CHILDREN'S DIFFICULTIES IN READING, SPELLING AND WRITING

EDITED BY PETER D PUMFREY & COLIN D ELLIOTT

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Children's Difficulties in Reading, Spelling and Writing

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Challenges and Responses

Edited by

Peter D. Pumfrey

and

Colin D. Elliott

Routledge
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Contents

Acknowledgments vii

Introduction ix
Peter D. Pumfrey and Colin D. Elliott

Part 1: Challenges

1 Literacy and the National Curriculum: the Challenge of the 1990s
Peter D. Pumfrey 3
2 The Definition and Identification of Specific Learning Difficulties
Colin D. Elliott 14
3 Subtypes of Specific Learning Difficulty: a Review
Stephen Tyler 29
4 Reconciling Different Approaches to Intervention
Rea Reason 40

Part 2: Responses
(A) Phonological Approaches: Theory and Research

5 Phonological Development and Reading
Peter E. Bryant 63
6 Rhyming Connections in Learning to Read and Spell
Lynette Bradley 83
7 Learning to Spell, Learning to Read
Suzanne Cataldo and Nick Ellis 101
8 Dyslexia in Childhood: a Cognitive-Developmental Perspective
Margaret J. Snowling 126
9 Intervention Strategies for Backward Readers in the Primary School Classroom
Asher Cashdan and Judith Wright 144

10 Evaluating Teaching Programmes for Children with Specific Learning Difficulties
Michael Thomson 155
11 Some Effects of a Dyslexia Centred Teaching Programme
Beve Hornsby and Maria Farrer 173

(B) Growth Points in Classroom Practice

12 Testing and Teaching Pupils with Reading Difficulties
Peter D. Pumfrey 187
13 Making Reading Real
Helen Arnold 209
14 Learning Strategies for Pupils with Literacy Difficulties: Motivation, Meaning and Imagery
Morag Hunter-Carsch 222
15 ARROW: Alleviating Children's Reading and Spelling Difficulties
Colin H. Lane 237
16 Suggestions for Helping Children with Spelling Problems
David Moseley 255
17 Meeting the Challenges of Specific Learning Difficulties
Harry T. Chasty 269
18 Children with Spelling and Writing Difficulties: an Alternative Approach
E. Neville Brown 289

Notes on Contributors 305
Subject Index 307
Name Index 313

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Introduction

Peter Pumfrey and Colin Elliott

If you could not read English, it is unlikely that you would have bothered to get as far as this.

'Language expresses identity, enables co-operation, and confers freedom. In language we create a symbolic model of the world, in which past and present are carried forward into the future. Language is the naming of experience, and what we name we have power over' (Department of Education and Science, 1988: The Kingman Report, p. 7).

Most children have well-developed speaking and listening skills prior to the start of formal education. Learning to read, spell and write are among the most critically important and empowering skills that children will learn at school. The history of education testifies to the importance of literacy. In modern industrialized societies, literacy is the bedrock of education. Access to the core and foundation subjects in the National Curriculum requires that pupils become literate. The problems faced by children who have difficulty in acquiring literacy skills are matters of continuing concern, not only to their parents and teachers, but to the whole of the education service, various helping professions and to society itself.

The current estimates of adult illiteracy in the United Kingdom, the United States and elsewhere, indicate that their respective educational systems have many important lessons to learn in the interests of the pupils, their parents and the societies whom the systems are designed to serve. The prevention of later literacy difficulties has much to commend it educationally and economically. This indicates that increased attention to the efficacy of school literacy programmes is essential.

The editors have, for many years, been involved in trying to understand, identify and alleviate children's literacy difficulties. Currently contributions are made to a variety of taught courses and research programmes in this area. The former include a two-year part-time course for qualified and experienced teachers in the study of Specific Learning Difficulties (Literacy), courses on Children's Reading Difficulties in other Advanced Diploma and Master of

Education programmes, and the training of Educational Psychologists. In the research field, the editors are currently involved in a national survey of LEA policies and provision concerning specific learning difficulties and dyslexia. They are also engaged in the development of diagnostic and attainment tests and assessment techniques. In connection with this teaching and research, a series of evening lectures was given by visiting specialists at the University of Manchester during the 1988–1989 session. Their contributions have been edited and comprise the present book.

The book reflects a wide range of issues regarding children's literacy problems, mainly at the primary school level. Some of the authors are principally interested in how young children normally learn to read and spell, and also in how later reading and spelling difficulties can be *prevented* or *reduced*. Other contributors have devoted themselves to helping *alleviate* the problems of the many pupils in mainstream schools who have been identified as having difficulties in learning to read, spell and write. A sub-set of authors consider the rarer phenomena of children who have proved unusually resistant to good mainstream teaching methods and who have specific learning difficulties (literacy), or specific developmental dyslexia.

The purposes of this book are twofold: first, in Part 1, to identify some challenges in the field of literacy and, second, in Part 2, to give an account of various responses to these challenges.

Part 1 starts with a consideration of a major challenge facing the teaching profession: the importance of literacy in the National Curriculum. Then follow two chapters on the definition and identification of various types of specific learning difficulties. These are highly controversial issues with important implications for policy, resources, theory and practice. Part 1 concludes with another equally complex and controversial area, that of how to reconcile different approaches to helping children with literacy difficulties. This crucial concern is reviewed in Chapter 4.

Part 2 is focused on responses to the challenges of children's literacy difficulties — with understanding their nature and with proposals for the prevention and alleviation of difficulties in the fields of reading, spelling and writing. It is divided into two distinct yet related sections. The first of these concentrates on the growing corpus of work supporting the hypothesis that phonological awareness is a fundamental, often neglected, underlying ability necessary for children learning to read and spell.

Chapters 5, 6 and 7 present evidence indicating the crucial importance of phonological awareness in understanding the development of children's reading and spelling. They include descriptions of methods of early intervention that reduce later literacy difficulties. Chapter 8 applies this perspective to a consideration of developmental dyslexia. Two school-based teaching progammes then follow. The first, an interesting pilot study, introduces metacognitive notions; the second describes teaching programmes for children with specific learning difficulties attending a school for dyslexic children. Chapter 11 concludes this section with a description of some long-

term effects of an intervention carried out in an independent centre where the programmes used have a strong phonic emphasis.

The second section presents a variety of relatively independent but promising educational strategies and techniques likely to be of particular interest to the practising teacher. A consideration of assessment issues in Chapter 12 is followed by two chapters presenting accounts of various classroom strategies for improving the teaching of children with reading and spelling difficulties in mainstream schools. A novel application of the use of a specially adapted tape-recorder system, suitable for use in both classroom and clinic, that capitalizes on the motivational value of the learner's own voice, is presented in Chapter 15. Chapter 16 gives an account of the use of other sophisticated applications of information technology for helping children with spelling problems. The special problems of children with specific learning difficulties are then considered, together with suggestions for improving areas of cognitive deficit and low attainments in literacy. The book concludes with an alternative, but possibly complementary, approach to improving the spelling and writing attainments of dyslexic children.

Each of the Parts, and the two sections within Part 2, starts with chapters dealing with the assessment, identification and characteristics of children with literacy difficulties. In Part 1 this is followed by more specialized challenges concerning current and impending literacy difficulties. In Part 2, sections 1 and 2, chapters dealing with teaching methods follow.

Both Parts 1 and 2 begin with important general issues relating to literacy in mainstream schools. Chapters concerning literacy difficulties in general are followed by specialized ones focusing on specific learning difficulties or dyslexia.

The contributors include teachers, advisers, psychologists and research workers. They address a range of policy, research and classroom concerns. As a consequence, the chapters vary in their technical complexities. The editors consider that the classroom and the literacy clinic are two crucibles in which theories and innovative practices are eventually tested. Knowing what to do and how to do it in both classroom and clinic are, without doubt, important. Knowing WHY one is doing what one is doing is far more important. There is nothing as practical as good theory. One of the major purposes of this book is to reflect and disseminate the dual development of both theory and practice.

Not all contributions will be equally readable or accessible to all readers. The professional responsibilities of the reader will determine the perceived relevance of the various chapters. For example, the technical detail of certain of the research oriented papers will have greater appeal to research workers and to teachers contemplating empirical dissertations or school-based research, than to other readers. An informed appreciation that there is research backing up teaching methods and also that there are practitioners putting ideas and developments into action, are important.

In short, we consider that the contributions that follow will be of interest and value to classroom teachers, specialist teachers, psychologists, special

education advisers and policy makers, and researchers. Most important of all, the applications of some of the ideas contained therein could benefit many students currently experiencing difficulties in reading, spelling and writing.

Peter D. Pumfrey and Colin D. Elliott

Part One
Challenges

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1
Literacy and the National Curriculum: the Challenge of the 1990s

Peter D. Pumfrey

How can standards of literacy be raised? How can national standards be assessed? How can individuals with special educational needs in the areas of literacy be identified and helped?

In all countries with state educational systems, literacy is seen as a key objective. The abilities of reading and writing (including spelling) are acknowledged as amplifiers of human capabilities. Via the medium of text, the skills of reading and writing give access to a high proportion of the accumulated thoughts, ideas and feelings of the culture. They also facilitate reflections concerning them. In most societies, not to be able to read is to be impoverished because of the effects both on career opportunities and on access to much of a country's (and the world's) cultural heritage. It is seen as a prime responsibility of schools to help all their pupils to read and write. Democratic societies require a literate and informed population.

The understanding of how literacy abilities are, or are not, learned is both complex and controversial. Contrasting opinions exist concerning how such developments can be conceptualized and how they can be assessed and encouraged. Theory, research and practice make their complementary and, at times, contradictory contributions in this continuing quest.

If it is believed that standards of literacy are falling, considerable public concern is typically expressed. Action is demanded to ensure that standards of literacy rise and that children learn to read and write adequately. In most countries, including Britain, the evidence for changes in primary school children's standards of literacy is often fragmentary. Characteristically, there is no systematic and comprehensive means of assessing standards of literacy. The absence of such information allows speculation and conjecture free rein. Even if all 7 year old children in Britain could accurately, fluently and with comprehension read Shakespeare, some would do so more accurately, fluently and with greater comprehension than others. It is quite possible that those

performing at the lower levels would be deemed to have reading difficulties. The relative nature of the concept of literacy must never be forgotten. If we were collectively more aware, and more tolerant of inter- and intra-individual differences in children's standards of literacy, we might be able more effectively to improve standards (See Chapter 12).

The challenges to teachers and research workers generated by such a situation are many and varied. So are the responses in theory development, research and practice. The contributions contained in Parts 1, 2a and 2b of the present book testify to the range of challenges and the variety of responses.

At this stage, attention is drawn to three concerns. The first derives from the fact that each child is unique. Long before they attend school, there are marked differences in children's physical, mental and social/emotional characteristics. These are reflected in the ways and the rates at which children become literate. Are some of these characteristics important causes of success or failure in subsequent literacy? What does research tell us? Are differences between children in such pre-literacy abilities only quantitative, or are there qualitative differences characterizing some groups? Such issues have important implications for developing interventions that will prevent or alleviate children's reading, spelling and writing difficulties.

Accepted standards of literacy are usually based on what is typical of groups at particular times during their school careers. It has been shown that, for example, mean reading test scores for particular year groups can increase over a period of years. With this increase, it is also possible that there can be an increase in the proportion of children who fail. The increase in mean reading test scores over time was due to some able children doing much better, rather than all children doing better. Reading test scores became more widely dispersed over time. Intra-individual differences also differentiate: the individual's strengths and weaknesses in various aspects of literacy emerge.

The second point follows from the first. Many schoolchildren do not become literate. The estimate by the Adult Literacy Basic Skills Unit that some four hundred thousand adults in Britain are illiterate and that over five millions need help in basic skills, underlines the seriousness of the issue.

The third point is that children with a variety of learning difficulties, emotional and behavioural difficulties and other disadvantages, frequently show low standards of literacy for different reasons. The Education Act 1944 required that LEAs (Local Education Authorities) provide sufficient schools offering such variety that children could be educated according to their age, ability and aptitude. The provision of special educational treatment was based largely on a 'defect' model. LEAs were responsible for providing special educational treatment for pupils suffering any disability of mind or body. Ten different categories of handicap were officially recognized in England and Wales, and nine in Scotland. Approximately 2 per cent of children were identified as handicapped and were educated mainly in special schools, units or classes.

The Education Act 1981, (effective from 1st April 1983), changed the law

on special education in the light of the Warnock Report and the consultations and discussions that ensued (Department of Education and Science, 1978).

Under Section 1 of the Education Act 1981, a child is deemed to

> have special educational needs if they have a learning difficulty which calls for special educational provision to be made for them. Learning difficulty is defined in terms of children who have a significantly greater difficulty in learning than the majority of children of their age: and/or have a disability which either prevents or hinders them from making use of educational facilities of a kind generally provided in schools in their LEA area for children of their age.

How great must a child's reading, spelling or writing difficulty be to meet the requirements of Section 1? Nine years later we are still faced with the same question. Until the term 'significantly greater' is operationally defined, uncertainties will continue. Even if it is operationally defined, the arguments will not stop, but they would probably be somewhat different in nature. Special educational provision means educational provision that is additional to, or otherwise different from, that made generally for children of the same age in schools maintained by the LEA concerned. It is expensive.

LEAs must ensure that special educational provision is made for pupils who have special educational needs. It was accepted that most children with special educational needs would attend ordinary schools and that up to one in five pupils would, at some time during their school career, have such needs. Under the Act, children with identified special educational needs could be given the protection of a Statement. The status of such a document meant that the LEA was required to provide what was stipulated. The working of the Act is far from satisfactory. The great variation in the proportions of statemented pupils in LEAs emphasizes the ambiguity of the term special educational needs (Select Committee on Education, Science and the Arts, 1987). This situation has not been improved by the latest official advice on the identification and assessment of special educational needs (Department of Education and Science and the Welsh Office, 1988b).

Various voluntary organizations concerned with dyslexia were assured that the condition was recognized under the provisions of the Act. The *British Dyslexia Association, The Dyslexia Institute, The Foundation for the Underachieving and Dyslexic* and *Dyslexia Defined*, are but four of these. The problem of translating the terms of the Act into means of assessing and providing for children's special educational needs has led to a number of important legal actions being brought by parents whose children were experiencing severe literacy difficulties (see further discussion of this issue in Chapter 2).

Money to purchase the time and expertise required to assess and alleviate literacy difficulties is severely limited. The imprecise nature of the legal definition of special educational needs is an open invitation to legal action. Markedly different professional opinions exist concerning the nature and

incidence of literacy difficulties and the means of alleviating such difficulties (Cornwall, Hedderley and Pumfrey, 1984). The Education Act 1981 widened the scope of special education by abolishing former categories and subsuming them under the superordinate category of special educational needs. The current consensus of professional opinion is that the former categories of handicap are undesirable. Not all workers agree with this viewpoint. Currently we now have two different and much larger categories. Either a child has, or does not have, special educational needs. When the incidence rises from about 2 per cent to about 20 per cent of the population, the numbers of children at the inevitable borderlines have increased dramatically. In such a situation, the incidence of parental dissatisfaction is bound to increase.

The causes of severe and prolonged difficulties in learning to read and write, are many and varied. They are likely to require different interventions if children are to be helped. If a pedagogic panacea to children's difficulties in reading, spelling and writing existed, it would probably have been identified by now. It has not.

The implementation of the Education Reform Act 1988 is intended to provide a framework wherein these three (and many other) challenges can be met. Making the Act effective will be a challenge for the next decade to all involved: pupils, parents and professionals.

The National Curriculum

The establishment of a National Curriculum applicable to all pupils aged from 5 to 16 years of age in all maintained schools, is now a legal requirement. The curriculum of every maintained school must include religious education for all pupils. In addition, the curriculum must incorporate specified 'core' and 'foundation' subjects. English, Mathematics and Science are designated core subjects. In Wales, Welsh is also a core subject in Welsh-speaking schools. The core subjects are seen as encompassing essential concepts, knowledge and skills without which other learning cannot take place effectively. The foundation subjects at all ages are History, Geography, Design and Technology, Music, Art and Physical Education. During the secondary school period, a modern foreign language is to be included (Department of Education and Science, 1989a).

In each area of the curriculum, attainment targets will be specified at up to ten levels of attainment, covering the age range 5 to 16 years. Attainment targets are defined in the Act as: '. . . the knowledge, skills and understanding which pupils of different abilities and maturities are expected to have by the end of each key stage' (Education Reform Act, 1988, para. 2).

In the same Act, programmes of study are defined as: '. . . the matters, skills and processes which are required to be taught to pupils of different abilities and maturities during each key stage' in each subject area (*ibid.*, para. 2).

A national assessment system will monitor what children '. . . should

normally be expected to know, understand and be able to do at the ages of 7, 11, 14 and 16. This will enable the progress of each child to be measured against national standards' (Department of Education and Science, 1989a, para. 6.4). Standard Assessment Tasks (SATs) are being developed for assessing whether pupils have attained the achievement targets at each of the key stages.

The assessment system is intended to serve the following purposes. The information elicited will be:

- *formative*. It will help the teacher in deciding how the pupil's learning should be furthered, provide both teachers and pupils with clear and understandable targets and feedback on progress towards these. It will also indicate whether further diagnostic testing is required.
- *summative*. The cumulative achievements of the pupil will be appraised: this will include what the individual knows, understands and can do.
- *evaluative*. Used comparatively it will identify where further resources may be required or where curricular changes are needed.
- *helpful to teachers' professional development*.
- *informative*. Communication between parents, professionals and pupils will be facilitated.

Whilst it will be many years before the full requirements of the Education Reform Act 1988 are in operation, fundamental changes in the ways in which teachers and schools organize and assess the work that is done are already well in train (Department of Education and Science and the Welsh Office, 1987, 1988a). In December 1988 the Department of Education and Science issued contracts to three consortia to develop Standard Assessment Tasks. These were piloted in some primary schools in the Autumn of 1989. The first full-scale national assessments should be carried out in 1991 and the first results published in 1992.

Focusing on Primary schools, in June, 1988, the Secretary of State for Education stated that 'Primary schools will be centre stage when attainment targets and programmes of study are introduced'. Attainment targets and programmes of study are being introduced according to the following timetable.

> September, 1989: 5 year old pupils in English, Mathematics and Science.
>
> September, 1989: 12 year old pupils in Mathematics and Science, with the introduction of English, plus Design and Technology, one year later; and
>
> September, 1990: 7 year old pupils in English, Mathematics, Science, Design and Technology.
>
> (Department of Education and Science, 1989, Annex C1).

It is absolutely clear that primary school children's progress and

attainments in all aspects of English are of the essence. The effective delivery of the National Curriculum is virtually dependent upon pupils' ability to listen, talk, read and write satisfactorily. But what is meant by 'satisfactory'? How can those involved know what to do and whether they have been successful?

To assist the Secretary of State in his work, the National Curriculum Council, plus the Curriculum Council for Wales, were established. In addition, the Schools Examinations and Assessment Council was set up (Education Reform Act, 1988).

Somewhat earlier, a Committee of Inquiry into the Teaching of English Language, under the Chairmanship of Sir John Kingman, reported in March, 1988 (Department of Education and Science, 1988a). Their Report contained 18 recommendations. Probably the most important one was that a model (inevitably controversial) of the forms and patterns of written and spoken English language should provide a basis for teacher education. The model has four distinct yet related components: forms of language; communication and comprehension; development and acquisition; and historical and geographical variations. Examples of each aspect are provided in the report. Within these four categories, over 80 basic skills must be acquired by teachers if they are to be adequately prepared to teach all pupils. It is recommended that all intending primary school teachers undertake a language course based on the model.

The Kingman Report provided the foundation on which the National Curriculum Working Party on English, Chaired by Professor B. Cox, subsequently built. In November, 1988, the Report of the Cox Committee was published. It was entitled *'English for Ages 5 to 11'* (Department of Education and Science and the Welsh Office, 1988b). The Cox Report covers the first two key stages for the primary years of education, as defined in the Education Reform Act 1988. It is concerned with attainment targets and with programmes of study. The Cox Report presented six broad attainment targets in English for pupils aged 7 to 11 years. The subject of English was divided into three components: I. Speaking and Listening (one attainment target); II. Reading (two attainment targets); and III. Writing (three attainment targets) (Department of Education and Science and the Welsh Office, 1988b).

A consultation concerning the recommendations of the Cox Report was carried out very rapidly by the National Curriculum Council (NCC). Their subsequent report reduced the number of attainment targets to five by amalgamating Reading 1 and Reading 2, plus other changes (National Curriculum Council, 1989a). Cox and his working group, who were preparing the attainment targets and programmes of study for the secondary stages at the time, were reported as being ready to resign unless the NCC report recommendations were modified (Nash, 1989).

The saga was, in part, resolved when the Secretary of State published a draft order in respect of attainment targets and programmes of study for Key Stage 1 (5 to 7 year olds) only. After a further consultation, the final version was laid before Parliament in May, 1989 (Statutory Instruments, 1989). These took

effect as from August, 1989. The requirements relating to Key Stage 2 (7 to 11 year olds) will not be introduced until the autumn of 1990.

The Secretary of State has accepted the NCC's advice that there should be five attainment targets for English, rather than six as recommended in the Cox Report. Reading 1 and 2 have been combined. However, he has decided to modify in some respects the NCC's advice on statements of attainment and programmes of study. The aim was to clarify intentions and remove inconsistencies. The profile components reflect the complex relationships between the various aspects of language. These five attainment targets are intended to be appropriate, at different levels, for children of different ages and abilities within the primary school. Levels of attainment within the targets and the statements of attainment at the various levels are intended to specify what each pupil 'SHOULD' know, understand and be able to do at the reporting age of 7 years. For anyone sensitive to the vast range of inter-individual differences between the attainments of children aged from 5 to 7 years, the normative moral imperative rings a number of warning bells.

The programmes of study are sufficiently broad to accommodate a variety of curricular paths leading towards the common objectives. The effects of curricular differences on achievement test data at item and objectives levels will be of considerable importance. This topic has been extensively studied in the USA. These curricular effects do not appear to be as great as advocates of the National Curriculum apparently anticipate (Phillips and Mehrens, 1988).

Implications of the National Curriculum for children with literacy difficulties

The implications and effects of the Act for pupils experiencing difficulties in learning to read, spell and write will have to be carefully monitored. The preparation of a Statement for such pupils, under the provisions of the Education Act 1981, is largely dependent on the results of observations, tests and consultations between the parents and a range of professionals with medical, social, psychological and educational qualifications. The perspectives of these groups vary, as do the types of tests that they use. An awareness of these contrasting viewpoints may reduce the likelihood of professional ego-centricism. No single professional group can claim children's literacy difficulties as its sole prerogative.

Chapter 13 of the Cox Report gives a brief consideration of special educational needs. All of the attainment targets in the Report can be assessed at various levels of attainment. It follows that children with special needs should be able to participate in the attainment targets, programmes of study and assessment arrangements. The point is made in the Report that Level 1 assessments are designed to identify children who may require special help in some form. From the available evidence, we know that children with reading difficulties will figure prominently.

The Cox Report anticipates that, in addition to the record of continuous and structured observation of their skills in English, children's reading comprehension will be tested via the Standard Assessment Tasks that have been developed. These are seen potentially as having advantages over existing normative and criterion-referenced tests. It is suggested that, for example, the work of the Assessment of Performance Unit in the field of language development should be capitalized upon (Gorman *et al.*, 1988).

> First, they should be designed to arise naturally out of good primary practice. The choice of texts should draw on reading materials of the kind that children will encounter in school through the programmes of study that we have recommended.... The test questions should be what experienced teachers would be likely to ask, taking into account the character of the reading material, its context and the purposes for which it would normally be encountered. The tests should be practicable to administer in the classroom context, and to mark and moderate. The marking should give credit for children's grasp of meaning and allow "positive" errors to be distinguished from "negative". The results should be capable of being used formatively and to indicate any particular need for support for the child, or for more specific, diagnostic assessment (Department of Education and Science and the Welsh Office, 1988b, paras. 9.23–9.24).

It is also required that the SATs be reliable and valid. In view of the wide and possibly incompatible demands being made of SATs, it is unlikely that their reliabilities and validities will be very high. The concept that appears dominant in the current thinking is that of 'ecological validity'. It is a concept worth remembering and questioning. 'In many cases this (further testing) will merely confirm what teachers already knew, and will strengthen their hands in taking appropriate action, for example is seeking a statement under the 1981 Act' (*ibid.*, para. 13.6).

The Cox Report continues

> In others, it will come as something of a surprise, and there may then be a need for the child to undergo further diagnostic tests to establish the extent of the problem. A level 1 performance should always be a signal for further investigation. This might, for example, reveal that a child who appeared to be a slow learner, or inattentive, was in fact showing symptoms of specific learning difficulties (dyslexia) or a hearing impairment, possibly an intermittent one such as otitis media (*ibid.*, para. 13.7).

How, one asks, can this be done unless the requisite material and professional resources are readily available? At present, they are not. Children with statements may have the requirements of the National Curriculum

modified. However, this will not be the case for the majority of children with special educational needs

> . . . either because the degree of special need is not considered severe enough to warrant it, or because their LEA's policy is to write statements only for children in special schools. Our suggestions will also be relevant to some of the unstatemented children with special educational needs, and hence to consideration of possible modifications, which the 1988 Act allows in respect of children falling within certain cases and circumstances, to Orders for attainment targets, programmes of study and assessment arrangements for English (*ibid.*, para. 13.9).

It is stated that children with learning difficulties are likely to make only slow progress in reading and writing. In such cases, it is suggested that initially greater emphasis should be given to oral work, though the skills of reading and writing must not be neglected. Despite its value, this is hardly a dazzling insight.

Enabling children with special educational needs to communicate their achievements, is recognized as a major challenge. Additional help may be required from professionals such as speech therapists, occupational therapists or psychologists. 'We recognize the resource implications, but feel the involvement of such experts to be essential if pupils with special educational needs are to be enabled to perform in English to their full potential' (*ibid.*, para. 13.15). It is interesting to see the word 'potential' being used in this report. If 'potential' is to be a criterion against which attainments in, for example, reading, spelling and writing will be appraised, how will potential be assessed?

Subsequently, the NCC has produced general guidance on children with special needs. This covers the modifications and disapplications procedures, revising Statements of Special Educational Needs and Temporary Exceptions from the National Curriculum (National Curriculum Council, 1989b). The NCC has also published guidance in helping pupils with special educational needs obtain access to the National Curriculum (National Curriculum Council, 1989c). Arrangements for carrying out multidisciplinary assessments, and making, or not making, statements of individual pupil's special educational needs under the Education Act 1981, were originally detailed in Circular 1/83 (Department of Education and Science, 1983). The Department is currently reviewing that Circular to take into account changes in both practice and the law that have taken place in the interim. To this end Draft Circular (/89) was widely distributed on 21st December 1988. (Department of Education and Science, 1988b). In it the concept of '. . . the child's TRUE LEARNING POTENTIAL' is also used (*ibid.*, para. 88) (Author's capitalization). This remains the case in the final document (Circular 22/89; DES, 1989b).

As with the Cox Report, its very use in an official document raises

important issues concerning the relationships between 'potential' and 'attainments'.

- Why should significant discrepancies exist?
- Why should such discrepancies cause concern?
- How can each be validly and reliably assessed?
- Can the approach be used to identify children with specific learning difficulties in various aspects of literacy?
- Can such information help in deciding which individual pupils should receive additional resources such as extra small group and/or individual work?
- Do different groups of pupils require different types of help?
- Can we validly and reliably chart both inter- and intra-individual literacy related abilities?
- Of what utility is such information?
- Who has the required expertise?
- How much will this cost?
- From where will the money come?
- Is the additional investment in individual pupils with reading, spelling and writing difficulties worthwhile?
- How does a school establish priorities in the allocation of its income under Local Management of Schools?

These are weighty issues that will have to be addressed more explicitly than hithertofore as a consequence of the Education Reform Act 1988.

To improve the help we can give to children with reading, spelling and writing difficulties, we must learn to ask the pertinent questions concerning the nature of children's abilities and the conditions that foster their development. Meeting this initial challenge will sharpen and improve the responses of research workers and practitioners in extending understanding and control of children's language developments (Wolfendale, 1987; Pumfrey and Reason, 1989). Then the National Curriculum might be better implemented for more pupils and the problem of both child and adult literacy wither.

We have a long way to go, but some directions hold considerable promise.

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2
The Definition and Identification of Specific Learning Difficulties

Colin D. Elliott

The problems facing the LD field

Bertrand Russell defined mathematics as 'the subject in which we never know what we are talking about, nor whether what we are talking about is true'. Without being impolite to co-authors, or wishing to suggest that the present author has an answer to the problem, the reader of this volume may well agree with Kavale and Forness (1985) that Russell's comments are even more applicable and appropriate to the field of learning disabilities (LD).

Huge amounts of time, effort and manpower have been devoted during this century to the unravelling of people's learning difficulties. There are thousands of empirical results in search of a theory. There have, indeed, been plenty of theories on the way, all of which have been found wanting. Whereas in the physical sciences, theory is based upon broad conceptions of causality, in the LD field it is much more shallow-rooted as the means of pulling together various empirical observations. The theories about learning disabilities are often not in a form which leads to testable and refutable hypotheses. If you cannot properly test or refute a theory, then one theory can be taken to be just as good as another. Hence many competing theories have sprung up, each with its devotees who have typically adopted polarized positions. Great indeed has been the noise of battle on occasion, but the protagonists have never really been able to find common ground on which to fight (or, more sedately, on which to compare and test their theories).

One of the major difficulties in the LD field has been that of defining exactly what it is we are arguing about. Definitions of learning difficulties abound and are well reviewed by Kavale and Forness (1985, Chapter 3) from an American perspective, and by Cornwall, Hedderly and Pumfrey (1983, Chapter 2) from a British one. The theories have produced a welter of terminology, such as strephosymbolia, dyssymbolia, word-blindness, minimal brain dysfunction,

dyslexia, developmental dyslexia, specific developmental dyslexia, learning disorder, specific learning disability, and specific learning difficulty. With so many theories, so many terms, and so many definitions of learning problems, it is not surprising that there are very considerable variations in the criteria used to select samples of children for research. One of the reasons why it is so difficult to obtain consistent research results in the LD field is the heterogeneity of criteria for selecting and defining the children who are the subjects of study. Unless the samples used in research reports are very carefully described, it is difficult to judge whether we are comparing like with like. These, and some other sources of variation and disagreement between workers in LD research, are shown in Table 2.1.

Table 2.1 Some sources of differences commonly found between learning disability research studies

- Different theories of the nature of learning disability (e.g., cognitive, neuropsychological, educational), leading to:
- Different definitions of learning disability, leading to:
- Different criteria for sample selection.
- Different measuring instruments used (e.g., which tests, methods of making observations, etc.), with different reliability and validity.
- Variations in quality and rigour of research design.
- Different methods of data analysis.
- Different definitions of treatments and interventions (similar labels, e.g., multisensory teaching, may not necessarily mean identical teaching procedures).
- Presence of context-dependent factors (e.g, personal characteristics of teachers and researchers, where and when intervention took place).

In the US Congressional testimony relating to the proposed Public Law 94–142 *The Education for All Handicapped Children Act* (1975), a Congressman who was no doubt feeling some despair over the diversity of evidence on learning disabilities, observed that, since there are 53 basic learning disabilities and 99 minimal brain dysfunctions, 'no one knows what a learning disability is' (Congressional Record, 1975, reported by Kavale and Forness, 1985). The one thing that characterizes people with learning disabilities is that they have difficulties with learning in schools and other institutional settings where most others manage to get by. There seems to be no common agreement on anything else.

The LD field is thus characterized by such major difficulties as lack of theory, different criteria for defining those who have specific learning difficulties, heterogeneity of population, lack of agreement on assessment, and lack of agreement on intervention. Despite the large amount of work which has been undertaken over the years, Kavale and Forness (1985) have concluded that

this quantity of data has not resulted in scientific knowledge. The field is characterized by empiricism without proper theory: it has not integrated its knowledge into a conceptual whole, a system of laws useful for explanation and prediction. It is, therefore, a pseudoscience. This conclusion is largely supported in a thoughtful and constructive article by Swanson (1988), which is accompanied by commentary from a number of workers in the LD field.

The views of Kavale and Forness and of Swanson were developed after major reviews of American literature in the LD field. Their conclusions apply equally well to the work which has gone on in the UK. It is interesting to observe how little attention is given by workers on one side of the Atlantic to work going on on the other side, although perhaps because of the relatively small size of the UK this fault is possibly more noticeable in US work. We all are trying to grapple with essentially the same sorts of problems, and have much to learn from each others' approaches. One of the stumbling blocks to a free interchange and acceptance of each others' findings is perhaps the somewhat different legislative systems in which we try to develop appropriate provision for LD children.

The major aim of this paper is to consider issues relating to the definition and identification of specific learning difficulties. In doing this, it is instructive to compare and contrast the legislative approaches to the problem which have been implemented in Britain and the USA. The two major pieces of legislation which govern special educational practice are the British Education Act, 1981, and the US Public Law 94–142 (The Education for All Handicapped Children Act), 1975.

The two education acts

The American Act (which we shall designate as 'PL 94–142'), passed in 1975 and implemented in 1978, had the fundamental purpose of bringing to an end what Abeson and Ballard (1976) described as 'the unconstitutional exclusion of handicapped children from the public education system'. The law stated that a free and appropriate public education must be provided for every handicapped child in the US. The law defined basic rights for children and parents and it prescribed administrative procedures (called 'due process procedures') for the identification and placement of handicapped children in various categories which have to be observed if a particular State is to qualify for and receive Federal funding assistance for its handicapped children.

The British 1981 Education Act (which we shall designate as 'the 1981 Act'), implemented in 1983, also represents an attempt to improve both assessment and provision for children with special educational needs.

There are a number of important similarities between the two Acts. Like PL 94–142, the 1981 Act provided enhanced definitions of rights and duties for professionals and for parents, although perhaps in a less thoroughgoing way. Both sets of laws emphasize the importance of the integration of handicapped

children with the non-handicapped. Thus, under the 1981 Act, it is the duty of Local Educational Authorities (LEAs) to educate a child with special educational needs in an ordinary school, provided that this is compatible with giving both that child and others in the school an efficient education. As far as reasonably practicable, the child should engage in the activities of the school together with children who do not have special educational needs. Similarly, PL 94–142 contains a similar principle of a 'least restrictive environment', whereby, to the maximum extent appropriate, handicapped children are educated with children who are not handicapped. A third major similarity is in the purpose and outcome of formal assessment under the two Acts. In the British case, the end result of assessment is a 'statement of special educational needs', and in the American case the end result is an 'individualized education program'. Both provide a description of the child's functioning, aims or goals of provision, and a specification of the facilities and resources required.

Although there are a number of similarities of purpose and practice in the two sets of laws, the 1981 Act has been called 'a pale reflection of similar legislation already in force in other countries (for instance the Education for All Handicapped Children Act in the US)' (Newell, 1985, p. 1).

There are a number of major differences between the two Acts. One is that, in contrast to PL 94–142, the 1981 Act does not provide for extra Government funding to be made available to Local Educational Authorities for children identified as having special educational needs. One of the purposes of PL 94–142, on the other hand, is to channel Federal funding to school districts for all children identified as handicapped. A major task for individual States and school districts is to determine whether a child is eligible to receive these resources: extra funds are not provided until eligibility is established.

Other than this question of additional Government funding, the two major differences between the Acts which are particularly relevant to children with specific learning difficulties, and which will be outlined and discussed in more detail, are (a) contrasts between the Acts in their use of statutory categories of handicap; and (b) questions of definition of such terms as 'learning disability', 'learning difficulty' and 'special educational needs'.

The use of statutory categories of handicap

The 1981 Act got rid of classification labels which had previously been in use in special education in Britain. Some of these were archaic (such as 'educationally subnormal') and were considered offensive. Also the definitions of some of the handicaps had on occasion caused some difficulty, particularly where a child had more than one handicap. In some cases it became difficult to decide which handicap was primary, and where the child should be placed. The Act replaced the previous definitions of handicap with the concept of special educational needs.

Since all labels for categories of handicap or disability have been

abandoned by the 1981 Act, there is no reference in the Act to Specific Learning Difficulties. Hence LEAs have had to work out their own individual policies on whether such difficulties can be recognized under the Act (some LEAs at least initially refused to make any distinction between these and any other learning difficulties) and also on whether special provision needs to be made for such children, and of what type.

By way of contrast, PL 94–142 uses and defines no fewer than eleven categories of handicap: deaf, deaf-blind, hard-of-hearing, mentally retarded, multihandicapped, orthopedically impaired, other health impaired, seriously emotionally disturbed, specific learning disability, speech impaired, and visually handicapped. Each of these categories is fairly carefully defined (even though there is sometimes keen debate about the adequacy and interpretation of the definitions).

Before moving on to examine the question of various definitions of specific learning difficulty, a number of important points need to be made which will perhaps help to clarify the issue of definitions.

Are the categories homogeneous?

Each of the categories of handicap listed in the section above relates to a group of individuals with a broadly common configuration of problems. We must not assume from this that all children within a group have precisely the same difficulties, or the same strengths, and neither should we assume that the causes of their handicaps are the same. In other words, each category is *not* homogeneous. A moment's reflection upon the categories of visual or orthopaedic impairment reveals that within each of these categories there is a wide range of distinctively different problems. For example, a person with one or more limbs missing has a different aetiology, has different teaching needs and requires different resources than a person with athetoid cerebral palsy. Similarly, it is unreasonable as well as undesirable to make the assumption that children categorized as having a specific learning difficulty in literacy are homogeneous with regard to the causes of their difficulties, their patterns of difficulties, or their teaching needs.

What is required is the development of a taxonomy which will describe and define groupings *within* each category. Classification research, outlined for example in a seminal article by Morris, Blashfield and Satz (1986), has much to offer the LD field. There is already substantial evidence that categories of children variously labelled 'LD', 'Specific Learning Difficulty'. 'Reading Disabled', 'Dyslexic', and so on, are fairly heterogeneous and can be subdivided into more homogeneous subgroups. Tyler reviews this evidence in Chapter 3 in this book. In the meantime, nothing in this chapter should be taken to imply that LD children are homogeneous or that they have a uniform pattern of problems (see also Elliott, 1989).

The purpose of the definitions which we shall now consider is to identify

children who, even though they have a variety of patterns of difficulty, can still be considered to have a specific learning difficulty.

Definitions

Under the 1981 Act, the various category labels which were previously used have been replaced by the generic concept of 'special educational needs' which in its turn defines two further related concepts. These definitions are as follows, directly quoted from Section 1 of the Act:

(a) 'A child has "*special educational needs*" if he or she has a learning difficulty which calls for special educational provision to be made for him.'
(b) 'A child has a "*learning difficulty*" if he has a significantly greater difficulty in learning than the majority of children of his age, or he has a disability which either prevents or hinders him from making use of educational facilities of a kind generally provided in schools.'
(c) '*Special educational provision*' means 'provision which is additional to, or otherwise different from, the educational provision made generally for children of his age'.

The Local Education Authorities charged with implementing the Act have understandably interpreted these definitions in a variety of ways. Some have taken the view that if a child is attending an ordinary, mainstream school, he or she does not have 'special educational needs' under the Act, since they are able to make use of facilities generally provided in schools for children with learning or other problems. Other LEAs have taken a more liberal view of the wording of the Act, and hence a wide variation in practices has developed between LEAs.

In an effort to enquire into this variety of practices, the Division of Educational and Child Psychology of the British Psychological Society sponsored a survey of all LEAs and of most educational psychologists in England in early 1989. The survey work is being co-ordinated on behalf of the Society by two contributors to this book, Peter Pumfrey and Rea Reason. By early May 1989, 72 out of a total of 104 LEAs had replied to a questionnaire about their policies and practices in relation to specific learning difficulties. Forty out of the 72 LEAs (56 per cent) said that they had formulated a policy on specific learning difficulties, leaving 44 per cent who had not formulated a policy. It seems reasonable to conclude that the variety of LEA policies or non-policies in Britain is directly due to the absence of any definition or specification of specific learning difficulties in the 1981 Act.

PL 94–142, on the other hand, provides a definition of specific learning disability as follows:

'Specific learning disability' means a disorder in one or more of the

> basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural or economic disadvantage.

This definition is virtually the same as one developed by the National Advisory Committee on Handicapped Children in 1968 and incorporated into 1969 legislation on specific learning disability. Although taken on its own, without further elaboration, the definition is general and open to interpretation, the US Office of Education (1977) provided procedural guidelines for interpretation. The criteria for determining the existence of a specific learning disability states that a child has such a disability if:

1. the child does not achieve commensurate with his or her age and ability levels in one or more of the areas listed in paragraph (2), when provided with learning experiences appropriate for the child's age and ability levels; and
2. the team finds that a child has a severe discrepancy between achievement and intellectual ability in one or more of the following areas: (i) oral expression; (ii) listening comprehension; (iii) written expression; (iv) basic reading skill; (v) reading comprehension; (vi) mathematics calculation; or (vii) mathematic reasoning.

The regulation repeated the exclusion clause contained in the final sentence of the original definition.

An example of state regulations

Even the attempt, which has just been outlined, to define criteria for the detection of learning disability has resulted in a wide range of interpretations by individual States. Although the Federal Government determines the legislative framework under which the States must operate, it is up to each individual State to formulate its own regulations and interpretations of the law. The wide range of regulations and interpretations of the law has been recently reviewed by Frankenberger and Harper (1987).

According to this study, 57 per cent of States do include achievement discrepancy criteria in their guidelines. These will typically involve a comparison of achievement test scores with scores from an intelligence test or some other tests of generalized cognitive abilities, such as reasoning, memory,