsidiary aim i.e. to examine different types of formula which could be used across both the primary and secondary phases and to simulate the effects on schools' budgets. The chapter will first consider a set of 'technical' evaluations and then propose a further allocation model, Model 4. The Key Questions to be studied are listed as 10 to 12. These are:

- should National Curriculum Assessments replace other standardised educational tests in the formula on the grounds of validity, dependability and reliability?
- should recognition be made within the formula for different types of SEN e.g. specific learning difficulties and emotional and/or behavioural difficulties?
- what is the impact on school budgets using different special educational needs indicators?

9.1 THE POTENTIAL USE OF NATIONAL CURRICULUM ASSESSMENT INFORMATION

The use of National Curriculum Assessment information, widely cited in the Code of Practice's criteria for deciding to make a statutory assessment offers an efficient method of obtaining data at the individual pupil level. Allocation Model 4 explores the potential use of National Curriculum Assessments (NCA) to fund pupils whose performance at Formula Funding and Special Educational Needs 302 Chapter Nine OU/PhD/AJM/April 1998 the end of key stage tests gives cause for concern. Year 2 NCA results are used to fund Key Stage 2 (KS2) pupils, Year 6 KS2 NCA are used to illustrate the impact of funding Key Stage 3 pupils and Year 9 KS3 NCA are used to fund Key Stage 4 pupils. It is likely that NCA information will continue to provide a rich source of data and will be considered for wider use in funding arrangements, both at a local and at a national level. However there are objections to the use of NCA and other attainment tests e.g. the use of the present 6+ screening tests.

Firstly, attainment test scores are under the direct effects of schools, and schools could be penalised financially for improving their results if the information is used for funding purposes. This effect has been referred to as the 'resource paradox'. Although this argument is reasonable, it should perhaps not carry the day. The publication of NCA performance information and open enrolment will provide a strong deterrent to the danger of "rewarding failure" in schools. It may also be worth considering incentive systems of extra cash enhancements on top the 'normal' allowance for schools obtaining exceptional results. This policy would help to counteract the effect of the 'resource paradox' or 'perverse incentives'.

The second main objection relates to the use of National Curriculum Assessment information and to the questions of administration, reliability and dependability. Serious doubts were expressed by teacher associations about the conduct and administration of the National Curriculum Assessment arrangements when they were first completed in 1992. This concern led the Government to invite Sir Ron Dearing to chair a review of the manageability of the National Curriculum and assessment framework during 1993. Despite this review, teacher association action took place with regard to the administration of Key Stage 1 and Key Stage 3 NCA in 1993 and 1994 which led to a low response rate by schools in *Whiteshire* and throughout the country. However there now appears to be general agreement and acceptance by schools about the assessment arrangements. In 1996 the Assessment Support Team in *Whiteshire* had received returns close to a 100% response rate from schools at Key Stage 1 and 3 and a 85% response rate from schools at Key Stage 2. The lower rate for KS2 seemed to reflect the concern expressed by primary schools about the government's proposal to publish performance tables for Year 6 pupils.

There has also been considerable debate at a national level surrounding the use and interpretation of NCA results including the issues of reliability and dependability. Critics will argue that to reduce the provision of SEN to merely depend upon whether a child is functioning adequately or not in class work as determined by the National Curriculum ignores school context variables such as teacher effectiveness, the richness of school experience, socialisation and personal development. Nevertheless the alternative view would hold that NCA is a much better indicator of individual pupil progress than many of the other proxy indicators which have been used by LEAs. Furthermore National Curriculum Assessment information would better enable interventions to be developed, as stressed in the Code of Practice, than with the present Y2 screening tests and Y7 Cognitive Abilities Test.

Similarly, another objection to the use of NCA or other attainment tests are on the grounds that the criteria of low performance does not necessarily equate with the full

continuum of pupils who are experiencing learning difficulties e.g. specific learning difficulties (SpLD) or emotional and/or behavioural difficulties (EBD). Section 9.3 will consider a 'planned place element', analogous to the LMSS formula whereby a proportion of the resources could be allocated to provide for categories of SEN where there is some evidence that they fall randomly across the school population.

In Chapter 8 under concern 5 it has been argued that a better proxy indicator of need for funding pupils within Key Stage 1 is to use social disadvantage data e.g. free school meals entitlement. I shall now examine the potential use of National Curriculum Assessments (NCA) for funding Key Stage 2, Key Stage 3 and Key Stage 4 pupils.

9.1.1 FUNDING FOR KEY STAGE 2 PUPILS

The 1996 NCA arrangements for Key Stage 1 included tests/tasks in Reading, Writing and Mathematics and Teacher assessments in each of the core subjects of English, Mathematics and Science. The ranges are from working towards level 1 (scored 0) to level 4 (scored 4). The A-C gradings within the level 2 tests for Reading, Writing and Mathematics have all been scored as 2 for the purposes of the model. In total, fourteen individual attainment target levels have been recorded for each pupil (10 teacher assessments and 4 test/tasks). Using Hill and Ross's parsimony property of AEN indicators, Model 4 will propose to use six of these individual levels to be aggregated for each pupil i.e. the tests/tasks for Reading, Writing and Mathematics and the three overall teacher assessed subject levels for each of the core subjects of English, Mathematics and Science. Table 9.1 illustrates the Year 2 cumulative percentage for pupils with low performance for the six aggregated scores (full range 0 to 24) for years 1995 and 1996.

Table 9.11995 and 1996 National Curriculum Assessments : Cumulative
Percentage of Pupils with Low Performance in Whiteshire at the
end of Key Stage 1 (1995 n=18,547 pupils, 1996 n=17,479 pupils)

Teacher Assessment and Test/Task Aggregated Score	Ne of pupils 1995	Cumulative Percentage 1995 %	No of pupils 1996	Cumulative Percentage 1996 %
0	36	0.2	92	0.5
1	32	0.4	83	1.0
2	23	0.5	97	1.6
3	62	0.8	162	2.5
4	86	1.3	139	3.3
5	206	2.4	344	5.2
6	1149	9.6	693	9.2
7	820	13.0	641	12.9
8	645	16.5	572	16.2
9	869	21.2	847	21.0
10	903	26.0	698	25.0

Note: The Teacher Assessment and Test/Task Aggregated score (TATTagg) is calculated by aggregating the test/task score for Reading, Writing and Mathematics and the overall teacher assessed subject levels for English, Mathematics and Science.

9.1.2 FURTHER CONCERNS OVER THE USE OF AGGREGATED NATIONAL CURRICULUM ASSESSMENT RESULTS

The further concern about using NCA results relates to test stability which is also one of the indicator properties used by Ross (1983). Table 9.1 exemplifies cumulative percentage differences between the two years for teacher assessment and test/task scores of 5 and below. A greater number of pupils are identified in the lowest score ranges for 1996 than in 1995. For instance 1.6 % of pupils achieved an aggregated teacher assessment and test/task score of 2 or below in 1996 compared to 0.5 % of pupils in 1995. This difference can be explained by the implementation of the recommendations from the Dearing Review in September 1995 which restructured parts of the National Curriculum. The effect was that it became more difficult for a child to attain level 1 in English than had previously been the case. In 1995 0.8 % of pupils were assessed by teachers to be working towards level 1 in English compared to 2.8 % of pupils in 1996. It is likely that further minor revisions may continue to be implemented by the government in future reviews of the NCA arrangements. It the Authority finally decide to use NCA for funding purposes then a phased introduction may prove to be advisable leading to the calculation of a rolling three or four year average for each school.

A second concern about the use of NCA is that a small number of pupils with special educational needs (approximately 0.5 %) are disapplied each year from the assessment arrangements and therefore will not have scores for calculation of an appropriate funding band. This highlights Hill and Ross's (in press) non-manipulability property. However most of these pupils will have teacher assessment scores and these could be

used as a proxy for the missing test/task information.

A third concern about the use of NCA is that the teacher assessment scores tend to be more favourable than the test/task scores and relates to Ross's 'leakage' property, see Table 9.2. The overall effect of this finding may be minimised as an aggregated total of six teacher assessment and test/task scores is proposed in Allocation Model 4. A fourth concern, also relating to 'leakage', is that the percentage of pupils achieving level 2 is relatively large (range 51% to 73%), is not of high relevance, as the funding model is mainly concerned with pupils who have low performance at the Key Stage assessments i.e. working towards level 1 or at level 1.

 Table 9.2
 1996 National Curriculum Assessments Key Stage 1 : Percentage of Pupils at each Attainment Level in Whiteshire

Teacher Assessments	W %	1 %	2 %	3 %
English	2.8	19.2	64.5	14.5
Mathematics	1.6	16.3	69.9	12.2
Science	1.2	14.8	72.0	12.0
Test/ Tasks				
Reading	3.0	19.4	51.4	26.2
Writing	5.2	15.9	73.6	5.3
Mathematics	2.6	15.3	65.9	16,2

Allocation Model 4 proposes that the teacher assessment and test/task aggregated scores are grouped together for funding purposes as indicated in Table 9.3.

Table 9.3Key Stage 2 SEN Pupil Allocation Used in Model 4 based on 1996Key Stage 1 National Curriculum Assessments

Model 4 Funding Bands	Amount per Qualifying Pupil	Teacher Assessment and Teat/Task Aggregated Score	No of Pupils	Cumulative Percentage in 1996
Band 6	£1,000	0 to 2	272	1.6
Band 7	£700	3 to 4	301	3.3
Band 8	£400	5	344	5.2
Band 9	£100	6 to 7	1,334	12.9
		8 to 21	15,228	100.0

The amount of resource per qualifying pupil for each funding band has been based on work performed by the advisory service in Kent LEA (Moore, 1995) who have suggested a funding allocation ratio of 1 : 4 : 10 for pupils at Code of Practice stages 1 to 3.

9.1.3 FUNDING FOR KEY STAGE 3 PUPILS

One of the aims of this thesis is to explore the viability of a common approach to resourcing non-statemented special educational needs across the primary and secondary sectors. If the Authority accepts the use of National Curriculum Assessment results to fund primary schools at Key Stage 2 then it would be consistent to use a similar methodology to fund Key Stage 3 pupils based on Key Stage 2 results. The main problem with this approach is the technical difficulty of tracking pupils from their primary schools to their secondary schools. At the time of writing this thesis it has only Formula Funding and Special Educational Needs 309

Chapter Nine OU/PhD/AJM/April 1998 been possible to associate approximately 60% of pupils with Key Stage 2 scores and their corresponding secondary school.

The 1996 NCA arrangements for Key Stage 2 included test/tasks and teacher assessments in English, Mathematics and Science. The ranges are from working towards level 1 (scored 0) to level 6. In total, fourteen individual attainment target levels have been recorded for each pupil (11 teacher assessments and 3 test/tasks). As with the Key Stage 1 information, Model 4 will use the 'parsimony' property to aggregate six of these individual levels for each pupil i.e. the tests/tasks and teacher assessments for each of the core subjects of English, Mathematics and Science. Table 9.4 denotes the Year 6 cumulative percentage for pupils with low performance for the six aggregated scores (full range 0 to 36) for 1996.

Table 9.41996 National Curriculum Assessments : Cumulative Percentage
of Pupils with Low Performance in Whiteshire at the end of Key
Stage 2 (n=14,814 pupils)

No of pupils	Cumulative Percentage %
136	1.0
200	2.4
107	3.2
167	4.4
162	5.6
266	7.5
324	9.9
1,249	19.0
739	24.4
858	30.6
	136 200 107 167 162 266 324 1,249 739

Table 9.5 indicates that there are similar percentages of pupils at levels W to 3 for English, Mathematics and Science which lends support to the parsimonious method of aggregation of the three teacher assessment and test/task scores.

Table 9.51996 National Curriculum Assessments Key Stage 2 : Percentage
of Pupils with Low Performance for English, Mathematics and
Science in Whiteshire

Teacher Assessments	W 9/3	1 %	2 %	3 %
English	0.1	0.6	7.1	29.4
Mathematics	0.1	0.5	6.2	29.6
Science	0.1	0.5	5.1	27.1
Test/ Tasks				
English	0.1	0.7	6.1	30.3
Mathematics	0.0	0.4	5.4	33.6
Science	0.0	0.3	4.2	29.9

Using the same system as the Key Stage 2 funding, Allocation Model 4 proposes that the teacher assessment and test/task aggregated scores are grouped together for funding Key Stage 3 pupils, see Table 9.6. The data obtained from the Assessment Support Team in *Whiteshire* does not at present specify whether the pupil was in receipt of a final or proposed statement, so a relatively high Band 6 cut-off has been used (2.4%) to allow for the omission of pupils with statements who have been double counted.

Table 9.6The Key Stage 3 SEN Pupil Allocation Used in Model 4 based on
Key Stage 2 National Curriculum Assessments

Model 4 Funding Bands	Amount per Qualifying Pupil	Teacher Assessment and Test/Task Aggregated Score	No of Pupils	Cumulative Percentage %
Band 6	£1,370	0 to 12	336	2.4
Band 7	£960	13 to 14	274	4.4
Band 8	£550	15 to 16	428	7.5
Band 9	£140	17 to 18	1,573	19.0
		19 to 34	11,140	100.0

9.1.4 FUNDING FOR KEY STAGE 4 PUPILS

The existing Secondary SEN Index does not make a specific allocation for Key Stage 4 pupils. Funding is only given on the basis of Y7 to Y9 pupils numbers. A Teachers' Staffing Working Party from *Whiteshire* in 1993 recommended that resourcing should be made available for all identified pupils with SEN in all year groups Y7 to Y11. This could be performed by either waiting until additional funds become available or by a redistribution of the present KS3 funds as carried out in Model 4.

The 1996 NCA arrangements for Key Stage 3 included test/tasks and teacher assessments in English, Mathematics and Science. The ranges are from working towards level 1 (scored 0) to level 8. In total, fourteen individual attainment target levels have been recorded for each pupil (11 teacher assessments and 3 test/tasks). Model 4 Formula Funding and Special Educational Needs 312

Chapter Nine OU/PhD/AJM/April 1998 will propose to use a common methodology of aggregating six of the individual levels for each pupil i.e. the tests/tasks and teacher assessments for each of the core subjects of English, Mathematics and Science. Table 9.7 shows the Year 9 cumulative percentage for pupils with low performance for the six aggregated scores (full range 0 to 48) for 1996. The data obtained from the Assessment Support Team was a sample only (n =6,083 pupils) and therefore the final cut-offs used for the funding bands may need to adjusted slightly when a full sample is available. Pupils in receipt of a final statement have been omitted from the table to avoid double counting.

Table 9.71996 National Curriculum Assessments : Cumulative Percentage
of Pupils with Low Performance in Whiteshire at the end of Key
Stage 3 (n=6,083 pupils)

Teacher Assessment and Test/Task Aggregated Score	No of pupils	Cumulative Percentage %
0 - 17	73	1.4
18	81	3.0
19	66	4.3
20	98	6.3
21	116	9.6
22	177	12.1
23	142	14.9
24	254	19.9
25	214	24.1
26	307	30.2

Table 9.8 indicates that there are similar percentages of pupils at levels W to 4 for English, Mathematics and Science which again lends support to the methodology of aggregation of the three teacher assessment and test/task scores.

Table 9.81996 National Curriculum Assessments Key Stage 3 : Percentage
of Pupils with Low Performance for English, Mathematics and
Science in Whiteshire

Teacher Assessments	W %	1 %	2 %	3	4 %
English	0.0	0.2	2.8	10.5	22.8
Mathematics	0.0	0.1	1.1	10.0	26.2
Science	0.0	0.1	0.8	10.7	27.3
Test/ Tasks					
English	0.5	0.2	2.3	11.3	24.7
Mathematics	0.2	0.1	0.7	9.9	26.7
Science	0.1	01	0.6	9.1	27.8

Using the same system as with the Key Stage 2 and Key Stage 3 funding, Model 4 proposes that the teacher assessment and test/task aggregated scores are grouped together for funding Key Stage 4 pupils, see Table 9.9.

Table 9.9The Key Stage 4 SEN Pupil Allocation Used in Model 4 based on
Key Stage 3 National Curriculum Assessments

Model 4 Funding Bands	Amount per Qualifying Pupil	Teacher Assessment and Teat/Task Aggregated Score	No of Pupils;	Cumulative Percentage %
Band 6	£1,280	0 to 17	73	1.4
Band 7	£890	18 to 19	147	4.3
Band 8	£510	20	98	6.3
Band 9	£130	21 to 24	689	19.9
		24 to 47	4,056	100.0

9.1.5 WHAT IS THE RELATIONSHIP BETWEEN THE NATIONAL CURRICULUM ASSESSMENTS (NCA) AND THE COGNITIVE ABILITIES TEST (CAT)?

A set of correlation analyses were conducted to see whether a 'NCA SEN index' would have a similar or different distribution of NSSEN pupils across schools to the 'CAT SEN index'. The correlations examined the relationship between the 1996 Key Stage 2 and Key Stage 3 results and the Cognitive Abilities Test scores at a pupil level. Tables 9.10 and 9.11 illustrate the correlations between the TATTagg for Key Stage 2 and Key Stage 3 with the three subtests from the Cognitive Abilities Test. Table 9.10Pupil level correlations between Key Stage 2 National CurriculumAssessments and Cognitive Abilities Test (n=8,251)

	Correlation
TATTagg and CATagg	0.81
TATTagg and Non Verbal CAT	0.65
TATTagg and Quantitative CAT	0.75
TATTagg and Verbal CAT	0.79

Table 9.11Pupil level correlations between Key Stage 3 National CurriculumAssessments and Cognitive Abilities Test (n=4,444)

	Correlation
TATTagg and CATagg	0.82
TATTagg and Non Verbal CAT	0.68
TATTagg and Quantitative CAT	0.75
TATTagg and Verbal CAT	0.79

Notes: TATTagg Teacher Assessment and Test/Task aggregated score CATagg Cognitive Abilities Test aggregated score

The high correlations of 0.81 and 0.82 between the TATTagg and the CATagg for Key Stage 2 and 3 provide evidence to support the progressive replacement of the Cognitive Abilities Test in order to follow a common approach to resourcing non-statemented SEN across the primary and secondary phases. The order of magnitude for the correlations increased from non-verbal to quantitative to verbal in both the KS2 and KS3 samples. This finding is in accord with Thomas and Mortimore (1996), who found that the verbal subtest score has a greater impact in predicting overall GCSE attainment than the quantitative and non-verbal score.

An implication arising from the lower correlation (0.68) between the TATTagg and the non verbal CAT is that a move to using TATTagg would favour pupils with lower demonstrated educational attainments as measured by National Curriculum Assessments rather than pupils with just low non-verbal ability. This could present more as a concern if the three CAT sub tests were used separately in the SEN Index rather than an aggregated score, since a lower TATTagg score than predicted from the nonverbal CAT would suggest 'negative' added value by the school which would then be rewarded by additional funding.

9.1.6 AN EVALUATION OF A SEN INDEX BASED ON NATIONAL CURRICULUM ASSESSMENTS

In Chapter Eight a number of desirable statistical properties of an additional educational needs indicator were cited e.g. validity, reliability, feasibility, cost, parsimony and non-manipulability (Hill and Ross, in press). Before evaluating the 'NCA Index' against these properties it is important to remind ourselves about the dangers of using the National Curriculum as a system of classification. Swann (1992) is concerned that the level descriptions may influence the grouping of children within and between schools and also the perceptions of pupils by their teachers. A similar concern could be made about the stages of assessment suggested by the Code of Practice. Chapter Three has

already concluded that the conceptualisation of SEN is much more than a reaction to NCA scores (Marsh, 1997c).

With regard to the properties of a 'NCA index', high correlations have already been reported to exist between CAT and GCSE (Thomas and Mortimore, 1994). Although the data did not allow direct comparisons to be made between KS3 results and GCSE, the data in Tables 9.10 and 9.11 supports good correlations between KS2/KS3 and CAT. This evidence upholds the validity property. Reliability is covered in the discussion about Table 9.1, and generally indicates that similar percentages of pupils score at similar NCA levels e.g. 21.2% of pupils achieved a TATTagg score of 9 in 1995 compared to 21.0% of pupils in 1996. Thirdly, although NCA results are under the direct influence of schools, the publication and reporting of the results to parents, does offer support to the property of non-manipulability, by nature of the fact that schools will wish to gain high not low scores.

Despite these reasons that we should still proceed cautiously with the potential use of National Curriculum Assessments. Yet, if the new Labour government continues to be committed to the administration of teacher assessments and tests/tasks at Key Stages 1, 2 and 3, the other indicator properties of parsimony, good feasibility and low cost may prove persuasive in the ensuing debate.

9.1.7 FURTHER RESEARCH

Regrettably it has not been possible in this thesis to perform budget modelling, for the full sample of schools, to investigate the effect of amending the KS3/4 funding from CAT to NCA. *Whiteshire* were beginning to collect this data towards the completion of the thesis as part of the value added project involving the interpretation of GCSE and KS3 scores by tracking pupils from primary to secondary schools. At the time of conducting the research it had only been possible to associate approximately 50% of pupils with Key Stage 2 scores and their corresponding secondary school (8,900 out of 17,500 Y6 pupils), and approximately 70% of pupils with Key Stage 3 scores have been matched with their corresponding secondary school (10,300 out of 15,300 Y9 pupils).

Further research involving budget modelling with a full sample of Key Stage 2 and Key Stage 3 results, would enable a more complete analysis of the impact on school budgets of using the results from National Curriculum Assessments.

9.2 THE DOUBLE FUNDING OF PUPILS WITH STATEMENTS OF SPECIAL EDUCATIONAL NEEDS

Under both the current Primary and Secondary SEN Index pupils with statements of special educational needs receive both the allocation for non-statemented SEN and the provision detailed in their statement. There has been concern expressed within *Whiteshire* about this double counting and a suggestion that the money should be recycled to enhance the overall resources for non-statemented pupils. If the double Formula Funding and Special Educational Needs 319 Chapter Nine 0U/PhD/AJM/April 1998

counting was ceased for secondary schools but not for primary schools, this would enable a more equitable primary/secondary funding balance. Another reason for not ceasing the double counting in the primary sector is the delegation of expenditure on pupils with statements in secondary schools, which has taken place from the Autumn term 1996. Additionally the percentage of pupils with statements is much higher in secondary schools (3.8%) than in primary schools (1.8%).

Tables 9.12 and 9.13 provide evidence that there is a relationship between the total number of pupils with either a final or proposed statement compared to low performance at Key Stage 1, as defined by the teacher assessment and test/task aggregated score (TATTagg).

Table 9.12Total Number of Pupils in Whiteshire with either a Final or
Proposed Statement at June 1996 compared to Low Performance
on Key Stage 1 National Curriculum Assessments

Teacher Assessment and Test/Task Aggregated Score	Total No of pupils	% pupils with either a Final or Proposed Statement	% pupils without either a Final or Proposed Statement	
0	88	44%	56%	
1	80 46%		54%	
2	93	19%	81%	
3	149	12%	88%	
4	133	20%	80%	
5	316	8%	92%	
6	644	5%	95%	
7	609	5%	95%	
8	533	1%	99%	
9	790	2%	98%	
10	636	1%	99%	
Totals	4071	6%	94%	

Table 9.12 indicates that it is more likely for a pupil with low levels of TATTagg to have a statement. Table 9.13 illustrates this finding in funding bands i.e. 76% (224 out of 293 pupils with a final or proposed statement) also have low performance at KS1 i.e. a TATTagg score of 7 or less.

Table 9.13 Total Number of Pupils with either a Final or Proposed Statement on 1996 Key Stage 1 National Curriculum Assessments compared to Funding Bands (n=16,247)

Model 4 Funding Bands	Teacher Astessment and Teat/Taak Aggregated Score	Total pupils with either a Final or Proposed Statement	Total pupils without a Final or Proposed Statement	Total Pupils With or without a Pinal or Proposed Statement	Percentage of overall total pupils at each band with either a Final or Proposed Statement (n=16,247)
Band 6	0 to 2	94	167	261	0.6%
Band 7	3 to 4	45	237	282	0.3%
Band 8	5	26	290	316	0.15%
Band 9	6 to 7	59	1,194	1253	0.35%
Sub Total	0 to 7	224	1,888	2,112	1.4%
Sub Total	8 to 21	69	14,066	14,135	0,4%
Overall Total		293	15,954	16,247	1.8%

The existence of the relationship between statements and low performance on NCA lends more support to the validity of using NCA as an indicator of special educational needs. However another word of caution is needed as low performance on NCA, of course, is not the sole criterion for a statutory stage 4 assessment. Table 9.13 shows that a significant proportion of pupils with low NCA performance (1 in 4 or 24%) do not have a statement at Key Stage 1. Unfortunately the data did not allow a comparison to be made at Key Stages 2 or 3. As pupils 'progress' through the Code of Practice stages and through the Key Stages then one might expect the percentage of 'non-statemented' pupils with low performance at NCA to reduce from 24% at KS2 and further reduce at

9.3 PUPILS EXPERIENCING SPECIFIC LEARNING DIFFICULTIES

It has been argued that one weakness of the present SEN index is that there is no explicit acknowledgement and funding for pupils with Specific Learning Difficulties (SpLD) or dyslexia. This section will attempt to identify a method whereby resources can be allocated for SpLD pupils.

The conceptualisation of SpLD has gained a high profile over the years since the introduction of the 1981 Education Act. The number of pupils identified as experiencing specific learning difficulties (SpLD) or dyslexia in *Whiteshire* is now a significant proportion of the total number of statements. Table 9.14 indicates that 28 per cent of all statements are for SpLD and that there has been an marked increase in the number of SpLD statements over the last three years (27%).

Table 9.14The Percentage of Pupils with Statements of SEN by Type of
Need in Whiteshire at March 1997

Type of Need	% of Total Statements	% Variation April 1994 to March 1997
MLD	36.1 %	8 %
SpLD	27.6 %	27 %
EBD	12.7 %	66 %
SLD	7.6 %	0%
PD	7.5 %	43 %
VI/HI	4.0 %	- 6 %
Other	4.5 %	27 %
County	100 %	20 %

Formula Funding and Special Educational Needs Chapter Nine OU/PhD/AJM/April 1998 At a national level SpLD has also had a high profile. The proportion of appeals registered by the Special Needs Tribunal, where the main need was literacy (including specific learning difficulties), approached 40 % in 1996/97 for the third consecutive year (Special Educational Needs Tribunal, 1997).

Before examining the more technical details of a possible way forward to identify SpLD pupils, firstly consideration will be given to the problem of definition. The Code of Practice notes that:

Some children may have significant difficulties in reading, writing, spelling or manipulating number which are not typical of their general level of performance (para. 3:60).

There has been evidence of the increasingly widespread adoption of discrepancy definitions of specific learning difficulties by LEAs.

The concept of specific learning difficulties, with which those who work in LEAs are more comfortable, is used when a child has an attainment level in some specific area of learning which is below what one would expect from his/her functioning in other spheres such as language, reasoning or practical skills. Where reading is concerned it is usually applied to a child whose score on a standardised reading test is below his/her score on an intelligence test by a specific amount (Presland, 1991).

The Authority has adopted this concept of underachievement and use a discrepancy level at the 1st percentile, to assist in the determination whether the criteria have been met for a statutory assessment.

9.3.1 THE USE OF NATIONAL CURRICULUM CORE SUBJECT DISCREPANCIES AND ATTAINMENT TEST SCORES

As part of the recorded evidence which the LEA should seek in relation to pupils experiencing specific learning difficulties, the Code of Practice asks whether:

there are extreme discrepancies between attainment in different core subjects of the National Curriculum or within one core subject, particularly English. LEAs should be especially alert if there is evidence that, within the core subject of English, a child has attained average or high average levels in Attainment Target 1, speaking and listening, but significantly lower levels in AT2, reading, and/or AT3, writing (para 3:61).

A number of LEAs are now beginning to use National Curriculum core subject discrepancies as part of their criteria for deciding when to make a statutory assessment. However there does not appear to be any consensus as to the value of the discrepancy to be used. The DfEE booklets detailing the results of the National Curriculum Assessment at Key Stages 1, 2 and 3 do not record any discrepancy statistics to assist in 'benchmarking'. Until the 1996 assessments were completed, LEAs were unable to perform their own analyses, as the Key Stage 2 and Key Stage 3 data had been collected by local examination boards at a school level rather than at a pupil level.

Table 9.15 shows an analysis of the 1996 National Curriculum Assessments in *Whiteshire*. The core subjects of English, Mathematics and Science have been used. The general subject level teacher assessments have been used at Key Stage 1 in each of the core subjects, for comparison purposes with the test/tasks results in the core subjects at KS2 and KS3. At Key Stage 1, a one level discrepancy between the Teacher Assessments in Maths or Science and English is seen in 19.5 % of the Year 2

population, whereas 0.4 % of pupils exhibit a 2 level discrepancy. At Key Stage 2, 1.5 % of pupils show a 2 level discrepancy between the tests/tasks in Maths or Science and English. At Key Stage 3, 1.0% of pupils show a 3 level discrepancy between the tests/tasks in Maths or Science and English.

Table 9.151996NationalCurriculumAssessmentCoreSubjectDiscrepanciesbetweenMathsorScienceandEnglishinWhiteshire

Key Stage	1 Level D	iscrepancy	2 Level D	serepeacy	3 Level D	встерансу
n=sample size	No of pupils	%	No of pupils	%	No of pupils	%
1 n=17,675	3,458	19.5 %	68	0.4 %		
2 n=14,932	4,326	29.0 %	218	1.5 %	8	0.1 %
3 n=10,116			706	7.0 %	101	1.0 %

Note: examples of one level discrepancies = En1 Ma1 Sc2 or En1 Ma2 Sc1; examples of two level discrepancies = En1 Ma3 Sc2 or En2 Ma3 Sc4; examples of three level discrepancies = En3 Ma5 Sc6 or En2 Ma5 Sc3.

The implication arising from the results in Table 9.15 is that NCA discrepancies may be of potential use to the Authority to supplement the criteria for deciding to make a statutory assessment or cease a statement. National Curriculum Assessment discrepancies could be used to determine particular centile points to enable resourcing decisions to be made.

Coopers and Lybrand (1996a) have commented on the finding that the distribution of pupils experiencing SpLD appear to fall randomly across the population. If this assertion is valid then any pupil-specific funding could be provided for out of the baseline element or from the AWPU pupil led component. Table 9.16 and Figure 1 provide evidence that NCA discrepancies fall randomly across the school population in *Whiteshire*.

Table 9.161996 National Curriculum Assessment Key Stage 2 and KeyStage 3 Core Subject Discrepancies between Maths or Scienceand English by Education Area

Area	Percentage of Pupils with 2 level	Primary FSME	Percentage of Pupils with 3 level	Secondary FSME
	discrepancies at Key Stage 2	**	discrepancies at Key Stage 3	*
	(n=213)		(1#101)	
1	1.8 %	19.9%	0.7 %	18.2%
2	1.5 %	26.1%	0.6%	21.2%
3	1.1 %	22.8%	1.5 %	18.6%
4	1.3 %	22.4%	1.0 %	16.8%
5	1.4 %	29.4%	1.1 %	28.4%
6	1.7 %	27.5%	1.0 %	24.7%
County	1.5 %	25.0%	1.0 %	21.9%

If there is a trend in the incidence of SpLD, then it might be expected to see similar proportions of SpLD for each education areas at both Key Stages 2 and 3. That is to say, an education area with a high proportion of pupils with discrepancies at Key Stage 2 would also be expected to have a high proportion at Key Stage 3. Table 9.16 confirms that there is no positive trend (r = -0.74) and interestingly an inverse distribution is seen across education areas e.g. Area 1 has the highest percentage at KS2 (1.8%) but the second lowest percentage at KS3 (0.7%); Area 3 has the lowest percentage at KS2 (1.1%) but the highest percentage at KS3 (1.5%). Table 9.16 also shows that there is no

relationship between core subject discrepancies and free school meals entitlement (FSME) (r=0.0 for both primary and secondary sectors).

If the evidence from Table 9.16 is accepted that SpLD falls randomly across the population, then the 'hidden 5%' from the AWPU element could be used for allocating resources, analogous to the 'planned place' element of the Special Schools LMS formula. The Authority may wish to make a clear proposal to schools specifying that up to 5 per cent of the AWPU pupil-led part of the formula should be allocated for SEN pupils without statements.

9.4 PUPILS IDENTIFIED AS HAVING EMOTIONAL AND/OR BEHAVIOURAL DIFFICULTIES

There is a well established body of evidence supported by the Elton Report (DES, 1989) that difficult behaviour is at least as much a function of the school, its ethos, organisation and curriculum, together with the teacher and their classroom management and teaching style, as it is about factors idiosyncratic to the child. Notwithstanding this evidence it has been asserted that the child still frequently continues to be the sole focus of the assessment procedures with the inevitable problem that the child's needs are individualised as the 'problem' (Armstrong, 1995).

The Code of Practice reinforces the notion of the child as the 'problem' by recommending to LEAs that they should seek:

...clear, recorded evidence of both the child's academic attainment and the nature of his or her emotional and behavioural difficulties (para. 3:68). Formula Funding and Special Educational Needs 328 Chapter Nine 0U/PhD/AJM/April 1998 However the Code also attempts to provide contextualisation by stating that the LEA:

...should consider the action taken by the school and others to meet the child's needs (para. 3:69).

A paper by Wood, Gott and James (1993) provides a good account of the issues surrounding the identification of children identified as having emotional and/or behavioural difficulties (EBD). The authors argue for a process model rather than specifying particular criteria and have produced an aide-memoire to assist in the professional assessment of such children. Emphasis is given to the child's responses to different levels of intervention. The Authority have adopted the model as part of the criteria for deciding when to make a statutory assessment.

Coopers and Lybrand reported on evidence that children with emotional and/or behavioural difficulties are more likely to be found in schools in areas of social deprivation. This assertion was tested by analysis of data collected for the 1993 review of the Secondary SEN Index. Details of this 'pilot' research study have been reported elsewhere (Marsh, 1995a). The overall sample was 1104 Y10 pupils who were taken from a representative sample of 10 schools in terms of school size, percentage of pupils with low scores on an educational test and the percentage of pupils entitled to free school meals.

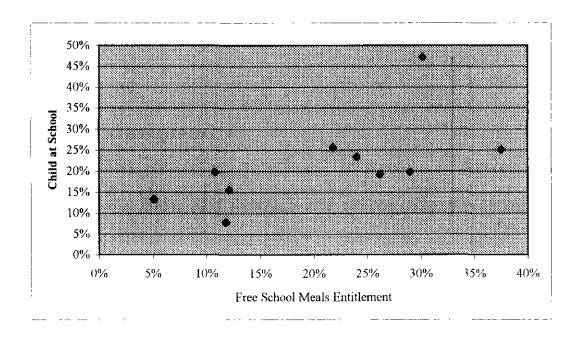
The survey included information about free school meals entitlement (FSME) and the completion of a *Child at School* (CAS) behaviour observation schedule by teachers. Table 9.17 shows a summary of the data at a school level. Figure 1 depicts a scatterplot.

School	No on Boll Y7-Y11	No in Sample Y10	CATagg over 5 years (%)	FSME (%)	Percentage of pupils with high rating on Child at School
A	903	138	24.1 %	29.0 %	19.8 %
В	998	174	21.8 %	24.0 %	23.4 %
С	867	141	23.3 %	12.1 %	15.6 %
D	414	64	36.4 %	37.5 %	25.0 %
E	655	102	9.4 %	11.8 %	7.8 %
F	588	98	13.1 %	5.1 %	13.3 %
G	1008	145	35.1 %	26.2 %	19.3 %
Н	402	53	36.0 %	30.2 %	47.2 %
I	614	111	17.7 %	10.8 %	19.8 %
J	475	78	19.5 %	21.8 %	25.6 %
Total	6924	1104	23.7 %	20.2 %	20.0 %
Average 101			21.5%	19.1 %	
schools SD			10,0	12.8	

Table 9.17Summary of Data used in the pilot study, reported at the School
Level (n=1104 pupils)

Note: The Child at School schedule (Kysel et al. 1983) consisted of 9 statements which were rated from 1 to 5 by teacher judgement. The range of scores was from 9 (well adjusted) to 45 (poorly adjusted). A cut off of 26 and above was used to select pupils who were reported by teachers to be experiencing behaviour difficulties. The cut off of 26 was used to select 20 per cent of overall pupils.

Figure 1 The Relationship between Free School Meals Entitlement and Behaviour (n=1104)



There is a significant correlation of 0.60 between FSME and a high score on the CAS at a school level. This result supports the view that there is a relationship between behaviour and social disadvantage. The important point of this research finding is that it is not a casual connection which is being highlighted, but rather that such a distribution exists. There is also a body of research evidence from other studies, to support the view that low educational achievement and poor spelling is a regular feature of pupils who present behaviour difficulties in school.

The issue of providing funding for pupils expressing EBD is highly complex. The conclusion reached in this section is that providing an indicator of EBD in the formula

would be inadvisable as it would be open to manipulation by schools. The use of a budget allocation model comprising of a balance of formula elements for social disadvantage and low educational achievement, may 'de facto' take account of the resource problems posed by pupils identified as experiencing behaviour difficulties in school.

9.5 ALLOCATION MODEL 4

The design of a further SEN formula is now outlined (Allocation Model 4) which builds on the previous three models. Table 9.18 illustrates the main points of Allocation Model 4. In summary these are:

- Four bands to be used for the SENCO allocation.
- Four bands to be used for the social disadvantage allocation based on the percentage of pupils entitled to free school meals. The total allocation for social disadvantage to be set at 25% of the primary and secondary non-statemented budget.
- Free school meals entitlement to be used as a proxy indicator of learning difficulties for Key Stage 1. Baseline Assessment information may provide a better method in future reviews of the SEN Index.
- National Curriculum Assessments to be used for the SEN pupil allocation in each of the Key Stages 2, 3 and 4 to be phased in over a transition period.
- Secondary funding to be split between the non-statemented SEN component (£7.9 million) and the Curriculum Related Staffing component (£4.4 million).

Table 9.18 Illustration of Allocation Model 4

	Factor Used	Amonut per qualifying popil	Altocation to s 200 place primery school	Total allocation to primary acheois	Alicention to a 750 place 97.V11 accurdary school	Total allocation to secondary schools
SENCO	Pupil Nos	£750 to £3,000	£1,500	£0.8 million	£3,000	£0.3 million
Allocation	4 Bands				<u> </u>	63.0
Social	% FSME	Pri £30 to £120	£3,000	£2.4 million	£15,675	£2.0 million
Disadvantage	4 Bands	Sec £45 to £190	64.600	(0 , 0, 11)		
SEN Pupil Allocation KS1	FSME	£200	£4,600	£2.8 million		
SEN Pupil Allocation KS2	4 Bands KS1 NCA	£100 to £1000	£4,100	£3.6 million		
SEN Pupil Allocation KS3 (Present)	Y7 CAT	£355			£33,000	£3.4 million
SEN Pupil Allocation KS3 (Future)	4 Bands KS2 NCA	£140 to £1370			£35,670	£3.4 million
SEN Pupil Allocation KS4 (Present)	Y7 CAT	£355			£21,700	£2.2 million
SEN Pupil Allocation KS4 (Future)	4 Bands KS3 NCA	£130 to £1280			£21,900	£2.2 million
Allocation under Model 4 less CBS Allocation			£14,200	£9.6 million	£75,245	£7.9 million
+ CRS Allocation	Y7 CAT	£460	N/A	N/A	+ 541,400= £117,645	£4.4 million
Totals under present SEN Index			£15,228	£9.6 million	£109,440	£12.3 million

 Notes :
 NCA
 National Curriculum Assessments

 FSME
 Free School Meal Entitlement

 CAT
 Cognitive Abilities Test (NFER-Nelson)

Worked examples for Model 4 are shown below in Tables 9.19 and 9.20 for average sized schools in *Whiteshire*. The mean percentage of qualifying pupils have been used for calculation purposes i.e. 25% FSME for primary and 22% for secondary, and KS1, KS2 and KS3 National Curriculum Assessments within the bands shown in Tables 9.3,

9.6 and 9.9.

Formula Funding and Special Educational Needs Chapter Nine OU/PhD/AJM/April 1998

Table 9.19	Allocation under Model 4 for a 200 place primary school with 25%
	FSME

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation Band 2 see Table 9.7	N/A	£1,500 per school	200	£ 1,500
Social Disadvantage Band 3 see Table 9.13	25%	£60	50	£ 3,000
SEN Pupil Allocation KS1 (90 pupils) based on FSME	25%	£200	23	£ 4,600
SEN Pupil Allocation KS2 (110 pupils) based on NCA see Table 9.3				
Band 6	2%	£1,000	2	£ 2,000
Band 7	2%	£ 700	2	£ 1,400
Band 8	2%	£ 400	2	£ 800
Band 9	8%	£ 100	9	£ 900
Total				£14,200
Total under present arrangements				£15,228

Formula Component	Percentage of pupils	Amount per qualifying pupil	No of pupils	Allocation
SENCO Allocation Band 4 see Table 9.7	N/A	£3,000 per school	N/A	£ 3,000
Social Disadvantage Band 3 see Table 9.13	22%	£95	165	£ 15,675
SEN Pupil Allocation KS3 only (450 pupils) based on NCA see Table 9.6				
Band 6	2%	£1,370	9	£12,330
Band 7	2%	£ 960	9	£ 8,640
Band 8	3%	£ 550	14	£ 7,700
Band 9	11%	£ 140	50	£ 7,000
SEN Pupil Allocation KS4 only (300 pupils) based on NCA see Table 9.9				
Band 6	1.5%	£1,280	4.5	£ 5,760
Band 7	3%	£ 890	9	£ 8,010
Band 8	2%	£ 510	6	£ 3,060
Band 9	13%	£ 130	39	£ 5,070
Total				£76,245
Add CRS Allocation based on KS3 (450 pupils)	20%	£460	90	£ 41,400
Overall Total				£117,645
Total under present arrangements				£109,440

Table 9.20Allocation under Model 4 for a 750 place secondary school with
22% FSME

Table 9.19 shows that an 200 place primary school with 'average' component scores under Model 4 would lose $\pounds 1,028$ (6.7%) compared to the allocation under the present arrangements i.e. $\pounds 15,228$. Table 9.20 illustrates that a 750 place secondary school with

'average' component scores under Model 4 would gain £8,205 (7.5%) compared to the present SEN index i.e. £109,440.

Budget modelling was then conducted for all primary and secondary schools. It was not possible to implement the SEN pupil allocation at KS3 and KS4 based on National Curriculum Assessment information (labelled 'future' in Table 9.18), as the data was not available at a school level for all secondary schools. Therefore in order to calculate a NSSEN budget for all schools the Y7 CAT score was used instead (labelled 'present' in Table 9.18).

9.6 SUMMARY

Table 9.21 provides a summary of the 'winners' and 'losers' under Model Allocation 4 for all primary schools.

Table 9.21 Model 4 : Non-Statemented SEN Budget Differences for Primary Schools

Budget Differences	Winners	Losers	
more than £10,000	10	14	
£5,000 to £10,000	16	31	
£2,500 to £5,000	76	74	
less than £2,500	243	128	
Total	345	247	
Maximum Gain	+£28,121		
Maximum Loss	-£20,281		
Maximum absolute % variance	1,749%		
Mean absolute % variance	17.3%		
Mean absolute budget variance	2,8	09	

The maximum gain under Model 4 was higher than under Models 1 and 2 i.e. \pm 28,121 compared to £8,873 under Model 1 and £17,847 under Model 2. The maximum loss under Model 4 for primary schools was lower than for Models 1 and 2 i.e. \pm 20,281 compared to \pm 20,934 under Model 1 and \pm 25,648 under Model 2. It could be argued that the principle of stability of funding is met under Model 4 as over 60% of primary schools experience NSSEN budget differences of less than £2,500. The mean absolute percentage variance was in the same order of magnitude under Model 4 i.e. 17.3% compared to 17.0% under Model 1 and 17.6% under Model 2 (see Table 9.26). However as explained in Chapter Eight, policy makers will then have to make the value decision of whether the percentage budget variance is 'reasonable' and can be accommodated by transition arrangements.

Formula Funding and Special Educational Needs Chapter Nine OU/PhD/AJM/April 1998 The maximum absolute percentage variance is high again for primary schools, as it is under Models 1 and 2, due to the SENCO allocation being available to schools which previously had very low NSSEN budgets. For example, under Model 4 the school with the maximum absolute variance of 1,749 % has a number on roll of 29, a SEN index of 3% and a current NSSEN budget of £55. The SENCO allocation by itself, for this small school generated an increase in the budget of £750 and the total NSSEN budget increased to £962. The correlation between the current SEN Index percentage and the budget change percentage from the existing allocation model to Model 4 is -0.45, suggesting that schools with low special needs would benefit the most in percentage terms for the reason mentioned above. Of the top 50 schools with the greatest percentage budget increase, the highest SEN percentage of any of the schools is 12.4% compared to the LEA primary average of 31%.

Table 9.22 now provides a summary of the 'winners' and 'losers' under Model Allocation 4 for all secondary schools.

Table 9.22 Model 4:Non-Statemented SEN Budget Differences for Secondary Schools

Budget Differences	Winners	Losers	
more than £20,000	12	6	
£10,000 to £20,000	7	21	
less than £10,000	18	34	
Total	37	61	
Maximum Gain	+£60,745		
Maximum Loss	-£50,212		
Maximum absolute % variance	52.0%		
Mean absolute % variance	11.2%		
Mean absolute budget variance	14,076		

It must be emphasised again that it has not been possible to perform budget modelling for the SEN pupil allocation in Model 4 based on National Curriculum Assessment (NCA) information at KS2 and KS3. Cognitive Abilities Test information has been used instead. Therefore the summary of the budget variances in Table 9.22 may need to be amended when the NCA data does become available. For the present, the maximum gain or loss under Model 4 are both higher than under Models 1 and 2 (see Table 9.27 for comparison). However over 50% of secondary schools experience NSSEN budget differences of less than £10,000. The mean absolute percentage budget variance under Model 4 is 11.2% compared to 3.1% under Model 1 and 9.1% under Model 2. As with the primary schools, the decision is now left to education officers to decide whether a potential budget variance of 11% can be justified. The maximum absolute percentage variance (52.0%) is higher than it is under Models 1 and 2. One reason for this is that a historical correction factor exists for schools with low SEN percentages which were formally grammar schools. The correction factor is not transparent in the formula and is known colloquially within the LEA as the 'fiddle factor'. It was inserted in the formula to protect pupil:teacher ratios in 'grammar' schools when the curriculum related staffing policy came into effect in 1986. Without the 'fiddle factor', schools which were previously designated grammar schools would have suffered significant budget losses. For example, under Model 4 the school with the maximum absolute variance of 52% has a number on roll of 997, a SEN index of 5% and a current NSSEN budget of $\pounds 84,372$. It can be seen by comparison to Table 9.18 that the NSSEN is grossly inflated from an estimated $\pounds 36,480$ (i.e. 5% of KS3 pupils (600) *£1,216). Under Model 4, which does not include the 'fiddle factor', the school's NSSEN budget share is decreased to $\pounds 40,483$.

The correlation between the current SEN Index percentage and the budget change percentage from the existing allocation model to Model 4 is 0.48, suggesting that schools with high special needs would benefit the most in percentage terms. Of the top 10 schools with the greatest percentage budget increase, the average CAT percentage is 34.4 % compared to the LEA average of 20.5 %.

In summary, this chapter has built on the evidence obtained from Chapter Eight to propose an improved NSSEN formula, termed Model 4. This budget allocation model is a development of Model 3, previously described in Chapter Eight which has already been shown to better meet the criteria for evaluation of a formula than the existing SEN index. The main advantages for Model 4 include:

- a common approach (i.e. primary and secondary) to resourcing non-statemented special educational needs could be accomplished by the use of national curriculum assessments;
- b) a consistent approach to resourcing throughout the continuum of SEN could be achieved by the application of differential funding at bands 6 to 9, which offer an extension to the five funding bands used in the local management of special schools;
- c) the research evidence suggests that specific formula elements for SpLD and EBD are not necessary. SpLD could be acknowledged by the use of the 'hidden 5%' within the pupil-led AWPU component. A balance of formula elements for social disadvantage and low educational achievement, may 'de facto' take account of the resource problems posed by pupils identified as having behaviour difficulties in school.

CHAPTER TEN SUMMARY AND CONCLUSIONS

The issues surrounding the area of special educational needs and formula funding have been found in this research to be highly complex. This concluding chapter will present the case that a well designed formula can be a key instrument of policy for Local Education Authorities (LEAs), especially within the areas of resource allocation and resource management. The first section will make reference to the aims and to the main points arising from the key questions. The second section will return to the theme of the relationship between research and policy making and assess the contribution of this research in relation to its policy making context.

10.1 SUMMARY OF THE MAIN POINTS ARISING FROM THE AIMS AND KEY QUESTIONS

10.1.1 FIRST SUBSIDIARY AIM

Key Questions 1 to 3 map onto the first subsidiary aim of this thesis which is to investigate how the purposes underlying differential funding for special educational needs affect the rules or principles for allocation embodied in a funding formula (see again Table 1.1).

Key Question 1. How does the conceptualisation of special educational needs impact upon policy within Local Education Authorities? Key Question 2. What contradictions and tensions are apparent when the purposes of providing additional funding for special educational needs are examined?

Key Question 3. What principles or criteria should be considered when evaluating a funding formula and how do they relate to the purpose of the additional funding?

A major theme of this research has been the conceptualisation of special educational needs presented as three policy discourse areas (Galloway, Armstrong and Tomlinson, 1994). Galloway et al. contend that the 1988 Education Act was premised on the 'school failure' discourse whereby the 'problem' was seen as poor teaching and outdated ideology. Following the general election in May 1997 there was an opportunity for the new government to change the previous stance in the White Paper *Excellence in Schools* (DfEE, 1997d). However as Hattersley (1997) has already pointed out the previous 'school failure' discourse again appears to be have been followed.

At an individual LEA level, Galloway et al.'s first two policy discourses are the most important and it should be borne in mind that they are not mutually exclusive. Local Management of Schools, with its emphasis on age weighted pupil units, and the Code of Practice which has stressed the importance of individual education plans, have both reinforced the notion of 'individualism' and have driven LEAs further towards the discourse of the special needs pupil. It could be argued that one strategy for raising school effectiveness is for teachers to be more aware of the learning needs and progress of pupils as individuals and to use assessment and recording systems to assist in this. In general though I would support the policy drive by LEAs to move away from the special needs discourse and more towards the school and teacher effectiveness discourse, however this is unlikely to happen within the present legislation. Indeed with the increasing numbers of statements, individualism seems to be more entrenched than ever. The Green Paper *Excellence for all Children* (DfEE, 1997e) mentions that a revised version of the Code of Practice is likely to be in place by 1999. However the Green Paper essentially builds on the 1994 version of the Code of Practice with its emphasis on stages of assessment for individual pupils experiencing special educational needs and individual education plans.

The notion of individualism is given greater urgency when the purpose of providing additional resources is considered. It has been argued that the majority of LEAs are unclear about the definition of special educational needs and about the overlap between SEN and social deprivation. Two main purposes for providing additional resources have been examined i.e. to raise achievement and to compensate for social disadvantage. If an LEA considers that a focus on educational outcomes should be the main purpose, then the following considerations are important. Funds should be distributed to meet the needs of individual pupils thereby strengthening the hold of the 'special needs pupil' discourse. There should be differential costs for different SENs and there should be accountability of SEN resources. On the other hand if an LEA wishes to develop the 'school and teacher effectiveness' policy discourse and provide a focus on equity, then the use of an index of social disadvantage to fund schools might be justified on the grounds that this readily available information is well correlated with educational achievement data. Also policy makers may wish to deal with the issue of compensatory resourcing for social disadvantage independently from low educational achievement.

The principles or criteria to be considered when evaluating a funding formula are scrutinised in Key Question 3 (Chapter Four). I shall now provide a summary of how the principles relate to the present SEN Index in Whiteshire (described in Chapter Eight) and to the recommendations proposed in Budget Allocation Model 4 (see Chapter Nine).

Table 10.1 Evaluation of Whiteshire's Present SEN Index and Budget Allocation Model 4

Principle	Pres	Budget Allocation Model 4	
	SEN Pupil Allocation	Social Disadvantage	
Simplicity	3	3	3
Equity	2	2	3
Effectiveness	2	1	3
Responsiveness to Needs	1	1	3
Efficiency	1	3	3
Stability of Funding	3	3	2
Cost Containment	1	3	2
Accountability	1	1	3
Total	14	17	22

Note :

3

- criterion satisfied -
- criterion partly satisfied 2 -1
 - criterion not satisfied -

Formula Funding and Special Educational Needs Chapter Ten OU/PhD/AJM/April 1998

Table 10.1 illustrates a simple scoring system to assist in the comparison between the models. Allocation Model 4 is shown to achieve a higher score than either the existing SEN pupil allocation or the social disadvantage allocation. Both the present SEN Index and Model 4 meet the criterion of simplicity in that the formulae can be readily understood and there is transparency about the source of the data which is used. The criterion of equity is a politically sensitive issue and also an extremely complex issue because of the different conceptions and definitions of equity (see Chapter Four). This principle is also important as the LEA's response to it will determine which policy discourse is emphasised and which is to be the main purpose of the additional funding. The purpose of Whiteshire's present SEN Index is not documented but it is reasonable to assume that the LEA were concerned with educational outcomes as individual pupil attainment data are used, albeit at the school level. Whiteshire's present SEN Index meets procedural equity in that there is a consistent application of agreed rules, it does not meet vertical equity as there is no differentiation of funding. Model 4 provides a clearer focus to the purpose of additional funding by the use of three notional components, each of which reflects a view of what the schools need to resource. Vertical equity and also responsiveness to needs is better met by Model 4 as funding bands are incorporated. The 'special needs pupil' policy discourse and the 'school and teacher effectiveness' policy discourse are both encompassed by Model 4. The social disadvantage allocation uses free school meals data which targets funding to the school and not to the individual pupil and therefore takes the 'school and teacher effectiveness' discourse. The SEN pupil allocation uses pupil outcome data e.g. CAT scores or National Curriculum Assessments, which are better viewed within the 'special needs pupil' policy discourse. The sole use of social disadvantage data could present a

dilemma for the LEA which wishes to follow the 'school and teacher effectiveness' policy discourse whilst also wishing to improve accountability.

Another equity issue is the primary/secondary differential previously discussed in Chapter Eight. Model 3 proposed to redistribute £3.3 million from the overall AWPU budget to increase the primary NSSEN budget to £12.9 million. This would reduce the AWPU budget of a 200 place primary school and a 750 place secondary school by 1.2% (see Table 8.23). Model 4 has avoided taking a value judgement about the level of resources to be allocated to the primary and secondary sectors and has used NSSEN budget totals which are the same as the existing allocations.

With reference to the criterion of effectiveness, lack of LEA documentation in *Whiteshire* about the purpose of the additional funding under the present SEN index, makes this difficult to evaluate. Also the principle of efficiency relates to the purpose of the resource allocation and to which policy discourse is followed. If compensation for social disadvantage is the main purpose then efficiency would not be as important as when the purpose is to raise educational achievement. This is because compensating for social disadvantage is only concerned with equity of inputs rather than emphasising the reduction of output differentials by raising educational achievement. Both *Whiteshire's* present SEN Index and Model 4 can be viewed as being inefficient as schools could affect the variables in the formula i.e. the educational attainment data, through their own actions. However the likelihood for schools to take this course of action is diminished since the publication of school performance data i.e. Key Stage 2 and GCSE results. A narrower definition of efficiency can be considered with respect to the amount of

professional time required to collect the data required for inclusion in the formula. As both the present SEN Index and Model 4 use group tests, including the use of National Curriculum Assessment data, both models are more efficient in terms of data collection than the professional audit approach used in *Mercia*.

Whiteshire put a high premium onto the principle of stability of funding as previously noted in Chapter Seven. There is good stability of funding under the present SEN Index as three year rolling averages are used. It is difficult to calculate with certainty the total SEN budget variances under Model 4 as National Curriculum data is not available for all Key Stages (see Chapter Nine).

The principle of cost containment has been discussed in Chapter Four. The present SEN Index does not appear to meet this criterion as there has been a considerable growth in the number of statements in *Whiteshire* (see Table 7.4). As mentioned in the Preface, Model 4 has been designed against the backcloth of the widespread concern about the escalating costs of providing for pupils with special educational needs. However it is unreasonable to expect that a revised formula by itself will meet the criterion of cost containment. It is only one factor within a complex set of strategic choices faced by LEAs (Coopers and Lybrand, 1996a).

The principle of accountability is also not met by the present SEN Index and this issue has already been discussed in Chapters 4.8 and 7.2. This criterion becomes more important if an LEA pursues the 'special needs pupil' policy discourse. There is no expectation under the present SEN funding arrangements in *Whiteshire* that schools should be held up to scrutiny about how they have used their resources allocated for additional educational needs. Despite the high priority placed upon raising standards and accountability by the White Paper *Excellence in Schools* (DfEE, 1997d), not all headteachers in *Whiteshire* are of the view that ring fencing of SEN funds should take place. An example of this view was received during a consultation about a revised SEN formula which took place in *Whiteshire* during the Autumn term 1997.

The ring fencing of particular funds within the schools budget allocation is contrary to the philosophy of 'local management' of finances. It is essential in my view that schools maintain the greatest flexibility in the allocation of funds to particular budget headings if the variety of local needs and financing of particular projects are to be met.

Interestingly this comment was made by a headteacher who was a member of the Secondary Special Needs Working Group as the representative of his teacher association. He presented the view that the formula should be more focussed towards funding at the individual pupils level rather than at the school level, but paradoxically, has also consistently pressed the LEA to provide more statements for pupils attending his school. This vignette is an example of an entrenched view about SEN funding which may be prevalent and enduring within *Whiteshire*. That is the view which encourages the LEA to release more centrally retained resources to meet the needs of individual pupils with SEN at Code of Practice stages 1 to 3 whilst rejecting of the notion that there should be accountability. The view also motivates the school to extract more resources from the LEA by increasing the referral of pupils at stage 4. The challenge for the Authority, and indeed many other LEAs, is to change attitudes about the 'ownership' of SEN and for discussion and debate to take place about the respective responsibilities of the LEA and schools for pupils with SEN. The partnership model of

SEN delivery (Coopers and Lybrand, 1996a) recognises the need to build a consensus and share responsibility with schools.

10.1.2 SECOND SUBSIDIARY AIM

Key Questions 4 to 7 map onto the second subsidiary aim which is to examine the funding relationship between non-statemented special educational needs and pupils with statements in an attempt to develop a coherent approach to resourcing throughout the continuum of SEN.

Key Question 4. What have been the historical arrangements for funding pupils with special educational needs?

Key Question 5. What is the current practice in LEAs with regard to resource definition, resource allocation and resource management?

Key Question 6. What is the relationship between special educational needs and resource levels and how does this match professional views?

Key Question 7. Is it worthwhile for LEAs to differentiate financially between different levels of need?

The second aim of the thesis was concerned with the funding relationship within the continuum of SEN. A full analysis of the background issues was undertaken in Chapters Five to Seven.

First, the research considered the historical arrangements for funding pupils with special educational needs and the legislative context within which formula funding operates Formula Funding and Special Educational Needs 350 Chapter Ten OU/PhD/AJM/April 1998 (Chapter Five). In particular, Circular 11/90 (DES, 1990) was examined, which offered long awaited guidance to LEAs about resource levels for pupils with statements of special educational needs and introduced the concept of the resource band of learning difficulty. However the impression should not be gained that resource bands are the panacea to resource management. There is the concern that resource bands may reinforce 'categories' of learning difficulty and place further emphasis on child variables rather than upon contextual variables. A further criticism is illustrated when the majority of pupils fall just 'inside' or 'outside' a band. Yet the advantages gained by differentiated funding, in terms of the potential of increased accountability and of the 'instant' resource allocation to those pupils in greatest need rather than having to wait for the lengthy completion of a statutory assessment, would seem to me to outweigh the disadvantages. The concept of the resource band was therefore used in Budget Allocation Models 3 and 4.

Second, the two surveys reported in Chapter Six, examined the funding relationship between non-statemented SEN and pupils with statements at a national level, and considered the areas of resource definition, resource allocation and resource management. The first survey (Marsh, 1997a) looked at current practice in LEAs for resourcing additional educational needs. This survey provided an update of an earlier survey conducted by Lee (1992a). Although the first and second generations of SEN formulae have made extensive use of free school meals data as a means of predicting incidence levels of pupils with special educational needs, there does not seem as much enthusiasm about their continued use. This may be related to the structures put into place by the Code of Practice which reinforces the discourse area of the 'special needs pupil', and a general movement by LEAs to a more needs led approach. Also there is a widely held scepticism supported by research evidence, that a free school meals index, at a pupil level as opposed to the school level, is a poor predictor of learning difficulties. A future survey, say in the year 2000, would provide evidence as to which direction the 'third generation' of formulae will have followed. It will be important to note whether there has been a reduction in the present large funding differential between provision at Code of Practice Stage 5 and Stage 3.

The second survey (Marsh, 1996) was concerned with how consistency can be ensured in decision making relating to the initiation of a statutory assessment of special educational needs (Code of Practice Stage 4). Again it has been shown that LEAs have followed the special needs pupil discourse by their use of individual test data or professional audit information. Whilst this may be a disappointing response, it is highly predictable in the face of government legislation that has reinforced the notion of individualism.

A high level of interest has been shown by LEAs in both surveys. This seems to be illustrative of the concern which exists about SEN budget levels and also of the willingness to pool ideas about the complexities surrounding the area. The distinct impression was gained throughout the survey that education officers were keen to make sure that the information and performance indicators obtained from their LEA, were within 'the normal range' and did not deviate too markedly from the 'mean'. This respect for the 'traditional approach' does not augur well for the radical reconceptualisation of special needs as proposed by Dyson and Gains (1993). The

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viewpoint has already been stated in Chapter Three that LEAs are continuing to focus on structures rather than a focus on processes. The research finding in Chapter Six would suggest that a conformity is sought with practice and policies adopted in most other LEAs, rather than an involvement in a deeper consideration of more general processes, for example an examination of the effectiveness of teaching approaches across the curriculum by the inspection/advisory teams within the LEA e.g. West et al., (1995).

Third, the case study conducted in two LEAs and reported in Chapter Seven, examined the relationship between special educational needs (SEN) and resource levels and considered whether it is worthwhile for LEAs to differentiate financially between different levels of need. The conclusion to Key Question 6 was that there is no professional consensus about the level of resources required for different types of need or for different levels of need. The implication arising from this finding is that it is not worth the effort to devise a finely tuned points system which allocates resources for special educational needs as it is unlikely to find agreement and approval from teacher associations. On the other hand, provided that the level of funding for non-statemented SEN is set at a high level e.g. over 5 per cent of the aggregated schools budget, then the use of a differentiated broad banded approach may prove to be of value in the formula design to address the issues of vertical equity and responsiveness to needs.

In conclusion to the second aim of the thesis, the design of a coherent approach to resourcing throughout the continuum of SEN is an important issue and requires further development work by LEAs. The rapid changes in the funding arrangements for SEN has sharpened the focus for schools to examine their budgets far more closely than in previous eras. Under the present arrangement in *Whiteshire* it is clearly in the schools best interests to promote as many pupils as possible to Stage 4. It is not surprising therefore that the growth in the number of statements can be traced back to the introduction and implementation of LMS.

The LEA wished to address this concern by providing an enhanced level of support at stage 3 in an attempt to stabilise the number of statements. It was felt that if schools were allocated differentiated funding for pupils close to the statementing threshold, then the motive for requesting a statement would be reduced. The 'improved' SEN formula illustrated by Budget Allocation Model 4 and discussed in Chapter Nine, has supported this principle by suggesting four bands of resource within the '18 per cent of pupils with special educational needs.

If the 'SEN time bomb' is to be defused then an important step along the way will be the shaping of resource levels which improve the face validity of the SEN formula and narrow the resource gap between Stage 3 and Stage 5. This will only work if the allocation for Stage 5 pupils is reduced.

10.1.3 THIRD SUBSIDIARY AIM

The final part of the thesis was concerned with the design of an 'improved' SEN formula within *Whiteshire*. Key Questions 8 and 9 map onto the third subsidiary aim which is to investigate how a special educational needs funding formula for mainstream

schools within an English Local Education Authority (LEA) (*Whiteshire*) can be best constructed which meets a specified range of principles.

Key Question 8. What are the 'normative' or value questions which are informing decision making about the SEN formula within Whiteshire?

Key Question 9. How can the existing SEN formula be improved?

Before implementing the 'technology' of formula funding design, it is important to remind ourselves that research and development cannot provide answers to the value questions with which social and educational issues are imbued (Husen, 1984). That is to say policy making within LEAs is set within the framework of 'normative' or value questions which have developed over time. Details of the many working group meetings which I have attended during the course of the research are provided in Table 2.1. From these meetings it was clear that a number of concerns were continually being raised. These concerns have been examined in greater detail as a general critique of the existing SEN formula in Chapter Eight. Furthermore the present SEN index has been evaluated by reference to the eight principles or criteria for evaluating a formula. It has been seen from Table 10.1 that certain criteria are not met by the present SEN index, particularly responsiveness to needs and accountability.

The focus of the new revised SEN formula, termed Model Allocation 4, has been to address the shortcomings of the current formula, and to better meet the criteria for evaluating a formula. The process towards the development of Model 4 involved the analysis of three other models which are described and illustrated by worked examples in Chapter Eight. Budget Allocation 4 (described in Chapter Nine) makes use of Formula Funding and Special Educational Needs Chapter Ten OU/PhD/AJM/April 1998 differential funding arrangements in each of the three formula components i.e. SENCO allocation, social disadvantage allocation and SEN pupil allocation. The differential funding arrangements in the SEN pupil allocation gives the potential for a higher level of accountability to be achieved which will also impact upon the principles of responsiveness to needs and vertical equity. Finally there is also a better opportunity for cost containment to take place by the prevention of stage four assessments, as a higher level of resource (\pounds 1,600) is proposed for those stage 3 pupils with the greatest needs.

10.1.4 FOURTH SUBSIDIARY AIM

Key Questions 10, 11 and 12 map onto the fourth subsidiary aim which is to examine different types of formula which could be used across both the primary and secondary phases and to simulate the effects on schools' budgets.

Key Question 10. What is the impact on school budgets of using different special educational needs indicators?

Key Question 11. Could National Curriculum Assessments replace other standardised educational tests in the formula on the grounds of validity, dependability and reliability?

Key Question 12. Should recognition be made within the formula for different types of SEN e.g. specific learning difficulties and emotional and/or behavioural difficulties?

Computer budget modelling has been used to investigate the effect of different SEN allocation models in *Whiteshire*. The sample sizes were impressive as the Authority is one of the largest in England (591 primary schools and 98 secondary schools). The Formula Funding and Special Educational Needs 356 Chapter Ten OU/PhD/AJM/April 1998 impact on school budgets are examined in Chapters Eight and Nine. The surveys reported in Chapter Six indicate that an increasing number of LEAs are investigating the use of National Curriculum Assessment (NCA) data for inclusion in their SEN formula. Despite the objections and controversy surrounding the use of Standard Assessment Test/Tasks (SATs) (see Chapter Nine; and Marsh, 1997c), this research lends qualified support to the use of this information and encourages further research by LEAs.

10.2 POLICY MAKING AND RESEARCH REVISITED

This research has been conducted since the implementation of the 1988 Education Act which gave rise to the implementation of formula funding and Local Management of Schools in 1990. This section will now reconsider the interaction between policy making and this research and the impact which technical considerations have had in the development of a revised formula. The political and policy implications have always had a high profile in the thesis. I shall now revisit those models from Weiss' (1977) taxonomy, previously discussed in Chapter Two, which have direct relevance to this thesis.

The first model, the *linear* one does not appear to be particularly apposite to this study because the assumptions do not apply. The dissertation does not have a basic research and applied research element and so does not meet the *linear* model criteria.

The *problem-solving* model and the *interactive* model do apply rather well to the research. The *problem-solving* model postulates that specific studies are commissioned

in order to assist pending policy decisions. The *interactive* model which has been likened to the 'garbage-can' model of decision making and provides a good description of the further research which was commissioned from September 1995 to December 1997 previously been referred to Table 2.1. This research paid particular attention to a series of developments which have influenced thinking on the resourcing of special educational needs since the working party report of 1993. The research was discussed at regular intervals with an education officer with responsibility for SEN policy and therefore the assumption of a dialogue between the policy maker and the researcher was met. The developments since the 1993 review included:

- changing legislation which has included the implementation of Local Management of Special Schools and the SEN Code of Practice, referred to in Chapter Three and the Green Paper Excellence for all Children (DfEE, 1997e);
- the development of criteria for the statutory assessment of children with special educational needs, referred to in Chapter Four;
- the availability of National Curriculum Assessment information and the possibility of including baseline information for reception aged pupils, referred in Chapter Nine;
- an expanding research base in the area of school effectiveness and school improvement, referred to in Chapter Three;
- a shift in the focus in which the study of special educational needs has developed and moved emphasis from the passive to the active, referred to in Chapter Two under policy making and research.
- the publication of a major national study: *The SEN Initiative* (Coopers and Lybrand, 1996a) in which *Whiteshire* was one of the 59 subscribing LEAs, referred to throughout the thesis.

An example of the political model occurred during the Secondary Special Needs Working Group where one teacher association (National Association of Schoolmasters/ Union of Women Teachers, NAS/UWT) wanted an EBD component to be included in the formula to publicly acknowledge the perceived increase in behaviour difficulties experienced by schools. The increase in behaviour difficulties as measured by exclusion rates has been highlighted by a number of writers in recent years (e.g. Hayden, 1996; Parsons et al. 1997). The stance taken by the NAS/UWT has historical roots in the key role played by the NAS during the 1970s. The NAS actively campaigned to raise and pursue the issue of disruptive pupils in schools mainly in response to the Raising of the School Leaving Age (ROSLA) proposal, which was implemented in September 1972. Turkington (1986) has provided an in depth analysis of the coverage of deviance in schools by the educational press and has used the term 'the discovery of the disruptive pupil' to describe the emphasis of the 'special needs' discourse in the period after 1970. A more recent example of the emphasis of the 'special needs' discourse was the high profile taken by the NAS/UWT during the inspection of the Ridings school, in Calderdale LEA.

Other members on the Secondary Special Needs working group felt that to identify a formula element for Emotional and Behavioural Difficulties would place undue emphasis upon "within child" factors rather than a full analysis of the school's behaviour policy, its ethos, organisation and curriculum, together with the teacher and their classroom management and teaching style. In other words the "school and teacher effectiveness" discourse was being supported. The working group commissioned research by myself to see whether there is any evidence to support the view that a correlation exists between low achievement and reported behavioural difficulties in pupils. The group considered the view that a formula element which reflects both social disadvantage and low achievement in schools may 'de facto' take account of likely incidence of behavioural difficulties perceived by schools. This research has been reported in Chapter Nine and shows that a correlation does exist between schools with a high level of pupils in receipt of free school meals and reported numbers of pupils with behavioural difficulties. As the result did not support the line taken by the NAS/UWT, it is not surprising that the teacher association attempted to find fault with the research design.

Another example of how the research overlaps a further model from Weiss' taxonomy, is the *tactical model*. The cynical observer might comment that this model is the best fit of all. It could be argued that the Authority used in the study has indeed attempted to "bury the controversial problem". By commissioning research within and outside the structure of working groups, the LEA have postponed taking any action which might lead to a number of schools 'losing' money in the resultant formula redistribution. At the time of submitting this thesis in April 1998, the LEA have not revised their secondary SEN index since 1986 and the last revision of the primary index was conducted in 1990. The argument put forward by education officers from the LEA was that a formula change which had the effect of decreasing a school budget may influence governing bodies to request grant maintained status. Since the general election of May 1997, the LEA may now be more inclined to consider amendments to the funding formula as the White Paper, *Excellence in Schools* (DfEE, 1997d) set out proposals to

abolish the grant-maintained sector to pave way for a new structure of aided, community and foundation schools.

A further model of research utilisation which can be applied to the research is the *enlightenment or percolation model*. The enlightenment model can perhaps be easily merged with the interactive model (Husen, 1984). The published and unpublished papers arising from the research (listed separately before the preface) are evidence of how the research has informed the policy debate.

Much of the discussion in the thesis has centred on aspects of budget management and budgetary control as the research has been carried out against a national concern by Local Education Authorities that SEN budgets and the number of statements are continuing to rise (Marsh, 1997b). It has been argued that the SEN formula can play an important part in resource management and in policy making. Cost containment and the need to reduce and stabilise the rate of statementing are important criteria or principles by which the formula can be evaluated. If the number of statements continue to grow then the main implication for LEAs is that, within the context of finite budgets, these increases will exert pressure on other already stretched budgets areas and will impact upon the amount that LEAs are able to distribute for pupils with special educational needs but without statements. The growth in the number of statements in Whiteshire since 1988 is detailed in Table 7.4 (Chapter Seven). Statements in Whiteshire have increased over the last ten years by more than 130 per cent from 4,100 to over 9,500 statements. The Green Paper (DfEE 1997e) reports a similar increase nationally, from 153,000 in 1991 to 233,000 statements in 1997.

A number of other reports have referred to the continuing growth in statements e.g. Audit Commission (1992a, 1992b, 1994) and Coopers and Lybrand (1996a). These reports have recommended that means should be identified of redirecting resources from statemented to non-statemented provision, to promote early intervention and preventative work and so reducing the demand for a statement. A well designed and funded SEN formula can assist with the accountability of resources at stage 3 of the Code of Practice and can help to prevent a pupil requiring a stage 4 statutory assessment thereby providing opportunities for the recycling of resources from stage 4 into stage 3.

The principle of maintaining a pupil at stage 3 with additional resources provided by the school rather than providing the protection of a statement, is not universally accepted by all parties. The Independent Panel for Special Education Advice⁸ (IPSEA, 1997) has provided a strong criticism of *The SEN Initiative* (Coopers and Lybrand, 1996a) claiming that its recommendations will prejudice the legal right of children to receive the special educational provision their special educational needs calls for. IPSEA believe that large numbers of disabled children are not receiving the provision to which they are legally entitled and that *The SEN Initiative* is already having a worsening effect. They cite case law from two High Court judgements which has made explicit the LEAs' duty to arrange the special educational provision required to meet a child's special educational needs as specified in the statement. In R v Hillingdon London

⁸ The Independent Panel for Special Education Advice (IPSEA) is a national charity which since 1983 has been giving advice and support to parents of children with special educational needs. As well as its national helpline, IPSEA has a Free Representation Service for parents wishing to appeal to the Special Educational Needs Tribunal. IPSEA answers 2,000 calls each year from parents and has at May 1997 advised over 200 parents with appeals to the SEN Tribunal.

Borough Council, ex parte Governing Body of Queensmead School, 10th December 1996 the judgement confirmed that if a LEA's formula did not produce sufficient resources to meet the child's needs then the LEA would have to make up the balance and could not require a school to do so (The Times, 9th January 1997). In R v Harrow London Borough Council ex parte M, 8th October 1996, the judgement confirmed the right of LEAs to request other bodies (e.g. a Health Authority) to make the special educational provision a child required, but if that was not forthcoming, there was no 'let-out' for the authority, they must themselves arrange the special educational provision the child required. In the words of Mr Justice Turner:

... this duty is owed personally to the child and the duty is not by this section delegable.

Whilst the child advocacy actions of IPSEA can be interpreted as working for the best interests of the child, it does illustrate the negative aspects of the competitive market forces model whereby the 'educationally fittest' will survive at the expense of those who are less well informed or educated. Indeed yet more emphasis is placed on the confrontational aspects of attempting to extract statements and resources for the "2 per cent" of pupils whilst neglecting the needs of the "18 per cent". Parents have been encouraged by the previous Government to behave as critical consumers in the market place seeking out the services they required and rejecting those which did not conform to their specifications. There is gathering evidence (e.g. Riddell, 1994; Gross, 1996) that middle class parents have been successful in securing more of the type of education they require for their own children e.g. specific learning difficulties, and this will be at the expense of others who are less articulate. For example, it has been reported in Chapter Nine that the proportion of appeals registered by the Special Needs Tribunal, where the

main need was specific learning difficulties, approached 40% in 1996/7 for the third consecutive year. Riddell (1994) feels that because the competition is not a 'fair' one, market forces will not only maintain but increase educational inequalities. She argues that it is possible for a relatively powerful group of parents with the support of voluntary organisations, such as IPSEA, to shift the balance of resources in favour of their children. On the other hand it is also likely that articulate parents would accrue resources for their children at the expense of children from less articulate parents, even if there was no schools' market (i.e. pupils were allocated to schools by the LEA with no parental choice).

The principle of equity has already been shown to be an important criterion to be considered when evaluating the SEN formula. The pressure exerted by parents of children experiencing specific learning difficulties to secure resources, will severely test the equity principle. Despite the pressure, this thesis proposes that a well designed and well funded SEN formula can address aspects of procedural and distributional equity not only for pupils with general learning difficulties but also those experiencing SpLD. That is to say procedural equity would be satisfied by the consistent application of agreed rules rather than relying on previously flawed methods of allocation such as officer discretion. Further examples of agreed rules for assessing the severity of SpLD have been noted in Chapter Six in the 'Criteria of Need' survey. Distributional equity and in particular vertical equity would be met if the formula was able to meet the needs of individuals with different needs. The use of banding arrangements proposed in Budget Allocation Model 4 attempts to meet the vertical equity criterion. With respect to specific learning difficulties (SpLD) it has been argued that SpLD falls randomly across the population and therefore the argument to include a factor in the formula addressing SpLD is all the more weaker. LEAs could make particular reference to the funding of SpLD by suggesting that the 'hidden 5%' from the Age Weighted Pupil Unit element should be used for allocating resources to pupils experiencing specific learning difficulties analogous to the 'planned place' element of the Special Schools LMS formula. This argument highlights two previous issues i.e. the accountability of resources (see this chapter) and whether the concept of the statement is still workable (see Chapter Three).

10.3 CONCLUSIONS

This thesis set out to investigate the principles and practice for allocating additional resources to provide for pupils with special educational needs (SEN) but without statements. The research has been written against the backcloth of increasing numbers of pupils with statements of SEN so inevitably much of the discussion has centred on issues of budget management. Evidence has been obtained throughout the study relating to the key questions set out in Chapter One, and has been incorporated in the design of an 'improved' SEN formula, which could be adopted by *Whiteshire*.

At the time of writing this conclusion the Authority was entering into a consultation process with governors and headteachers about a general review of the LMS scheme, which included the arrangements for funding non-statemented SEN. The preferred budget allocation model set out in this thesis (Model 4) has been generally accepted by the policy team within the LEA. The main amendments refer to the amount set aside for

the curriculum related staffing (CRS) funding⁹ and to a level of caution expressed about the SEN pupil allocation banding system based on National Curriculum Assessments (NCA). The main reason behind the caution appeared to rest with the principle of stability of funding and the impact of differential funding arrangements upon school budgets. Furthermore it was felt that the use of NCA information would be major step for the Authority and that, before examples of budget models could be presented, views needed to be sought by the consultation process. Therefore no differential funding arrangements were mentioned in the consultation paper and instead a common standard unit of resource for the SEN pupil allocation (£335) was applied across both phases. The SEN pupil allocation of £335 would enable qualifying pupils to receive one and a half hours of specialist support teaching per week in a group of five qualifying pupils. However the relatively low value attached to this standard unit of resource makes very little impact upon the responsiveness to needs and vertical equity criteria. Perhaps more importantly, in the secondary sector, schools would perceive the unit of resource has been reduced markedly from £1,244. Primary schools are also likely to be unimpressed with an increase of only £21 to their allocation share to support their own nonstatemented pupils with the most significant learning difficulties, i.e. those pupils at stage 3 who may always be close to the '2 per cent' but never quite meet the criteria for a stage 4 statutory assessment.

⁹ The CRS policy was implemented in 1986 at a time of falling rolls and was introduced in order to guarantee secondary schools sufficient staff to ensure that all schools were able to provide a curriculum modelled on the Authority's agreed curriculum policy, protecting the curriculum for pupils aged 11-16. In order to separate "curriculum protection" from pupil-related special educational needs funding, the policy team felt it was necessary to increase the notional staffing ratio for pupils in Year 7-9. This was to ensure that the minimum 19.5 staffing ratio, currently included in the CRS, was achieved without reference to SEN funding and was costed at £8.3 million. Using 1997/98 prices (see Table 8.1, Chapter 8), this left £4.6 million for secondary schools SEN and £9.8 million would continue to be available for primary schools SEN.

The Green Paper *Excellence for all Children* (DfEE, 1997e) proposes that as a result of improvements arising from the conclusions, then the proportion of children who need a statement will be moving towards 2%. This may enable more LEAs to engage in the policy drive of releasing delegated resources for pupils with special educational needs but without statements at an earlier stage. There may also be a renewed interest in refining and reviewing SEN funding formulae. Clearly it is too simplistic to think that a revision of the funding formula and an increase in the budget allocation will automatically reduce the demand for statements. The issue of accountability and what is to be expected from schools' generally available provision, is paramount in any debate about additional educational needs policy formulation. The challenge for LEAs and schools as we approach the turn of the century is to develop inclusive education policies and formula funding arrangements which fully encompass the needs of *all* pupils with special educational needs.

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APPENDIX A

The Open University

Centre for Educational Policy and Management School of Education

Research Project on the Funding of Special Educational Needs in Maintained Schools

HEADTEACHER QUESTIONNAIRE

1. What is the number on roll (FTE) (as at 01.01.95)?

2. Is there a written school policy on special educational needs? Has this been endorsed by the governors?

3. How does the LEA's policy influence this?

4. What is your perception of the LEA's direction of development in special needs provision?

5. What classroom practice would you wish to promote to improve the quality of provision for pupils with special educational needs?

6. How do senior management encourage these developments to take place?

7. How is the progress or success of these developments monitored?

8. Do you know how much the school receives from the LEA for special educational needs, i.e. for pupils without statements for 1994/5? Please indicate one of the following: exact amount approximate amount don't know

Formula Funding and Special Educational Needs Appendices OU/PhD/AJM/April 1998 9. Do you consider that the amount is enough to be able to meet the needs of your pupils without statements?

10. What do you consider should be the level of budget?

11. How does the school deploy resources allocated in respect of special educational needs? What changes, if any, do you think should be made to the deployment of the SEN budget for non-statemented pupils?

12. Has the school been inspected by OFSTED or the LEA? When and how?

What was the focus on special educational needs?

13. What have been the practical outcomes of the inspection process with regard to special educational needs?

14. Does the school have access to training in special needs? How responsive is this to the school's needs and what have been the outcomes of it?

15. How does the school decide when to put forward a pupil for a stage 4 statutory assessment? Is the school aware of any LEA guidelines for helping to make this decision?

16. What is your view of the efficiency of the process of issuing statements?

17. What do you think are the key special educational needs issues which the LEA should address or initiatives which the LEA might usefully take?

18. If there were one issue you would like this research to address what would that be?

APPENDIX B

The Open University

Centre for Educational Policy and Management School of Education

Research Project on the Funding of Special Educational Needs in Maintained Schools

SENCO QUESTIONNAIRE

1. Estimate the number of pupils at each of the following stages of the Code of Practice (please give figures)

at stage 5

at stage 4

at stage 3

at stage 2

at stage 1

2. Which of the following criteria do you use to decide which pupils to place on the SEN register i.e. Stage 1:

□ Teacher concern about pupil progress

□ Parental concern about pupil progress

□ In-school assessment results

3. Please would you now complete the attached proforma for a sample of 20 pupils. Please include at least 10 pupils at stage 5 if possible, and the rest at stage 3.

Notes For nature of SEN please use one of the following:

MLD	Moderate/mild learning difficulty	SLD	Severe learning difficulty
SpLD	Specific learning difficulty	EBD	Emotional and/or behavioural
-			difficulty
PD	Physical disabilities	HI	Hearing impairment
VI	Visual impairment	SLaD	Speech and language
MC	Medical conditions		difficulties

4. What do you think are the key special educational needs issues which the LEA should address or initiatives which the LEA might usefully take?

5. If there were one issue you would like this research to address what would that be?

APPENDIX C

The Open University

Centre for Educational Policy and Management School of Education

Research Project on the Funding of Special Educational Needs in Maintained Schools

SENCO AND HEAD OF DEPARTMENT PROFORMA FOR AUDIT OF RESOURCES FOR PUPILS WITH SPECIAL EDUCATIONAL NEEDS

Please complete one of these for each pupil in the sample

1. Pupil initials, DoB, Year (R-Y13)

2. Code of Practice Stage

3. Nature of SEN

4. What is the type of support provided and which staff are involved i.e. teacher and/or non-teaching assistant? Please indicate whether the support is provided by the school or the LEA.

5. What is the frequency of support?

6. What is the timing of support? i.e. please list days and actual times of the support together with size of group.

7. Are there any external specialists involved? If so please list and indicate the frequency and timing of support.

8. Are there any other costs which need to be considered?

9. What is your professional assessment of the resources required to meet the needs of the pupil mentioned on this proforma?

10. Are you able to provide any recent formal testing or assessment information about this pupil e.g. standardised reading or spelling tests, National Curriculum Assessments.

APPENDIX D

GLOSSARY OF TERMS

The General Schools Budget is the total amount and LEA spends on its schools and services for schools. It includes the money delegated to governing bodies as well as items such as interest on borrowing for capital works, school meals, home-to-school transport. It does not include pupil referral units, education otherwise than at school, nursery schools, provision at out county residential schools or certain charges for central administration.

The **Potential Schools Budget** is broadly that part of the general schools budget that a LEA could delegate to governing bodies. There are two types of exceptions which place certain items outside the PSB but still within the GSB. Mandatory exceptions include capital expenditure and capital financing costs. More recently education welfare service and educational psychology service have been added to the mandatory exceptions list. There are also discretionary exceptions which include for example home to school transport and school meals. The amount which is left is called the Potential Schools Budget (PSB). Circular 7/91 stated that the GSB was an unsuitable basis for determining a minimum figure for delegation to apply to all LEAs, because it includes a number of large and uneven items. The Circular went on to define a new requirement that LEAs must delegate to schools at least 85% of the PSB. Circular 2/94 (DFE, 1994c) increased this figure to 90%, but the Secretary of State later withdrew this stipulation. Within the Potential Schools Budget LEAs are allowed further discretionary items (15% of the total PSB), for instance where the funding in question would be difficult to

allocate satisfactorily by formula because the needs to which it relates are variable and unpredictable in their incidence (DFE, 1994c para. 78a). Examples of discretionary exceptions within the PSB are: management and administration, advisory and inspection services and provision for pupils with statements. The White Paper 'Self-Government for Schools' (June 1996) has proposed a redefined PSB and raised to 95% the proportion which LEAs delegate to schools. The Government has proposed to take out spending on pupils with statements of SEN and replace it with spending on school meals, milk and LEA Initiatives.

The remainder of the GSB after deduction of the mandatory and discretionary exceptions and the PSB discretionary exceptions is known as the Aggregated Schools Budget (ASB) so called because it is in effect the budgets for all schools in an LEA aggregated together. It is this amount of the GSB which is delegated to schools by means of the LMS formula. Circular 2/94 covered the Local Management of Special Schools (LMSS) and their costs are now also included within the ASB. A further formula requirement is that LEAs must allocate 80% of the ASB on the basis of pupil numbers or age weighted pupil units (AWPUs). Within the 80% requirement, an amount (5%) could also be allocated on the basis of additional weightings for pupils without statements (Circular 7/91 para. 105). This is sometimes known as the "hidden 5%" because many LEAs have not made clear in their Section 122 budget statements that this money existed or what of its purpose. Funding for special schools are exempt from the 80% rule as Circular 7/91 stated that the bulk of each special school's funding will normally be determined by the numbers and types of places which it is planned should be available at the school for that year, whether or not these places are occupied (DES, 1991 para. 84).