

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties

Practical strategies

Michael Farrell

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

**Also available as a printed book
see title verso for ISBN details**

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties is an accessible and practical guide for the busy practitioner. Drawing on his extensive specialist knowledge, the author offers a sensible, workable and practical approach for any teacher who wishes to understand and promote effective classroom practice for children with learning difficulties. Concentrating on the realities of teaching and learning, the book:

- ◆ places learning difficulties in the context of policy and law;
- ◆ examines and explains the relevant terms and definitions;
- ◆ puts forward suggestions for provision;
- ◆ looks at ways of assessing and raising achievement;
- ◆ offers strategies to develop a responsive environment.

Highly accessible and authoritative, this book provides a much-needed source of knowledge for teachers, special educational needs co-ordinators and students on initial teacher training courses.

Michael Farrell is an independent special educational consultant and recognised expert in special education. He has written or edited over 30 acclaimed education books.

New Directions in Special Educational Needs

By focusing firmly on what really works in practice with children with special educational needs, this highly practical series will enlighten and inform any busy teacher eager to know more about individual difficulties, and who wants to make inclusion a reality for their pupils.

All books in the series concentrate on the educational implications of certain special educational needs. They also consider the legal obligations of schools, what teachers can do to support and encourage inclusive learning in their classroom, and where they can go for additional support and advice. Packed full of down-to-earth yet authoritative advice this series will provide teachers with everything they need to ensure their pupils with special educational needs are effectively and properly supported.

Titles in the Series (all by Michael Farrell)

The Effective Teacher's Guide to Behavioural, Emotional and Social Difficulties

Practical strategies

The Effective Teacher's Guide to Autism and Communication Difficulties

Practical strategies

The Effective Teacher's Guide to Dyslexia and Other Specific Learning Difficulties

Practical strategies

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties

Practical strategies

The Effective Teacher's Guide to Sensory Impairment and Physical Disability

Practical strategies

The Effective Teacher's Guide to Moderate, Severe and Profound Learning Difficulties

Practical strategies

Michael Farrell

First published 2006
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Ave, New York, NY 10016

This edition published in the Taylor & Francis e-Library, 2006.

“To purchase your own copy of this or any of Taylor & Francis or Routledge’s collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk.”

Routledge is an imprint of the Taylor & Francis Group

© 2006 Michael Farrell

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data

A catalog record has been requested for this book

ISBN10: 0-415-36041-2

ISBN13: 9-78-0-415-36041-8

Contents

	<i>List of abbreviations</i>	vii
1	What are moderate, severe and profound learning difficulties?	1
2	Moderate learning difficulties	13
3	Severe learning difficulties: curriculum and assessment	27
4	Aspects of teaching and learning for pupils with severe learning difficulties	43
5	Profound and multiple learning difficulties	57
6	Conclusion	75
	<i>Addresses</i>	79
	<i>Bibliography</i>	85
	<i>Index</i>	91

Abbreviations

AAC	augmentative and alternative communication
BESD	behavioural, emotional and social difficulties
CB	challenging behaviour
CMV	cytomegalovirus
DfEE	Department for Education and Employment
DfES	Department for Education and Skills
<i>DSM-IV-TR</i>	<i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision</i>
ESPP	Early Support Pilot Programme
<i>ICF</i>	<i>International Classification of Functioning</i>
ICT	information and communications technology
IEP	individual education plan
LEA	local education authority
MLD	moderate learning difficulties
NLS	National Literacy Strategy
NNS	National Numeracy Strategy
PIVATS	Performance Indicators for Value Added Target Setting
PLASC	Pupil Level Annual School Census
PMLD	profound and multiple learning difficulties
PSED	personal, social and emotional development
PSHCE	personal, social, health and citizenship education
PSHE	personal, social and health education

QCA	Qualifications and Curriculum Authority
RoA	Record of Achievement
SCAA	Schools Curriculum and Assessment Authority
SEN	special educational needs
SENCO	special educational needs co-ordinator
SLD	severe learning difficulties
SMSC	spiritual, moral, social and cultural
<i>WISC-III</i>	<i>Wechsler Intelligence Scale for Children – Third Revision</i>

Dr Michael Farrell trained as a teacher and as a psychologist at the Institute of Psychiatry and has worked as a head teacher, a lecturer at the Institute of Education, London and as a local education authority inspector. He managed national projects for City University and for the Government Department of Education. Michael Farrell presently works as a special educational consultant. This has involved policy development and training with LEAs, work with voluntary organisations, support to schools in the independent and maintained sectors, and advice to ministries abroad. Among his numerous books, which are translated into European and Asian languages, are:

Key Issues for Primary Schools (Routledge, 1999)

Key Issues for Secondary Schools (Routledge, 2001)

Understanding Special Educational Needs: A Guide for Student Teachers (Routledge, 2003)

Key Issues in Special Education (Routledge, 2005)

What are moderate, severe and profound learning difficulties?

INTRODUCTION

This chapter sets the book in the context of the ‘New Directions in Special Educational Needs’ series of which it forms a part. It outlines the contents of the book chapter by chapter and describes the proposed readers. I then attempt to define moderate, severe and profound learning difficulties (which I will refer to collectively as general learning difficulties to distinguish them from specific learning difficulties) and describe pupils considered to have them. This is done with reference to the *Special Educational Needs Code of Practice* (DfES, 2001a); the guidance, *Data Collection by Type of Special Educational Needs* (DfES, 2003); and the legal definition of special educational needs (SEN).

The sort of provision from which pupils with general learning difficulties appear to benefit is touched on. (Later chapters consider the possible causes of general learning difficulties and look at the factors associated with them.) The prevalence of general learning difficulties is considered. The issue of inclusion is examined with particular reference to pupils with general learning difficulties in terms of the balance of pupils in mainstream and special schools with particular reference to the guidance, *Inclusive Schooling: Children with Special Educational Needs* (DfES, 2001b). Finally, I look at the issues of professionals working together; working with parents; and involving pupils.

The place of this book in the New Directions in Special Educational Needs series and an outline of the chapter contents

This book, *The Effective Teacher’s Guide to Moderate, Severe and Profound Learning Difficulties: Practical Strategies*, is part of a ‘New Directions in Special Educational Needs’ series covering the types of SEN related to those outlined in the *Special Educational Needs Code of Practice* (DfES, 2001a). The series focuses on what works in the education of pupils with SEN. It covers:

- ◆ learning difficulties (moderate, severe, and profound and multiple learning difficulties (PMLD));

- ◆ behavioural, emotional and social difficulties (BESD);
- ◆ specific learning difficulties (dyslexia, dyspraxia and dyscalculia);
- ◆ communication and interaction difficulties (speech, language and communication difficulties, and autistic spectrum disorder);
- ◆ sensory and physical difficulties (visual impairment, hearing impairment, multi-sensory impairment and physical disability).

The present book covers the following areas:

Chapter 2: Moderate learning difficulties

This chapter considers the prevalence of moderate learning difficulties (MLD) and possible causal factors associated with them. I look at the identification and assessment of MLD. I explain various approaches to provision: interventions for literacy and for mathematics; more general interventions, namely using concrete and visual apparatus, understanding and using multi-sensory teaching; making connections for the pupil to other objects and life-relevant situations; providing opportunities for exploratory learning and investigation; and ensuring suitable pace. Finally, interventions suitable for pupils who have additional difficulties in communication and language and behavioural, emotional and social difficulties (BESD) are outlined.

Chapter 3: Severe learning difficulties: curriculum and assessment

In this chapter, I look at definitions of severe learning difficulties (SLD), the prevalence of SLD and causal factors associated with SLD. The chapter considers identification and assessment. I then examine provision for pupils with SLD in terms of curriculum and assessment adaptations. These include the curricular issues of adapting the National Curriculum, the National Literacy Strategy (NLS) and the National Numeracy Strategy (NNS). I look at the use of cross-curricular links to reinforce subject understanding and skills; the development of intermediate targets; and briefly at an approach to lesson planning. Regarding assessment, the chapter examines breadth, quality, challenge, depth and laterality; and several assessments used for achievement below level 1 of the National Curriculum. Other aspects of assessment are examined, including Records of Achievement (RoAs). Next a more specific view of adaptations of the curriculum and assessment is provided using the example of personal, social, health and citizenship education (PSHCE).

Chapter 4: Aspects of teaching and learning for pupils with severe learning difficulties

This chapter examines approaches to teaching and learning, including: multi-sensory approaches; interactive approaches; visual inputs; augmentative and alternative communication (AAC); and encouraging communication through music. Also considered are: using information and communications technology (ICT) to improve access to the curriculum; developing and using regular routines; starting with what is familiar; and choice and decision-making. Finally, the chapter examines using and developing understanding of questions; capitalising on practical activities; developing vocabulary; interactive storytelling; developing mobility and co-ordination; pupil grouping; a 'room management' approach; and resources.

Chapter 5: Profound and multiple learning difficulties

This chapter examines definitions of PMLD. It considers the prevalence of such difficulties and causal factors associated with them. Identification and assessment are considered. Provision for pupils with PMLD is described with particular reference to curriculum and assessment, and teaching and learning approaches. The latter concern multi-sensory approaches, enabling communication, linking resources and routines, and pupils controlling their surroundings. Also discussed are building on the pupils' interests, aptitudes and achievements; managing challenging behaviour (CB); and the effects of sensory impairment, physical disability and severe medical conditions.

Chapter 6: Conclusion

The final chapter considers principles that apply to general learning difficulties and how they are refined and modified, as the learning difficulty is increasingly more severe. In other words, the chapter will briefly reiterate why the concept of general learning difficulty is used and why it can be useful.

Each chapter has its own introduction and headings and ends with thinking points and suggested key texts. At the end of the book are a list of physical and internet addresses, a bibliography and a combined subject and author index.

Proposed readers

The book is intended particularly for:

- ◆ all teachers, special educational needs co-ordinators (SENCOs) and head teachers in mainstream schools and units working with pupils with general learning difficulties;
- ◆ all staff in special schools providing for pupils with general learning difficulties;
- ◆ local education authority (LEA) officers with an interest in and/or responsibility for pupils with general learning difficulties;
- ◆ student teachers and newly qualified teachers wishing to gain an understanding of educational provision for pupils with general learning difficulties;
- ◆ teachers and others undergoing continuing professional development;
- ◆ school advisers and inspectors.

What are general learning difficulties?

The Special Educational Needs Code of Practice

As a starting point, the *Special Educational Needs Code of Practice* (DfES, 2001a) differentiates between general learning difficulties and specific learning difficulties under an umbrella of 'cognition and learning'. Under the remit of 'cognition and learning' are 'Children who demonstrate features of moderate, severe or profound learning difficulties or specific learning difficulties, such as dyslexia or dyspraxia' (Chapter 7: section 58).

The odd expression, ‘demonstrate features of’ may have been used to avoid appearing to label a child too rigidly as ‘having’ moderate, severe or profound learning difficulties, otherwise it is very difficult to know what it might mean. In any event, children with general learning difficulties (or specific learning difficulties) ‘require specific programmes to aid progress in cognition and learning’ (7: 58).

The requirement of specific programmes to aid progress in cognition and learning may also apply ‘to some extent to pupils with physical and sensory impairments and those on the autistic spectrum’ (7: 58). Some children with difficulties in cognition and learning ‘may have associated sensory, physical and behavioural difficulties that compound their needs’ (7: 58).

Possible triggers for intervention at the level of Early Years Action include ‘the practitioner’s or parent’s concern about a child who, despite receiving appropriate educational experiences: makes little or no progress even when teaching approaches are particularly targeted to improve the child’s identified area of weakness’ (4: 21). In the case of Early Years Action Plus in general, the triggers for seeking help outside the school could be that, ‘despite receiving an individualised programme and/or concentrated support, the child . . . continues working at an early years curriculum substantially below that expected of children of a similar age’ (4: 31).

In the primary phase, the triggers for School Action could be ‘the teacher’s or others’ concern, underpinned by evidence, about a child, who despite receiving differentiated learning opportunities: . . . makes little or no progress even when teaching approaches are targeted particularly in a child’s area of weakness’ (5: 44). School Action Plus triggers in the primary phase could be that ‘despite receiving an individualised programme and/or concentrated support under School Action, the child . . . continues working at National Curriculum levels substantially below that expected of children of a similar age’ (5: 56).

Turning to the secondary sector, School Action triggers (6: 51) and School Action Plus triggers (6: 64) are almost identical to those for the primary phase.

Regarding the statutory assessment of SEN, when an LEA is deciding whether to carry out an assessment, it should ‘seek clear recorded evidence of the child’s academic attainments and ask, for example, whether . . . the child is working at a level significantly below that of their contemporaries in any of the subjects of the National Curriculum or the Foundation Stage curriculum’ (7: 41).

In the light of evidence about the child’s ‘learning difficulty’ the LEA should consider the action taken and particularly should ask whether ‘the school or setting has, in consultation with outside specialists, formulated, monitored and regularly evaluated IEPs and whether the child’s progress, measured by criterion referenced or standardised tests, continues to be significantly and consistently less than that which may be expected for the majority of children following such programmes’ (7: 49).

The guidance, Data Collection by Type of Special Educational Needs

A further description of general learning difficulties is provided in the guidance, *Data Collection by Type of Special Educational Needs*, which is connected with the Pupil Level Annual School Census (PLASC) (DfES, 2003) (www.dfes.gov.uk/

sen). The Department for Education and Skills (DfES) sent original draft descriptions to a sample of schools, LEAs and voluntary organisations and amended them in the light of the comments received. The guidance concerns gathering information on the type of SEN for pupils for whom special educational provision is being made at Early Years Action Plus, School Action Plus or through a statement of SEN (DfES, 2003, p. 2). (Pupils at Early Years Action and School Action are recorded as having SEN, but it is not necessary for the purpose of the PLASC to record their type of SEN.)

According to the guidance, pupils with MLD ‘will have attainments significantly below expected levels in most areas of the curriculum, despite appropriate interventions. Their needs will not be able to be met by normal differentiation and the flexibilities of the National Curriculum’ (p. 3). The guidance emphasises that such pupils **‘should only be recorded as MLD if additional educational provision is being made to help them to access the curriculum’** (p. 3, bold in original). Pupils with MLD ‘have much greater difficulty than their peers in acquiring basic literacy and numeracy skills and in understanding concepts. They may also have associated speech and language delay, low self-esteem, low levels of concentration and under-developed social skills’ (p. 3).

Pupils with SLD have ‘significant intellectual or cognitive impairments’. The guidance continues:

This has a major effect on their ability to participate in the school curriculum without support. They may also have difficulties in mobility and co-ordination, communication and perception and the acquisition of self-help skills. Pupils with severe learning difficulties will need support in all areas of the curriculum. They may also require teaching of self-help, independence and social skills. Some pupils may use sign and symbols but most will be able to hold simple conversations. Their attainments may be within the upper P scale range (P4–8) for much of their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, pp. 3–4)

Turning to pupils with PMLD, the guidance states:

In addition to very severe learning difficulties, pupils have other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition. Pupils require a high level of adult support, both for their learning needs and for their personal care. They are likely to need sensory stimulation and a curriculum broken down into very small steps. Some pupils communicate by gesture, eye pointing or symbols, others by very simple language. Their attainments are likely to remain in the early P scale range (P1–4) throughout their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, p. 4)

General learning difficulties and the legal definition of SEN

General learning difficulties can be better understood by examining them in the context of the legal definition of SEN in the Education Act 1996. The Act provides

a layered definition in which a ‘difficulty in learning’ or a ‘disability’ may lead to a ‘learning difficulty’, which may call for special educational provision to be made, therefore constituting an SEN. In this context, MLD, SLD and PMLD are all ‘difficulties in learning’ that are so significant that they constitute a ‘learning difficulty’ that calls for special educational provision to be made, therefore constituting an SEN. As already indicated in the case of PMLD, there may also be physical disabilities, sensory impairment or the effects of a medical condition that of themselves *could* also represent a learning difficulty constituting an SEN.

Provision for pupils with general learning difficulties

Later chapters of the book explore provision for pupils with MLD, SLD and PMLD to the extent that these are distinctive. The purpose of the present section is to indicate something more about the nature of general learning difficulties by touching on the interventions that are used when educating pupils with these difficulties. As a starting point, the *Special Educational Needs Code of Practice* (DfES, 2001a) provides a basic description of provision from which pupils with general learning difficulties may benefit. These children may require some or all of the following:

- ◆ flexible teaching arrangements;
- ◆ help with processing language, memory and reasoning skills;
- ◆ help and support in acquiring literacy skills;
- ◆ help in organising and co-ordinating spoken and written English to aid cognition;
- ◆ help with sequencing and organisational skills;
- ◆ help with problem solving and developing concepts;
- ◆ programmes to aid improvement of fine and motor competencies;
- ◆ support in the use of technical terms and abstract ideas;
- ◆ help in understanding ideas, concepts and experiences when information cannot be gained through first hand sensory and physical experiences.

(DfES, 2001a, 7: 58)

The above extract is not as helpful as it might be because the *Code* conflates observations about the provision for pupils with general and specific learning difficulties. Also some of the suggestions are unclear. What, for example, are ‘programmes to aid improvement of fine and motor competencies’? Are they programmes to aid ‘fine competencies’ and if so what are these? Are they programmes to aid fine and gross motor skills? Also, does ‘help with processing language, memory and reasoning skills’ really mean help with processing language and help in developing memory skills and reasoning skills?

Causes of general learning difficulties and their prevalence

The possible causes of general learning difficulties will be considered separately for MLD, SLD and PMLD in subsequent chapters, where the prevalence of these types of general learning difficulty will also be discussed.

Inclusion and general learning difficulties

Inclusion is sometimes characterised as aiming to encourage schools to reconsider their structure, teaching approaches, pupil grouping and use of support so that the school responds to the perceived needs of all its pupils. Teachers, collaborating closely, seek opportunities to look at new ways of involving all pupils and to draw on experimentation and reflection. There should be planned access to a broad and balanced curriculum developed from its foundations as a curriculum for all pupils.

One view of inclusion is that it concerns educating more pupils in mainstream schools and fewer or none in special schools and other venues regarded as segregating. However, it may be argued that special schools can also be inclusive (Farrell, 2000). Indeed, the Qualifications and Curriculum Authority (QCA) has characterised inclusion as ‘securing appropriate opportunities for learning, assessment and qualifications to enable the full and effective participation of all pupils in the process of learning’ (Wade, 1999).

Aspects of inclusion in relation to general learning difficulties

Including pupils with SEN already in mainstream school

An aspect of inclusion is that of including pupils with SEN who are already in mainstream schools. This approach seems to be the purpose of documents seeking to encourage this kind of inclusion, such as the *Index for Inclusion* (Booth *et al.*, 2000). The document concerns the inclusion of all those connected with the school, adults as well as children, not only pupils with SEN. Developing an inclusive ethos and inclusive approaches may increase the school’s capacity to include pupils with general learning difficulties who are presently not in mainstream or who otherwise might be considered to be better placed in another setting such as a special school or a unit. This leads to a consideration of that aspect of inclusion concerning the balance of pupils in mainstream schools and other settings such as special schools.

The balance of pupils in mainstream and special schools

The expression, ‘full inclusion’, as it applies to pupils with SEN, indicates the view that all pupils with SEN should be educated in mainstream schools. A range of provision in which pupils with SEN could be educated (such as mainstream school, special school, home tuition) would not be acceptable. It would be better to have increased support and resources in mainstream schools in proportion to the severity and complexity of SEN (e.g. Gartner and Lipsky, 1989). Full inclusion is not the position of the government in England nor is it that of any of the major parties in opposition at the time of writing.

The document, *Inclusive Schooling: Children with Special Educational Needs* (DfES, 2001b), gives statutory guidance on the framework for inclusion. The Special Educational Needs and Disability Act 2001 is said to deliver a ‘strengthened right to a mainstream education for children with special educational needs’ (DfES, 2001b, p. 1, para. 4) by amending the Education Act 1996.

Concerning the nature of the proposed ‘right’ to inclusion, it is clear that this is constrained. This is indicated by the *Inclusive Schooling* document referring to a ‘strengthened right’ to mainstream education (p. 1, para. 4). The right (if that is the correct word) is partial. The extent of the right can be seen from the commensurate duties that are placed on others in connection with the ‘right’.

As a result of the Special Educational Needs and Disability Act 2001, the Education Act 1996 section 316(3) was amended to read:

If a statement is maintained under section 324 for the child, he must be educated in a mainstream school unless that is incompatible with:

- ◆ the wishes of his parent, or
- ◆ the provision of efficient education for other children.

The use of the word ‘must’ in the above section of the Act indicates the duty of the LEA and others that corresponds to the ‘right’ to be educated in the mainstream. If the education of a child with SEN is incompatible with the efficient education of other pupils, mainstream education can only be refused if there are no reasonable steps that can be taken to prevent the incompatibility. But it may not be possible to take steps to prevent a child’s inclusion being incompatible with the efficient education of others. This may arise, for example, when the teacher, even with other support, has to spend a greatly disproportionate amount of time with the child in relation to the rest of the class.

The ‘rights’ are further affected when one considers a particular school rather than the generic concept of ‘mainstream’. Parents may express a preference for a particular mainstream school to be named in their child’s statement of SEN. In this case, schedule 27 of the Education Act 1996 requires the LEA to name the parents’ preferred choice of school in the child’s statement unless any of three conditions apply. These are:

- 1 the school cannot provide for the needs of the child;
- 2 the child’s inclusion at the school would be incompatible with the efficient education of other pupils;
- 3 the child’s inclusion at the school would be incompatible with the efficient use of resources.

It will be seen that there is no comprehensive ‘right’ of attendance at a mainstream school, but that the rights of the parents of a child with SEN are balanced against the ‘rights’ of the parents of children who do not have SEN and against other factors. It is in this context that provision – what works best for pupils with general learning difficulties – should be understood.

Professionals working closely together

Professionals involved with children with general learning difficulties may include the teacher, the general practitioner, school nurse, school medical officer, speech and language therapist, physiotherapist, educational psychologist, educational welfare officer, social worker and others. Each may have different professional perspectives and different levels of experience concerning general learning diffi-

culties. Professional trust is essential but is difficult to build up where staff turnover is very high. For multi-professional working to be practicable, clear lines of communication are necessary and a structure that demarcates responsibility without being too constraining.

Early years development and childcare partnerships use inter-agency planning to bring together early years education and social care. Health action zones and education action zones co-ordinated action on social disadvantage and social support for pupils with SEN. SEN regional partnerships have encouraged discussions and joint planning between education, health and social services on some topics. Aspects of the Excellence in Cities programme included encouraging school-based learning support units working with pupils at risk of exclusion from school to work with learning mentors and out-of-school support services. The Sure Start initiative offered the opportunity to interrelate family policy and the early identification and support of pupils with SEN.

In 2003, an Early Support Pilot Programme (ESPP) was designed to develop good service provision and to support development in various areas, including the co-ordination of multi-agency support for families and partnership across agencies and geographical boundaries. This involved joint work between the DfES and others, including the Royal National Institute for the Blind, the Royal National Institute for the Deaf, and the National Children's Bureau (www.earlysupport.org.uk). See also the DfES website (www.dfes.gov.uk/sen), the Department of Health website (www.doh.gov.uk) or the National Children's Bureau website (www.ncb.org.uk).

Related to joint professional working, a National Children's Trust Framework was announced in 2001 intended to develop new standards across the National Health Service and social services for children and encourage partnership between agencies. Children's Trusts were subsequently seen as seeking to integrate local education, social care and some health services (through the Health Act 1999, section 31) for children and young people, and to incorporate an integrated commissioning strategy. The LEA will potentially include all education functions, including SEN, the education welfare service and educational psychology. Children's social services will include assessment and services for children 'in need'. Community and acute health services will include locally provided and commissioned child and adolescent mental health services and could also include speech and language therapy, health visiting and occupational therapy services concerned with children and families. Primary Care Trusts will be able to delegate functions into the Children's Trust and will be able to pool funds with the local authority.

Trusts can also include other services such as Connexions and Sure Start. Other local partners such as voluntary organisations, housing services and leisure services can be involved. Children's Trusts are expected to sit within local authorities reporting to the director of children's services, who in turn will report to the chief executive to the local councillors. The Children's Trusts will commission services and may provide these directly or by contracts through public, private or voluntary sector organisations.

The resulting integration of service provision is expected to be reflected in such features as: collocated services such as Children's Centres and extended schools; multi-disciplinary teams and a key worker system; a common assessment

framework across services; information-sharing systems across services; joint training; and effective arrangements for safeguarding children. The intention is to integrate key children's services within a single organisational focus, preferably through Children's Trusts, which it was envisaged would exist in most areas by 2006. Bids for 35 'Pathfinder' Trusts were approved in 2003, funded to 2006 (www.doh.gov.uk/nsf/children/index.htm).

Working with parents

Working closely with parents is an aspiration of all schools and a continuing theme in government guidance. The *Special Educational Needs Code of Practice* (DfES, 2001a) devotes a chapter to 'Working in partnership with parents' and specific guidance on seeking to understand what parents might need is available (e.g. Greenwood, 2002). Subsequent chapters of the present book assume that parents are as fully involved as is practicable. The school's support of parents may include:

- ◆ providing information about SEN and practical strategies for coping;
- ◆ putting parents in touch with support groups locally and nationally;
- ◆ making school premises available for various activities such as a parents support group;
- ◆ having displays of literature such as leaflets;
- ◆ being a 'one stop' point of contact for other services.

Panter (2001) suggests specific examples of involving parents in their child's mathematics learning. These include using home routines and other times when the child and parent are together to encourage mathematics skills. For example, parents may ask whether a container of liquid is full or empty, half full or a quarter full. They might ask the child what time it is or how long it is to a specified time such as dinnertime. Parent workshops might help parents understand how to help their child. Joint parent and pupil workshops can allow parents to see what their child can do or enable the sharing of the language of mathematics. Also, mathematics days in school holidays may allow parents to join pupils for part of the time and the school can create mathematics trails with parents, which they can do with their children (Panter, 2001, p. 50).

Hornby (2003, p. 131) suggests a model for collaborating with parents in order to help pupils experiencing difficulties at school, which may have wider application for work with parents of pupils with SEN more generally. It distinguishes between what it is considered parents 'need' and what they can reasonably be expected to contribute. Parents' *needs* are considered to be for communication with the school (which all parents need); liaison, such as that taking place at parent-teacher meetings (which most parents need); education, such as parents' workshops (which many need); and support, such as counselling (which some need). Parents' *contributions* are considered as information, for example about the child's strengths (which all parents can provide); collaboration, for example with behaviour programmes or supporting a pupil's individual education plans (IEPs) (to which most parents could contribute); resources, such as being a classroom aid (which many could contribute); and helping develop policy, for example being a parent governor of the school (which some could contribute).

The model leaves open the exact interpretation of the expressions ‘most’, ‘many’ and ‘some’ and schools will bring their own judgements to bear on, for example, whether it is reasonable to expect ‘many’ parents to contribute at a level suggested by being a classroom aid. Nevertheless the basic structure of the model with a graduated view of the parents’ proposed needs and the contribution is a helpful one.

Pupils’ views

Materials used when seeking to explore the views of children with SEN include such sources as: the guidelines, *Listening to Children with Communication Support Needs* (Aitken and Millar, 2002) and *How It Is* (Marchant and Cross, 2002); and projects such as *Can You Hear Us?: Including the Views of Disabled Children and Young People* (Whittles, 1998). Lewis (2004) lists some aspects of methods relevant to chronologically young children or ‘developmentally young’ children. These include:

- ◆ permit or encourage ‘don’t know’ responses and requests for clarification;
- ◆ stress not knowing the events or views of the child to counter the child’s assumption that the adult knows the answer (the child tends to be more suggestible if the adult has credibility and rapport with the child);
- ◆ use statements rather than questions to trigger fuller responses from children;
- ◆ if using questions, use an appropriate level of generality (for example, ‘open or moderately focused questions seem to generate more accurate responses from children with learning difficulties than do highly specific questions’);
- ◆ avoid ‘yes/no’ questions to avoid acquiescence, particularly for pupils with learning difficulties; and
- ◆ aim for an uninterrupted narrative.

(Lewis, 2004, pp. 4–6 paraphrased)

The *Special Educational Needs Code of Practice* (DfES, 2001a, especially Chapter 3) encourages pupil participation and seeks to involve pupils with SEN in the development and evaluations of the IEP and behaviour support plans where possible. A balance is sought between encouraging participation and overburdening the pupil when he may not have sufficient experience and knowledge to make judgements without support.

THINKING POINT

Readers may wish to consider, with reference to a particular school:

- ◆ the effectiveness of procedures for seeking a commonly held understanding of general learning difficulties, such as discussion, consultation with the SENCO and observation.

KEY TEXT

Farrell, M. (2003) *The Special Education Handbook*, London, David Fulton Publishers.

As a starting point, entries that may be useful include: ‘moderate learning difficulty’, ‘severe learning difficulty’, ‘profound and multiple learning difficulty’, ‘special educational needs’ and ‘learning difficulty’. Others include ‘individual education plan’, ‘object of reference’, ‘sign language’, ‘symbols’, ‘advocacy’ and ‘multi-sensory environments’. Appendices summarise legislation and related reports and consultative documents from the ‘Warnock report’ to the present day; selected regulations from 1981 to the present; and selected circulars and circular letters from 1981 to the present, including the *Special Educational Needs Code of Practice* of 2001 and the Special Educational Needs and Disability Act 2001.

Moderate learning difficulties

INTRODUCTION

This chapter seeks to define MLD more precisely than in the previous chapter, where they were briefly discussed. I consider the prevalence of MLD and possible causal factors associated with them. The chapter looks at the identification and assessment of MLD. I explain various approaches to provision: interventions for literacy and for mathematics; more general interventions, namely using concrete and visual apparatus, understanding and using multi-sensory teaching; making connections for the pupil to other objects and life-relevant situations; providing opportunities for exploratory learning and investigation; and ensuring that lessons have a suitable pace. Finally, interventions are outlined that are used for pupils who have additional difficulties in communication and language or BESD.

Definitions

It will be remembered that a description of MLD is provided in guidance connected with the PLASC (DfES, 2003) (www.dfes.gov.uk/sen). The guidance concerns gathering information on the type of SEN for pupils for whom special educational provision is being made at Early Years Action Plus, School Action Plus or through a statement of SEN (p. 2). (Pupils at Early Years Action and School Action are recorded as having SEN but it is not necessary for the purpose of the PLASC to record their type of SEN.)

According to the guidance, pupils with MLD ‘will have attainments significantly below expected levels in most areas of the curriculum, despite appropriate interventions. Their needs will *not* be able to be met by normal differentiation and the flexibilities of the National Curriculum’ (p. 3, italics added). The guidance emphasises that such pupils ‘**should only be recorded as MLD if additional educational provision is being made to help them to access the curriculum**’ (p. 3, bold in original). Pupils with MLD ‘have much greater difficulty than their peers in acquiring basic literacy and numeracy skills and in understanding concepts. They may also have associated speech and language

delay, low self-esteem, low levels of concentration and under-developed social skills' (p. 3).

Part of this definition refers to low attainment. It is not implied that the low attainment is the fault of the school, for example because the school has not been providing suitable interventions. However, neither does the definition imply that the school can be complacent and assume that it cannot do more, even though it may have provided 'appropriate' interventions. The definition specifies that the attainments be below expected levels, 'despite appropriate interventions'. Then why are attainments low? The definition suggests that this relates to the child's 'difficulty' in 'acquiring basic literacy and numeracy skills and in understanding concepts'.

The introduction to the guidance makes it clear that 'Lack of competence in the English language is **not** a special educational need' (p. 2, bold in original). It also appears to indicate that the child's home or family circumstances are not one of the factors that constitute SEN. The guidance states, 'Under-attainment may be an indicator of SEN but poor performance may be due to other factors such as problems in the child's home or family circumstances or poor school attendance' (p. 2). This does not sit well with notions of MLD that relate them in part to socio-economic circumstances.

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000) uses categories for describing conditions and these include mental retardation. This is a disorder 'characterised by significantly sub-average intellectual functioning (approximately IQ 70 and below) with onset below 18 years and concurrent deficits/impairments in adaptive functioning' (p. 39). In 'mild mental retardation', IQ levels are between 50/55 and approximately 70 (p. 42). Deficits in adaptive functioning have to be in at least two of eight specified areas such as communication or self-care. This corresponds to some interpretations of MLD in England. Definitions of MLD vary internationally (Norwich and Kelly, 2004, pp. 17–19) and in England have also varied over time (pp. 20–7). If the term is to be useful, the greater the agreement on what it means, the more relevant might be its use. The Audit Commission (2002) also outlines arguments for a national definition of SEN.

For Norwich and Kelly (2004) the validity of SEN categories is 'about whether categories such as MLD have implications for additional or different educational provision or interventions for those with MLD compared to [*sic*] those without MLD' (p. 31). Such implications might be, for example, the provision of very small classes perhaps in a unit or a special school or through special arrangement in mainstream class grouping (such as 'sets') so that the pupil receives much more teacher attention than in other provision. Related to questions of definition are issues of classification. It has been suggested that, with regard to MLD:

To be relevant to education the classification has to be in curriculum and teaching terms; in terms of broad and balanced learning goals, access and adaptations in teaching methods and their context. It was argued that any adequate classification of this kind would be multi-dimensional as well as be [*sic*] in terms of the learning impact of additional and different education provision.

(Norwich and Kelly, 2004, p. 158)

Additional difficulties

Factors associated with pupils considered to have MLD are indicated by a sample used for a study reported by Norwich and Kelly (2004, pp. 13–14). All pupils in one LEA in the south-west of England with statements of SEN in which ‘mild and moderate general learning difficulties’ was the main learning difficulty were identified. From these, a sample was randomly selected so that 50 pupils were in ordinary schools and 50 were in special schools. Half of the pupils in each setting were aged 10 to 11 years and half of them were aged 13 to 14 years with each having equal numbers of boys and girls. The pupils from the ordinary schools were from 29 primary and secondary schools while the pupils from special schools were from 4 schools. From each pupil’s most recent statement of SEN, the associated difficulties were recorded. The most recent National Curriculum levels in mathematics and English were noted, allowing comparisons to be made between the nature and severity of difficulties of pupils in the mainstream and special school settings.

While 16 per cent of the total sample was recorded as having MLD alone, 61 per cent of the sample had some form of language and communication difficulty with MLD. Over a third of the sample had more than two additional difficulties. Turning to the special school sample, pupils were recorded as having more additional difficulties than the ordinary school sample; for example, 75 per cent of the pupils with MLD alone were in mainstream schools while only 25 per cent were in special schools. Also, for pupils with MLD and two other additional difficulties, 29 per cent were in the mainstream sample and 71 per cent in the special school sample.

In earlier research, pupils with MLD attending special schools were reported by head teachers to have associated difficulties (Male, 1996). The sample comprised 54 special schools in England for pupils with MLD in 1993. Some 87 per cent of head teachers reported that up to a half of their pupils had language and communication difficulties while 80 per cent of head teachers reported that up to a half of their pupils had emotional and behavioural difficulties.

It has been suggested that such a preponderance of additional difficulties requires ‘a definition scheme which accommodates additional areas’ (Norwich and Kelly, 2004, p. 14). However the necessity for and usefulness of such a scheme could depend on two factors: first, the extent to which, in practical educational terms, the main learning difficulty is MLD; and, second, the extent to which such additional difficulties as BESD are to be provided for in a setting that primarily provides for pupils with MLD. Also, for any LEA used in a sample, the clarity of definitions of SEN in all areas (such as MLD; severe learning difficulty; and BESD) needs to be taken into account. Finally, it should be made clear whether the funding mechanism of any LEA offers possible perverse incentives for additional difficulties to be found within the population of pupils with MLD. For example, a system may provide extra funding according to whether pupils with SEN have additional needs. Unless there are criteria to determine when these difficulties are of a degree to justify them being considered as additional needs, then it is difficult to know how significant they may be. Many LEAs are still working strenuously to develop agreed criteria for a child’s main type of SEN. (Others

already have such criteria, for example Croydon, Blackpool and Northampton LEAs and many others.) The development of criteria for supposed additional difficulties is much less advanced.

It is possible that there may be a political incentive to find additional difficulties, particularly in special schools for pupils with MLD who may feel threatened by potential falling rolls because of that thread of inclusion that seeks to encourage the placement of pupils in ordinary rather than special schools. In one study, professionals, including teachers, educational psychologists, social workers and health service workers, expressed views about pupils with some types of SEN being easier or harder to include in mainstream schools than others. The easier to include types of SEN were considered to be MLD, sensory and physical difficulties, speech and language difficulties, and specific learning difficulties. Harder to include were thought to be types of SEN such as SLD, PMLD and BESD (Evans and Lunt, 2002).

Of course the degree of severity of the SEN is also important but the implication is that, all other things being equal, pupils with MLD are among the easier to include and, for example, pupils with BESD are among the harder to include. Therefore, for special schools to identify BESD among a population with MLD would suggest that inclusion would be more difficult. Factors suggesting other explanations include that, where pupils have MLD and do not experience associated difficulties such as BESD, they are more likely to be placed in mainstream schools so that the population in special schools is more likely to comprise more pupils with additional difficulties, including BESD.

This is not to maintain that some pupils with MLD do not have additional difficulties. It is to suggest that the existence of these and therefore their potential impact on the pupil's education requires a similar rigour to that which is developing in relation to identifying main types of SEN.

Prevalence

Prevalence in relation to SEN refers to the number of children with a particular type of SEN in a specified population over a specified period, for example 0–5 years old, or school age. Incidence is usually expressed as the number of children per live births in a given year. Prevalence is related to incidence in that prevalence is determined by the incidence of a condition and its duration (see also Farrell, 2003, pp. 129–30).

Estimates of the prevalence of MLD are difficult to establish. This is in part owing to different views about what constitutes MLD referred to in the section discussing definitions. What is widely agreed is that pupils considered as having MLD constitute the largest group among pupils with SEN (Fletcher-Campbell, 2004). In special schools, there is a predominance of boys over girls (e.g. Norwich and Kelly, 2004, p. 159).

Although there is variation in what different schools and different LEAs call MLD, nevertheless, useful information is provided by statistics gathered by the DfES and published in 2004. Regarding 'moderate learning difficulty', in January 2004 in England (DfES, 2004, table 9), there were 106,330 pupils at School Action

Plus representing 30.2 per cent of pupils at this part of the SEN framework and a further 65,600 pupils with statements of SEN or 27.8 per cent of pupils with statements.

This indicates that pupils with MLD constitute the largest group among pupils with SEN at both School Action Plus and among pupils with statements of SEN considering ordinary and special schools together, but the differences between ordinary primary and secondary schools and special schools are also worth noting. Pupils with MLD at School Action Plus are the largest group in ordinary primary schools, but in secondary schools are the second largest group next to pupils with BESD. (In special schools there are very few pupils at School Action Plus.) Pupils with statements of SEN for MLD are the largest group in special schools and in ordinary secondary schools, but in primary schools there are slightly more pupils with 'speech and language needs' as their main SEN than there are pupils with MLD.

The specific figures for ordinary primary and secondary schools and for special schools are as follows. In primary schools, 71,540 of pupils with MLD were at School Action Plus (32.7 per cent of all pupils at School Action Plus in primary schools) and 13,770 had statements of SEN (20 per cent of all pupils with statements in primary schools). In secondary schools, the number was smaller, being 34,640 at School Action Plus (26.4 per cent of all pupils at School Action Plus in secondary schools) and 23,450 with statements of SEN (29.9 per cent of all pupils with statements in secondary schools). In special schools, where it is much less usual for pupils *not* to have statements of SEN, there were only 140 pupils at School Action Plus (8.6 per cent of all pupils at School Action Plus in special schools) and 28,380 with statements of SEN (31.9 per cent of all pupils with statements in special schools). The figures for special schools included pupils attending maintained and non-maintained special schools but excluded pupils in independent special schools and pupils in maintained hospital schools.

Causal factors

There is debate about the extent to which MLD are predominantly attributed to 'within-child' factors or to social and environmental factors. Within-child factors are taken to include cognitive impairments as indicated by assessments of cognitive functioning such as IQ tests and other assessments. Social factors include the possible influence of impoverished social and economic backgrounds. Pupils with MLD, for example, tend to come from lower socio-economic class families (e.g. Norwich and Kelly, 2004, p. 3). The debate about the relative influence of within-child factors and social and environmental factors may reflect an unnecessarily sharp dichotomy as both may contribute in an interactive way.

DSM-IV-TR (American Psychiatric Association, 2000) uses categories for describing such conditions as 'mental retardation'. Taking a different approach, the *International Classification of Functioning, Disability and Health (ICF)* (World Health Organization, 2001, p. 3) seeks to give relative weight to individual and social factors using a bio-psychosocial model. Such a model can be used even within a categorising system to help indicate the possible relative influences of individual and social factors (see Farrell, 2004, pp. 75–7 for a fuller description).

Identification and assessment

The identification and assessment of MLD is a challenge to LEAs and schools. The reasons for this will be evident. Definitions are not agreed, for example level of attainment at specified ages in curriculum subjects such as English and mathematics that would be associated with MLD or the cognitive levels as indicated by standardised tests that would be taken as one of the indications of MLD.

LEAs' efforts to develop and agree criteria include references to intellectual functioning and curriculum attainment. A survey yielding a sample of 58 LEAs (49 English and 9 Welsh) gathered information about their policy and practice for pupils with MLD (Norwich and Kelly, 2004, pp. 138–52). The most frequent aspect of LEA definitions concerned 'the distinction between low all round attainments and low cognitive ability' (p. 141). A third of responding LEAs used a measure of cognitive abilities in their definition of MLD, such as IQ 50–70. Some 23 per cent of LEAs referred to slow progress across all or a number of curriculum areas (p. 141). Some referred to cut-offs for identifying low attainment, such as pupils attaining in the lowest 1–2 per cent or the lowest 2–5 per cent of all pupils. A fifth of LEAs defined MLD in terms of both low attainment and low ability. Also, 19 per cent of LEAs mentioned associated additional difficulties such as behaviour problems.

Two thirds of LEAs reported that they issued criteria to identify pupils 'with MLD-like difficulties' (p. 147), for example through guidance documents for school staff and other professionals, SEN statutory assessment panels that monitored the use of criteria, moderation panels and the use of SEN audits. LEA criteria have not yet tended to incorporate two aspects of the definition provided in guidance connected with the PLASC (DfES, 2003): that relating to difficulty in understanding concepts and the notion that the identification of MLD depends on normal differentiation and flexibility in provision having been made.

Provision

General points

Additional or different provision for pupils with MLD may be specified in terms of the curriculum and teaching and learning. Such provision should be such that it is beyond normal school flexibility. Norwich and Kelly (2004) emphasise what they consider to be the limited pedagogic significance of MLD as a category. They maintain that, if it were suggested that '*distinctive* provision for MLD pupils was in terms of cognitive enrichment programmes (Fuerstein, 1979), then this would have to address the question of why these programmes were not also relevant to low attainers and SLD groups' (p. 36, italics added). Also, if it were proposed that 'there was a *distinctive* programme focusing on underlying social and family conditions, then this too would have to address whether these programmes were not also relevant to those in the lower attainers group' (p. 36, italics added).

But such strictures may be focusing too much on distinctiveness and insufficiently on effectiveness. Consider a situation in which an approach such as using multi-sensory teaching and learning programmes raised the attainment of pupils who are considered to be lower attainers, let us say working a year 'behind' the level expected of typical children. Also, the approach raised the attainment of pupils considered to have MLD, perhaps working at a level several years behind typical children of the same age. It might be correct to point out that the intervention is not exclusive or distinctive to pupils with MLD, but it would be unreasonable to deny the effectiveness of the intervention for pupils with MLD. (However, if the programme were routine for all pupils or many pupils in a mainstream school, then it might be difficult to consider the intervention as one relating to SEN. This would be because it would not then be additional to or different from what the school normally provides.)

Surely what one is seeking are approaches that are effective for pupils who have difficulties much greater than typically attaining children. If a pupil considered as having MLD is several years behind typical pupils of the same age then interventions that increase progress and raise attainment are to be welcomed. The fact that some of them might also work for other pupils does not seem to diminish this usefulness. Of course, what would be likely to be more distinctive for pupils with MLD, compared with pupils who are not identified as having learning difficulties, is the curriculum level at which a pupil with MLD would be likely to be working. This would constitute one of the factors that would be 'different from' most other pupils. The justification for identifying pupils with MLD as a group or identifying individual pupils as being considered to have MLD would be that they are much further behind other pupils in attainment or cognitive level and that it is particularly important therefore to ensure that they make good progress.

Interventions for literacy

A good starting point for considering interventions for literacy is a report into the effectiveness of intervention schemes for pupils with literacy difficulties (Brooks, 2002). This includes a few approaches that have been evaluated with pupils having MLD. For example, 'Phonological Awareness Training' (Wilson and Frederickson, 1995) has been experimentally evaluated on a small group of pupils aged 9 to 11 years with 'special educational needs' described as 'including some severe learning difficulties and some mild learning difficulties' (Brooks, 2002, p. 106, see also p. 37). The approaches use a pupil's existing knowledge of letter sounds and words so that new words containing identically written word endings present less of a difficulty in reading and spelling.

Particularly effective was 'Reading Intervention' (Hatcher, 2000), which was also evaluated with pupils identified as having MLD and reported as having IQ levels 55–75. The approach uses a combination of phonological training and reading (Brooks, 2002 pp. 38–9, 110). Pupils are helped to isolate phonemes within words to come to recognise that sounds can be common between words and that certain letters can represent specific sounds. Other interventions described in the report (Brooks, 2002) that have been evaluated with pupils described as 'low attainers' are worthy of consideration with pupils having MLD.

Small steps of progress and assessment

For pupils with MLD, it is important that progress is recognised even if it is slower than for other pupils. This has two aspects. First, it is necessary for material to be presented in a way that begins with the easy to grasp and extends to the more difficult to comprehend. Complex concepts and procedures can be broken down into simpler components that can be taught and used to lead to more complex concepts. At the same time the teacher has to ensure that the separation of topics into component parts does not distort the whole and that what the pupil learns is not fragmented.

Parallel with this it is necessary to be able to acknowledge and record small steps of progress. For example, if the teacher aims to teach a process such as the rain cycle, it would be helpful to break this into components such as evaporation and condensation and to ensure that each of these was understood before the pupil was expected to grasp the meaning of the cycle. In a scheme of work, it is important that the work to be covered and assessed is broken into such steps to ensure that the pupil has a sufficient grounding in basic concepts before more complex concepts and procedures were taught. A brief overview of the topic to begin with would help ensure that the learning of components is not fragmented.

Using concrete and visual apparatus

Panter (2001) suggests that the use of concrete and visual apparatus is helpful in teaching mathematics to pupils with MLD, and the approach has a wider application to other subjects of the curriculum. The difficulty that pupils have with conceptual understanding suggests that a rich variety of concrete and visual experiences will enable more abstract reasoning to be understood and developed. Such an emphasis on concrete and visual apparatus, for example in mathematics, and on concrete and visual experiences in other parts of the curriculum, is also important in its own right to develop a fuller understanding of surroundings. Also, experience of working out problems using concrete resources relates to the subsequent development of operational thinking where concrete materials are not used or are not necessary.

This is in line with Piaget's theory of cognitive development (for a recent outline see Tilstone and Layton, 2004, pp. 15–21). Following the sensori-motor stage, the phase of pre-operational thinking is typified by the child's thinking being based on the evidence of the senses. This relates to 'a form of logic that lacks reversibility and on a steadfast focus on one aspect of a problem to the exclusion of its other features' (p. 9). Later, as operational thinking develops, its earlier manifestations involve the child visualising objects to aid thinking (concrete operations). The implication is that the child's cognitive development towards operational thinking is aided by experience of concrete objects and later the visualisation of these concrete objects in thinking. For a pupil with MLD, the structured use of concrete and visual objects will be particularly helpful.

In the development of language, repeated direct experience will help. So, when talking about fruit, having real fruits to see, smell, handle and taste is important. When discussing more challenging concepts, such as 'safety', real visual examples

of 'safe' and 'unsafe' items and situations will aid the development of the concept. In mathematics, the use of concrete, visual apparatus such as real liquids to measure, real objects to classify, real money to use and real areas to measure is important. In history, real artefacts will be more pertinent than pictures. From such structured experience, the pupil gradually comes to be able to think concretely by visualising items. For example, he can visualise the height order of three people when told their height relative to one another in pairs.

Understanding and using multi-sensory teaching

The teacher's understanding and use of multi-sensory teaching is a development of the use of concrete and visual apparatus and is intended to aid concept development in a similar way by engaging other senses. Such approaches are also used to aid memory by building experiences in many sensory modes. This also helps ensure that, where a pupil has a preferred sensory mode for learning, this mode is evident in lessons. Where a pupil has a weak mode, this is more likely to be supplemented by the existence of another mode to aid learning and memory.

In practice, the teacher would tend to ensure that a typical lesson would appeal to various senses. A lesson concerning the use of money would have a visual element because real money would be used in teaching. It would have a tactile and proprioceptive element because the pupil would handle and count coins and notes. By explaining particular calculations and asking the pupils to repeat or explain these, the teacher assures an auditory aspect.

A series of sessions exploring Christian worship and beliefs could draw on the sense of smell (incense, flowers used in church for weddings and funerals); taste (wine, bread); sight (coloured robes, stained glass, buildings, tombs, gold and silver artefacts, illuminated manuscripts); hearing (hymns, organ music, the peal of bells, prayer, chants); movement (walking to the altar, kneeling to pray, genuflecting to the altar); and touch (the texture of the wood of church benches, the textiles of prayer mats, the marble of statuary). These are, of course, only a few examples.

Relevance to everyday life

In seeking to make teaching and learning relevant, carefully planned and explicitly made connections that are linked to the pupil's own experience are helpful. For example, in teaching the design element in design and technology when making a moving toy, the teacher can ensure that the pupils:

- ◆ talk about their own toys or toys that they had when younger;
- ◆ watch others play with moving toys;
- ◆ examine other moving toys and dismantle one to see how it works.

Links with other subjects of the curriculum could include English (examining toys and learning the names of different toys and their parts) and mathematics (sorting and classifying toys and parts of toys, or measuring different toys or parts).

When learning about electricity, practical experience of making circuits can be applied to making a working item such as a doorbell, making comparisons with battery and mains-operated bells. Real household bills for electricity can be studied. The electricity meter at school and at home can be read. Links can be made with mathematics (reading dials, numerals); geography (visiting a generating station or viewing pylons that carry electricity); and PSHCE (having practical experience of situations in which electricity is safe to use).

Providing opportunities for exploratory learning and investigation

Exploratory learning and investigation implies handling, looking, listening and moving items around. These are structures intended to lead to clearly specified learning outcomes so that the exploration is guided in varying degrees. There is a connection here of course with practical activities in that the pupil is encouraged to have direct experience of items and materials. There is a parallel with the balance between discovery learning and relevance in that guided discovery is considered the most useful approach in discovery learning. Exploration is important but is most helpful to learning if it is structured so as to encourage connections to be made and learning to occur.

For example, it is helpful if exploration of materials is encouraged before teaching takes place, which assumes a familiarity with materials. Once a pupil has explored different forms of communication such as books, newspapers, the internet, e-mails, talking, television, radio and so on, he is more likely to be able to respond to lessons in which there is a discussion of the importance of communication and how different types of communication can influence the message.

Ensuring suitable pace

The pace of learning is an important feature in the education of pupils with MLD. The pupil is likely to have previously learned at a slower pace than others leading to lower levels of attainment. In present learning, the pupil may respond best to a slower pace of learning than other pupils of the same age to ensure that there is time to consolidate learning, over-learn and make sure that a learning point is fully understood.

However, there is a balance to be struck between a pace that ensures learning and one that keeps the interest and enthusiasm of learning. Pace, in other words, should be such that learning is secure and that the lesson moves along sufficiently briskly to maintain pupils' interest. This can be fine-tuned by strategies of questioning such as a mixture of open and closed questions or by balancing difficult new material with more familiar material to be consolidated. Also, if the lesson is well structured and progresses from the practical to the more abstract and from the familiar to the less familiar, it is likely that a brisk pace will be sustainable because the lesson structure is providing a supportive framework for learning.

Interventions taking account of ‘additional’ communication and language difficulties

It will be remembered that, in a sample of pupils with MLD described earlier in this chapter (Norwich and Kelly, 2004, pp. 13–14), 61 per cent was considered to have some form of communication and language difficulty. I have already suggested that care is necessary when describing so-called additional difficulties and that it would be helpful if there were criteria that help clarify the degree of difficulty. Given this reservation, to the extent that a pupil with MLD also has communication and language difficulties, suitable provision will take these into account.

A consideration of the interventions examined in the book in this series, *The Effective Teacher’s Guide to Autism and Communication Difficulties: Practical Strategies*, may form a useful starting point. For all communication and interaction difficulties, depending on their nature and severity, the intervention and support of a speech and language therapist may be necessary.

If the difficulties are with speech (phonetics, phonology and prosody), approaches include raising phonological awareness by encouraging interest in and explicit teaching of new vocabulary. Error analysis may be used to ‘remediate’ speech sounds through, for example, articulation exercises.

Should the pupil experience difficulties with grammar (syntax and morphology), interventions might include ensuring that the teacher’s communication is direct, clear and understandable and that the pupil has extra time and opportunity for over-learning as necessary. Planned opportunities for group discussion and the use of visual aids to support communication are among other interventions.

Difficulties with meaning (semantics) may be helped by improving a pupil’s skills in and understanding of ‘labelling’ (through, for example, direct teaching and structured experience using objects and role-play then pictures that represent objects and actions). ‘Packaging’ (the combination of conceptual and grammatical meaning in communication) can be helped through using exemplars and models and judicious reshaping of the pupil’s utterances. ‘Networking’ concerns the way a lexeme (a lexical language unit of one or more words whose elements do not separately convey the meaning of the whole) gains meaning from its relationship with other words. Networking can be helped by direct teaching in a range of subjects and by the teacher using and explaining key polysemic words (words that have many meanings) in subjects.

Difficulties with the use of language (pragmatics) can be aided by developing conversation skills, such as introducing a topic, maintaining it and concluding it. This might involve role-play and being taught the cues that are often used when a conversational partner wants to change or terminate the topic of conversation. The *Social Use of Language Programme* (Rinaldi, 2001) has been used to improve the communication skills of children and young people with ‘mild to moderate learning difficulty’ (Kirby and Drew, 2003, p. 133). It may be used to assess verbal and non-verbal social communication skills and to implement an intervention programme.

If the pupil has difficulties with comprehension, helpful strategies include explicit teaching for and reminders of maintaining attention and teaching ‘listening behaviour’. Other useful strategies are checking specific areas of understanding and encouraging pupil assertiveness to signal lack of comprehension.

Interventions taking account of ‘additional’ behavioural, emotional and social difficulties

In research mentioned earlier and involving pupils with MLD attending special schools (Male, 1996), the reader will recall that 80 per cent of head teachers reported that up to half of pupils had emotional and behavioural difficulties. Again there may be reservations about the criteria used to determine the level and severity of what might now be called BESD. But to the extent that a pupil with MLD has such additional difficulties, some of the approaches explained in another book in this series, *The Effective Teacher’s Guide to Behavioural, Emotional and Social Difficulties: Practical Strategies*, may provide a useful starting point for deciding strategies.

These include a systems approach, such as looking to school systems to seek explanations of BESD, and also group work, circle time and specialist interventions such as family therapy. Cognitive approaches that may be considered include aspects of emotional literacy, raising self-esteem, anxiety management, self-talk and anger management training (from a cognitive-behavioural perspective). Among behavioural approaches that can be considered are imitation, time out, desensitisation (for example, for phobias), modelling, the use of contracts and social skills training. Psychodynamic and related interventions include ensuring that there is open communication through such subject areas as art, music and the performing arts and specialist therapies, and through opportunities for counselling. Another theme of psychodynamic approaches, that of the importance of attachment relationships in personal growth, is evident in such approaches as nurture groups for young children.

Cornish and Ross (2003) explain a programme that draws on several approaches similar to those described above. Based on a multi-sensory cognitive behavioural approach to social skills training, the programme has been used in a special school with adolescents having MLD to enable them to deal with social situations better so that they might be included in mainstream school. Sessions involve several activities and last about an hour and forty minutes each, involving between six and ten students and two adults. Techniques used included rehearsal, modelling and reinforcement to teach students to use speech (external then internal) to influence their behaviour. Acceptable social behaviour and problem-solving skills were taught. The techniques involved verbal instruction although pictorial cues can also be used.

THINKING POINTS

Readers may wish to consider:

- ◆ the extent to which, in a particular LEA or school, there are clear criteria for identifying and assessing pupils with MLD, including assessing supposed additional difficulties;
- ◆ whether the LEA or school has particular identified approaches that are considered effective with these pupils in terms of the curriculum and teaching and learning;

- ◆ how important it is that approaches to pupils with MLD are distinctive to that group;
- ◆ the extent to which approaches are evaluated to test their relative effectiveness.

KEY TEXTS

Cornish, U. and Ross, F. (2003) *Social Skills Training for Adolescents with General Moderate Learning Difficulties*, London, Jessica Kingsley Publishers.

The authors explain a programme based on a multi-sensory cognitive behavioural approach to social skills training used in a special school with adolescents having MLD to enable them to deal with social situations better so that they might be included in mainstream school.

Norwich, B. and Kelly, N. (2004) *Moderate Learning Difficulties and the Future of Inclusion*, London, RoutledgeFalmer.

This book is one of the few to look at broad issues concerning MLD and considers the possible justifications of and limitations of a category of MLD. It examines studies and perspectives relating to inclusion and MLD. The authors report on children's perspectives of their special provision, and on their perceptions of themselves and how others see them and of labels associated with SEN; and consider social interaction, acceptance and the bullying of pupils with MLD. The results of a survey of LEAs regarding policy and practice for MLD are reported. The book concludes with a consideration of future strategies for providing for pupils with MLD.

Severe learning difficulties

Curriculum and assessment

INTRODUCTION

In this chapter, I look at definitions of SLD, their prevalence and at causal factors associated with SLD. The chapter considers identification and assessment. I examine provision for pupils with SLD in terms of curriculum and assessment adaptations. The first sections of the chapter consider the curricular issues of adapting the National Curriculum, the NLS and the NNS. I look at the use of cross-curricular links to reinforce subject understanding and skills, the development of intermediate targets and briefly at an approach to lesson planning. The chapter then turns to assessment matters, examining breadth, quality, challenge, depth or laterality; and assessments used for achievement below level 1 of the National Curriculum, namely P scales, Performance Indicators for Value Added Target Setting (PIVATS) and B Squared. Other aspects of assessment are discussed: RoAs, pupil's involvement in setting and reviewing individual targets, and other ways of involving pupils in assessments.

Next, a more specific and sustained view of adaptations of the curriculum and assessment is made using the example of PSHCE. I look at the National Curriculum and non-statutory framework for PSHCE; guidelines relating to PSHCE developed for pupils with 'learning difficulties' (QCA, 2001c); cross-curricular contributions and personal, social and health education (PSHE); and assessment in the subject for pupils with SLD.

Severe learning difficulties

A description of SLD is provided in guidance connected with the PLASC (DfES, 2003) (www.dfes.gov.uk/sen). The guidance concerns gathering information on the type of SEN for pupils for whom special educational provision is being made at Early Years Action Plus, School Action Plus or through a statement of SEN (p. 2). (Pupils at Early Years Action and School Action are recorded as having SEN but it is not necessary for the purpose of the PLASC to record their type of SEN.)

According to the guidance, pupils with SLD have ‘significant intellectual or cognitive impairments’. The guidance continues:

This has a major effect on their ability to participate in the school curriculum without support. They may also have difficulties in mobility and co-ordination, communication and perception and the acquisition of self-help skills. Pupils with severe learning difficulties will need support in all areas of the curriculum. They may also require teaching of self-help, independence and social skills. Some pupils may use sign and symbols but most will be able to hold simple conversations. Their attainments may be within the upper P scale range (P4–8) for much of their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, pp. 3–4)

DSM-IV-TR (American Psychiatric Association, 2000) relates ‘moderate retardation’ to IQ levels of 35–40 to 50–55, and ‘severe retardation’ to IQ levels of 20–25 to 35–40 (p. 42). These IQ ranges are interpreted with care, as IQ is not the sole criterion. The diagnostic criteria for mental retardation also include ‘concurrent deficits or impairments in present adaptive functioning . . . in at least two of the following areas: communication, self care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety’ (p. 49).

Lower IQ levels are associated with greater possibility of the child having a medical background condition and around 40 per cent of individuals with an IQ level under 70 have such a condition. When individuals have an IQ below 50, then 80 per cent have a medical background condition (Gillberg and Soderstrom, 2003).

Causal factors

The most common cause of learning difficulty is Down’s syndrome, which occurs because there is an extra chromosome 21 in some cells. This leads to learning difficulty; a number of physical characteristics, such as a smaller than typical mouth cavity; and a tendency to medical problems (e.g. 40 per cent of children with Down’s syndrome have a heart defect). The degree of learning difficulty for a child with Down’s syndrome varies and it is not assumed that the syndrome is always associated with an individually predictable IQ level. Fragile X syndrome, the second most common cause of learning difficulty after Down’s syndrome, is an inherited condition involving a defect in the X chromosome. Chromosomal abnormalities are implicated in about half of incidences of SLD (Ritney, 2003). Among other prenatal causes of learning difficulty is the cytomegalovirus (CMV), so called because it has the effect of causing the cells it infects to become enlarged. Infection with CMV is very common, but if a pregnant woman transmits the virus to the foetus, this can cause learning difficulties. Foetal alcohol syndrome is another cause of learning difficulties.

Prevalence

Regarding 'severe learning difficulty', in January 2004 in England (DfES, 2004, table 9), there were 4,580 pupils at School Action Plus representing 1.3 per cent of pupils at this part of the SEN framework and a further 27,450 pupils with statements of SEN or 11.6 per cent of pupils with statements. The specific figures for ordinary primary and secondary schools and for special schools are as follows. In primary schools, 3,430 pupils with SLD were at School Action Plus (1.6 per cent of all pupils at School Action Plus in primary schools) and 3,900 had statements of SEN (5.7 per cent of all pupils with statements in primary schools). In secondary schools, the number of pupils at School Action Plus was much smaller, being 750 pupils (0.6 per cent) and 2,320 with statements of SEN (3 per cent). In special schools, where it is much less usual for pupils *not* to have statements of SEN, there were only 390 pupils at School Action Plus (23.7 per cent) and 21,230 with statements of SEN (23.9 per cent). The figures for special schools included pupils attending maintained and non-maintained special schools but excluded pupils in independent special schools and pupils in maintained hospital schools.

Identification and assessment

The identification and assessment of SLD includes that of severely impaired cognitive functioning and other difficulties in adaptive functioning (see the earlier section defining SLD). Assessment relating to educational intervention involves determining areas of relative strengths and weaknesses using such assessments as intelligence tests, particularly the careful analysis of performance on sub-tests. An example of cognitive assessment is the *Wechsler Intelligence Scale for Children – Third Revision (WISC-III)*, which is standardised in the United Kingdom and in the United States of America (and elsewhere) for children aged 6 years to 16 years 11 months. The verbal sub-tests are information, similarities, arithmetic, vocabulary, comprehension and digit span. The non-verbal sub-tests are picture completion, coding, picture arrangement, block design, object assembly, symbol search and mazes. Assessments are also made for adaptive functioning, again looking for profiles of strengths and weaknesses.

Adapting the National Curriculum

A general approach to developing provision for pupils with SLD for a subject from the basis of the National Curriculum involves the teacher first being very conversant with the programme of study for the particular subject. Flexibility in the National Curriculum already allows covering earlier key stages and covering aspects in outline rather than in depth. With this flexibility in mind, the essentials of the subject are identified seeking features that distinguish it. For example, geography can be viewed as being about 'the relationships between people and places', and its aims can be seen as 'to help pupils make sense of their surroundings and develop an understanding about the interaction of people with the environment' (Sebba, 1995). Long-term planning may begin with adaptations of the programmes of study of the National Curriculum. The Equals curriculum for

pupils with SLD is helpful (Equals, 1999). Also useful is the non-statutory guidance, for example on the mathematics curriculum for pupils with 'learning difficulties', which sets out aims for mathematics and activities that might be suitable at each key stage (QCA, 2001b).

Adapting the National Literacy Strategy

It is recognised that the two key elements of the NLS (the framework of learning objectives and the literacy hour) both require adaptation, 'if they are to provide teachers of pupils with severe, profound and complex needs with sufficient guidance to plan and teach literacy effectively' (Berger and Morris, 2001, Preface, p. ii). One aspect of this is breaking the National Literacy Framework into smaller steps so that all pupils can 'access' the learning objectives. Also, these steps 'need to clarify the crucial importance of developing communication skills' (p. 2). In fact, the approach developed in Bristol, sometimes reported as the 'Bristol project', incorporates 'many of the tools used to teach communication, speech and language to pupils with special needs' (p. 2).

The NLS in Bristol for pupils with severe, complex and profound learning difficulties links performance level descriptions or 'P scales' (QCA, 2001a) to reception year learning objectives related to the NLS. It indicates how the framework can be used to develop a scheme of work for pupils with severe, profound and complex learning needs (Preface, p. ii):

In the literacy hour, teachers of pupils with 'severe, complex and profound learning difficulties' may need to continue using:

- ◆ multi-sensory approaches;
- ◆ clearly defined teaching based on pupils' literacy targets;
- ◆ a range of communication aids.

(QCA, 2001a, p. 3)

Interactive approaches are important (p. 5).

As Aird (2001, p. 79) points out, pupils with SLD (and those with PMLD) tend to have poor phonological awareness and/or problems with auditory memory, which make it unlikely that they will develop 'functional phonological abilities'. Hearing impairment is also commonly associated with severe (and especially with profound) learning difficulties. These difficulties 'all argue against a phonetic approach when teaching literacy skills' and sight recognition is the 'preferred and principal' means of teaching literacy to pupils with SLD (or PMLD) (p. 79).

Adapting the National Numeracy Strategy

The approach to the NNS developed in Bristol County Council (Berger *et al.*, 2000) included a project to implement the NNS for pupils attaining below level 1 of the National Curriculum. The approach uses a scheme of work to teach similar learning objectives associated with the NNS in an age-appropriate way. The reception objectives are used and small steps of learning and assessment have

been developed that link to these. The 11 key reception objectives from the NNS have been broken down into specific learning objectives matching each of the pre-level 1 descriptors.

Remembering that pupils with SLD tend to have poor auditory memory and therefore tend to learn better using visual approaches, oral methods of teaching numeracy, including mental arithmetic, may be particularly difficult. Visual means of teaching and learning are likely to be more effective, particularly where real-life contexts are used that promote problem-solving (e.g. Aird, 2001, p. 80).

Using cross-curricular links to reinforce subject understanding and skills

Using links with other subjects and areas of the curriculum to reinforce subject understanding and skills may be illustrated with reference to mathematics. The skills and understanding of mathematics will be explicitly tracked into the schemes of work for other subjects. Particularly pertinent subjects for building such links might be science, physical education, history, music, geography, design and technology, and modern foreign languages. The use of practical, relevant activities will help ensure the application of mathematical skills, but the contribution of other subjects is important in giving further opportunities to apply and develop such skills.

Teachers of other subjects than mathematics will recognise when a mathematical skill is involved in what they are planning to teach and this will be explicitly highlighted in planning. The task might, for example, be a traffic count recording different types of vehicles in a block graph. The geography teacher will not assume that, even if the skill has already been taught in mathematics, it will be remembered or successfully transferred to the new context. Also, the teacher will allow for the fact that the demands of the new task (watching the traffic) might make it harder for the pupil to apply any knowledge they may have of block graphs.

Intermediate targets

Creating intermediate targets is a variation of developing small steps in planning and small steps towards achievement for pupils. An example from science uses the programme of study for Sc2 (Key Stages 1 and 2), 'that humans need food and water to stay alive' (1:2b). This is developed into a set of intermediate goals/targets such as:

- ◆ communicate about sources of food or drink (eye contact, vocalisation, gesture, speech, or pulling at an adult);
- ◆ know that a person needs to eat and drink (communicates when thirsty/hungry or takes direct action to get a drink or eat).

(Ritchie, 2001, p. 61)

Using this approach, the teacher can plan work for individual pupils to develop the pupil's understanding.

Lesson planning

Drawing on such sources, one way of planning lessons in relation to mathematics is suggested by Panter (2001, pp. 48–9). This illustrates, for a lesson on the area of four-sided regular shapes, how the work can be seen in terms of knowledge, concepts, skills, teaching strategies, recording and assessment of learning. Importantly, it allows the teacher to be specific about what pupils ‘must be able to do’, ‘should be able to do’ and ‘could be able to do’. This helps ensure that the key focus of the lesson, that is, what pupils ‘must’ be able to do, is achieved by all.

Assessment

Breadth, quality, challenge, depth and laterality

Assessment may be understood and recorded in different ways. Consider the example of drawing a face portrait in art and design. Progress may be in terms of breadth, quality, challenge, depth or laterality (e.g. Peter, 2001, p. 106).

In developing experience of portraits, the pupil may draw several portraits – old person, young person, child, female, male, short hair, long hair and so on – and in doing so gain greater *breadth* of knowledge and experience.

The pupil may draw several face portraits of the same person, gradually improving the *quality* of the outcome in terms of the representation being recognisable in proportions and shape or capturing some characteristic of the person. Such progress may well be supplemented by breadth of experience already mentioned because the experience of creating several portraits of different people may also enable the pupil to better engage with the essentials of the portraiture of one person.

Bringing in the dimension of support in relation to the assessment of progress, the pupil may draw portraits at first with considerable help but later develop the skills and confidence to carry out the activity with less support and more independence. In this light, later portraits present a greater *challenge* although the outcomes may be similar.

A further subtle aspect of assessment involves the teacher noticing that, as the pupil draws several portraits, he shows increasing *depth* of knowledge and understanding, for example becoming more aware of the importance of spending time looking carefully at the subject and getting the basic outline of the face before putting in more detail. This may not at first translate into a better final drawing because the progress is in part concerned with beginning to recognise and develop techniques and approaches that are likely over a period of time to lead to better outcomes, but which may not do so immediately.

More broadly, and relating to breadth, is *lateral* progress in which the pupil will draw a face portrait using different materials (pencil, chalk), in different settings (art room, classroom, at home), using different colours, and with different teachers supporting.

This lateral progress is perhaps the most commonly recognised aspect for many teachers and it applies to all areas of the curriculum. In English and communication, it may imply the school ensuring that, across the school, teachers and others engage with the pupil in a way and at a level that the pupil can understand and

to which he can respond. This provides opportunities for the pupil to progress in using communication strategies in different areas of the curriculum (music, mathematics, assemblies); with different people (various adults, other pupils, visitors, people in the community on visits to shops, cafés, walks); or in different circumstances (with one person, with several people). In mathematics, a skill in counting to five can be applied when buying items in a shop, laying a table, or setting out chairs for others, and in many other situations and circumstances. Particularly where skills are just developing, evidence of such applications represent progress in beginning to generalise the knowledge gained and the skills acquired.

As the important aspects of progress concerning breadth, quality, challenge, depth or laterality coalesce and become embedded, so more vertical progress may be recognised. It should be remembered that the progress of pupils with SLD may be idiosyncratic and not necessarily conform to the hierarchical child developmental foundations that underpin assessments of vertical progression. It is with this in mind that the next section turns to various such assessments of progress.

P scales, PIVATS and B Squared

Assessment of pupils with SLD includes the use of assessments that identify attainment and indicate progress below level 1 of the National Curriculum. Examples are performance descriptions (P scales), B Squared and PIVATS.

Performance descriptions (P scales)

Among performance descriptions (P scales) developed for pupils working below level 1 of the National Curriculum are those for English (QCA, 2001a), mathematics (QCA, 2001b) and PSHE and citizenship (QCA, 2001c). Performance descriptions P1 to P3 are common across all subjects. For example, P1 is ‘pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses’ (e.g. QCA, 2001b, pp. 21–2).

From P4 to P8, the scales are subject-specific. For example, P4 for mathematics ‘shape, space and measure’ is ‘pupils begin to search for objects that have gone out of sight, hearing or touch, demonstrating the beginning of object permanence’ (QCA, 2001b, p. 23). In PSHCE, level P4 is:

pupils express their feelings, needs, likes and dislikes using single elements of communication (words, gestures, signs and symbols). They engage in parallel activity with several others. Pupils follow familiar routines and take part in familiar tasks or activities with support from others. They show an understanding of ‘yes’ and ‘no’, and recognise and respond to animated praise or criticism. They begin to respond to the feelings of others.

P7 in ‘using and applying mathematics’ is ‘pupils complete a range of classification activities using given criteria. They identify when an object is different and does not belong to a given familiar category’ (QCA, 2001b, p. 22). In ‘number’ P7 is:

Pupils join in rote counting to ten. They can count at least five objects reliably. They begin to recognise numerals from 1 to 5 and to understand that each

represents a constant number or amount. They respond appropriately to key vocabulary and questions, *for example, 'How many?'* Pupils begin to recognise differences in quantity, *for example in comparing given sets of objects and saying which has more or less, the bigger group or smaller group.* In practical situations they respond to 'add one' and 'take one'.

(QCA, 2001b, p. 23, italics in original)

P7 in mathematics for 'shape, space and measures' is 'Pupils begin to respond to forwards and backward. They start to pick out named shapes from a collection. They use familiar words when they compare sizes and quantities and describe position' (QCA, 2001b, p. 24).

PIVATS

PIVATS were developed under the auspices of Lancashire County Council Education and Cultural Services Directorate (www.lancashire.gov.uk/education/pivats/index.asp). PIVATS provide small steps of assessment enabling judgement of progress to be made between the steps of performance indicators (P scales) and the National Curriculum. Each of the level descriptions P1(i) to P8 and National Curriculum levels 1C to 4 have been broken down into five 'stepping stones' bridging each level milestone.

In English, two sections within 'speaking and listening' reflect the development of expression and comprehension skills within language and communication. The assessment is linked to the Framework for teaching the NLS and the National Strategy for Key Stage 3. PIVATS cover the following:

- ◆ speaking and listening – comprehension (P1(i) to P8 and National Curriculum level 1C to 4);
- ◆ speaking and listening – expression (P1(i) to P8 and National Curriculum level 1C to 4);
- ◆ reading (P1(i) to P8 and National Curriculum level 1C to 4);
- ◆ writing (P1(i) to P8 and National Curriculum level 1C to 4).

The PIVATS for mathematics take account of the Framework for teaching the NNS and the National Strategy for Key Stage 3. The assessments cover:

- ◆ using and applying mathematics (P1(i) to P8 and National Curriculum level 1 to 4);
- ◆ number (P1(i) to P8 and National Curriculum level 1C to 4);
- ◆ shape, space and measures (P1(i) to P8 and National Curriculum level 1C to 4).

In science, there are sections for scientific enquiry, life processes and living things, materials and their properties, and physical processes. The assessment encompasses:

- ◆ scientific enquiry (P1(i) to P8 and National Curriculum level 1 to 4);
- ◆ life processes and living things (P1(i) to P8 and National Curriculum level 1 to 4);
- ◆ materials and their properties (P1(i) to P8 and National Curriculum level 1 to 4);
- ◆ physical processes (P1(i) to P8 and National Curriculum level 1 to 4).

B Squared

B Squared SEN Publishing is an educational publisher specialising in assessments and workbooks (www.bsquaredsen.co.uk and www.bsquared.co.uk).

B Squared assessment breaks down into finer steps the programmes of study from the National Curriculum, the P scales and Foundation Stage documents. This aids in differentiating pupils' work and target setting. Assessment files are available in paper forms or as a software package. The assessments include the following:

- ◆ P Steps Summative Assessment covers English, mathematics and science from P1 to P8 and PSHE.
- ◆ Small Steps Summative Assessment for the English National Curriculum concerns the National Curriculum for English, mathematics and science from level P8 to National Curriculum level 5.
- ◆ Early Steps Summative assessment, based on the foundation document, covers physical development, personal and social development, language and literacy, mathematics, knowledge of the world, and creativity.
- ◆ Information and Communications Technology assessment extends from P1(i) to level 5 of the National Curriculum.
- ◆ Personal, Health and Social Education and Citizenship assessment ranges from P1(i) to level 5 of the National Curriculum.
- ◆ Geography assessment extends from P1(i) to level 5 of the National Curriculum.
- ◆ History assessment goes from P1(i) to level 5 of the National Curriculum.
- ◆ Art assessment covers from P1(i) to level 5 of the National Curriculum.

Records of Achievement

RoAs used in ordinary and in special schools offer a wide-ranging and celebratory summative assessment of pupils' achievements. They include information about achievements in school and elsewhere, including evidence of a pupil's leisure pursuits. Importantly, they are developed with the fullest involvement of the pupil.

Crucial aspects of an RoA have been summarised as follows: it enhances learning, provides evidence rather than judgements, involves a participative process, and recognises only success. Also, assessment is regarded as an ongoing process, all experiences are considered important, and the pupil has 'ownership' of the process (Lawson, 1996).

Pupils' involvement in setting and reviewing individual targets

Wherever possible, schools ensure that pupils are involved in setting individual learning targets as reflected in IEPs. This involves careful preparation and allocating plenty of time. As well as discussion about the targets, the pupils can be involved also in discussing the proposed strategy to reach those targets. At the annual review, such a background of involvement can help the pupil to contribute.

Involving the pupil in assessments

Another approach to assessment is the pupil–adult conference. This is sometimes seen in the context of other levels of assessment. For example, assessment through general classroom observation has been seen as ‘level 1’; systematic observation as ‘level 2’; and pupil–adult conferences as ‘level 3’ (Lewis, 2001, pp. 232–8).

Important information is gained if the teacher both observes the pupil working alone on an activity and also works alongside the pupil. This allows comparisons to be made of the pupil working alone and with a degree of support. Also, it enables the teacher to see how the pupil works towards solutions, that is, the process of learning as well as the outcomes. Activities can be chosen that provide a wealth of information, particularly where they reveal how the pupil approaches tasks.

The teacher might use the pupil–adult conferences to analyse the errors in an activity, such as reading. An analysis of such errors can suggest approaches to teaching. These will be richly informed by the pupil’s account of how he proceeded with the activity.

Lewis makes some useful observations about pupil–adult conferences. For example, organising such conferences might involve such features as capitalising on times when the pupil is well motivated and has a good relationship with the teacher. Certain questions can help to keep a focus on the pupil, such as ‘Can the pupil explain why he or she is carrying out an activity in a certain way?’ or ‘Does the pupil understand what he or she is being asked to do?’ On the grounds that some pupils may not always be able to tune in to the teacher’s language, certain questions for the teacher to consider include ‘How am I presenting this task?’, ‘Am I being clear and specific?’, ‘What is the classroom environment like?’ and ‘Are there unhelpful distractions?’ (2001, pp. 236–8).

The National Curriculum and non-statutory framework for PSHCE

This section examines personal, social and emotional development (PSED) and early learning goals in the Foundation Stage of education; PSHE and citizenship at Key Stages 1 and 2; and PSHE at Key Stages 3 and 4; and citizenship at Key Stages 3 and 4. This is to provide a background to later considerations of PSHCE for pupils with SLD.

PSED in the Foundation Stage

Work planned in the Foundation Stage of education (which applies to children from age 3 years to the end of the reception year in primary school) should be based on specified areas of learning and on the early learning goals. PSED is one of the six areas of learning and includes ‘dispositions and attitudes, self-confidence and self-esteem, making relationships, behaviour and self-control, self-care, sense of community’ (Office for Standards in Education, 1999, p. 2). The expectations for most children by the end of the Foundation Stage are set out according to each area of learning. For example, for ‘self-care’ these are ‘independence in dressing and undressing and in taking care of their personal hygiene; an ability to select and use activities and resources with independence’ (p. 9).

PSHE and the National Curriculum at Key Stage 1 and 2

The National Curriculum Handbook for Primary Teachers in England (DfEE/QCA, 1999a) set PSHE and citizenship within the context of promoting spiritual, moral, social and cultural (SMSC) development across the National Curriculum. It also states that ‘A significant contribution is made by school ethos, effective relationships throughout the school, collective worship and other curriculum areas’ (p. 19). The *Handbook* provides non-statutory guidelines ‘to help schools establish coherence and consistency, and to promote curriculum continuity and progression in pupils’ learning in PSHE and citizenship’ (p. 20). Essentially, PSHE and citizenship aim to ‘help to give pupils the knowledge, skills and understanding they need to lead confident, healthy, independent lives and to become informed, active responsible citizens’ (p. 136).

The guidelines for both Key Stage 1 and Key Stage 2 consider knowledge, skills and understanding under four headings. In the guidance, under each heading are lists of what pupils should be taught. An example may be seen regarding ‘developing confidence and responsibility and making the most of their abilities’. Within this, Key Stage 1 pupils should be taught ‘to recognise what they like and dislike, what is fair and unfair, and what is right and wrong’ and ‘to recognise, name and deal with their feelings in a positive way’ (p. 137). Key Stage 2 pupils should be taught ‘to recognise their worth as individuals by identifying positive things about themselves and their achievements, seeing their mistakes, making amends and setting personal goals’ (p. 139).

Such knowledge, skills and understanding should be taught through a breadth of curricular opportunities. At Key Stage 1 these include to ‘take and share responsibility [for example for their own behaviour; by helping to make classroom rules and following them; by looking after pets well]’ (p. 138). At Key Stage 2 they include ‘participate [for example, in the school’s decision-making process]’ (p. 141). There are no National Curriculum attainment targets for PSHE or citizenship at Key Stage 1 and 2 because the subject guidance is non-statutory.

PSHE at Key Stage 3 and 4

The National Curriculum Handbook for Secondary Teachers in England (DfEE/QCA, 1999b) sets PSHE and citizenship within the context of promoting spiritual,

moral, social and cultural (SMSC) development across the National Curriculum in the same way that the primary phase guidance does. The only difference is that it refers to PSHE only and not citizenship, which is treated separately because at Key Stage 3 and 4 citizenship is a statutory subject (see DfEE/QCA, 1999b, p. 21). The *Handbook* provides non-statutory guidelines ‘to help schools establish coherence and consistency, and to promote curriculum continuity and progression in pupils’ learning in PSHE. These complement the statutory requirements for citizenship’ (p. 21).

The guidelines for Key Stage 3 and 4 are in the *Handbook* on pages 188–94. Essentially, PSHE aims to ‘help pupils to lead confident, healthy, and responsible lives as individuals and members of society’ (p. 188). The guidelines for both Key Stage 3 and 4 cover, under three headings, knowledge, skills and understanding. In the guidance, under each heading, is listed what pupils should be taught. An example may be seen with reference to developing a healthy, safer lifestyle. This implies that, at Key Stage 3, pupils should be taught ‘basic facts and laws, including school rules, about alcohol and tobacco, illegal substances and the risks of misusing prescribed drugs’ (p. 189). Key Stage 4 pupils should be taught ‘the causes, symptoms and treatment for stress and depression, and to identify strategies for prevention and management’ (p. 192).

Such knowledge, skills and understanding should be taught through a breadth of curricular opportunities. At Key Stage 3 these include opportunities to ‘develop relationships [for example, by working together in a range of groups and social settings with their peers and others]’ (p. 190). At Key Stage 4 they include ‘consider social and moral dilemmas [for example, young parenthood, genetic engineering, attitudes to the law]’ (p. 194). There are no National Curriculum attainment targets for PSHE at Key Stage 3 and 4 because the subject guidance is non-statutory.

Citizenship at Key Stage 3 and 4

The National Curriculum Handbook for Secondary Teachers in England (DfEE/QCA, 1999b) describes the importance of citizenship:

Citizenship gives pupils the knowledge, skills and understanding to play an effective role in society at local, national and international levels. It helps them to become informed, thoughtful and responsible citizens who are aware of their duties and rights. It promotes their spiritual, moral, social and cultural development, making them more self-confident and responsible both in and beyond the classroom. It encourages pupils to play a helpful part in the life of their schools, neighbourhoods, communities and the wider world. It also teaches them about our economy and democratic institutions and values; encourages respect for different national, religious and ethnic identities; and develops pupils’ ability to reflect on issues and take part in discussions. Citizenship is complemented by the framework for personal, social and health education at Key Stages 3 and 4.

(DfEE/QCA, 1999b, p. 183)

At Key Stage 3 and 4, the programmes of study for citizenship fall under three headings: knowledge and understanding about becoming informed citizens;

developing skills of enquiry and communication; and developing skills of participation and responsible action. Taking the example of ‘developing skills of participation and responsible action’, at Key Stage 3 pupils should be taught to ‘negotiate, decide and take part in both school and community based activities’ (p. 184). Key Stage 4 pupils should be taught to ‘express, justify and defend orally and in writing a personal opinion about . . . issues, problems and events’ (p. 185).

The attainment targets for citizenship are expressed as end of key stage descriptions. The expectations are intended to match the level of demand in other subjects and are ‘broadly equivalent to levels 5 and 6 at Key Stage 3’ (DfEE/QCA, 1999b, attainment target appendix, p. 49). Both the end of Key Stage 3 description and the end of Key Stage 4 description reflect the work expected in the programme of study.

PSHE and citizenship and pupils with learning difficulties

The Foundation Stage, the framework for PSHE and citizenship at Key Stages 1 and 2 and the framework for PSHE and the curriculum for citizenship at Key Stages 3 and 4 provide a structure for these aspects of learning and development. For many pupils, their personal and social development and behaviour are well supported by such a structure. For some pupils with SEN, such a structure may not be sufficient to encourage and support personal and social development. For example, pupils with MLD, SLD, or PMLD may need particular support.

A series of guidelines developed for pupils with learning difficulties (MLD, SLD, PMLD) includes guidance relating to PSHE and citizenship (QCA, 2001c).

The guidelines indicate ways in which the PSHE framework and citizenship programmes of study can be modified, for example by choosing material from an earlier key stage or from more than one key stage (p. 4). They interpret the requirements of the framework and programme of study to make them relevant to the pupils with SEN they are considering. For example, in relation to the aspect of PSHE concerning ‘developing confidence and responsibility and making the most of their abilities’, the guidance focuses on self-concept, self-awareness, self-esteem and self-knowledge. With regard to self-knowledge, it is suggested that ‘Some pupils with learning difficulties may be dependent on staff to help them interpret their preferences’ (p. 5).

Regarding sex and relationship education, it is suggested that ‘pupils with learning difficulties may need to specifically learn things which other pupils learn incidentally, for example, what being “private” actually means’ (p. 6).

Examples of opportunities and activities across all key stages are given, for example, in helping ensure that ‘pupils have opportunities to take and share responsibility’, the pupil may ‘lead the way to different areas in the school and show visitors around the school’ (p. 8). Further examples of opportunities and activities are provided in relation to Key Stages 1 to 4. For example, in a possible Key Stage 2 activity intended to help prepare the pupil for change and help him cope with it, the pupil may ‘experience deliberate changes in regular routines, for example, lunch in the food technology kitchen rather than in the school dining room’ (p. 14).

Lawson and Fergusson (2001) point out certain areas not covered by the framework for PSHCE that are nevertheless important for pupils with 'learning difficulties'. In the context of the present chapter, the focus is on their importance for pupils with SLD, although in varying degrees some of the points are important for pupils with MLD and PMLD as well as others. For example, in the areas of 'personal care and social skills' are suggested such aspects as toileting, privacy, dressing, eating and drinking, and identifying and being responsible for one's own belongings (p. 202). In the area of 'skills for life/daily living skills/community skills' are included routes to local shops, social sight vocabulary, use of amenities and public transport, shopping and domestic skills (p. 202). Regarding 'play, leisure and recreation skills', examples are hobbies, play, making choices and the use of local community recreational facilities (p. 203).

Cross-curricular contributions and PSHE

The contribution of subjects other than those sessions identified as being PSHCE are important. In the same way that it should be clear how regular routines are contributing to PSHCE, so it should be clear and explicit what other subjects are covering. For example, design and technology (food) may include teaching and learning how to prepare a snack or meal for oneself, therefore contributing importantly to self-care and self-esteem. Observing and looking after classroom plants may be part of science provision but clearly relates to caring for other living things.

Assessing PSHE for pupils with SLD

Performance descriptions have been developed for PSHE and citizenship for pupils with 'learning difficulties' (in this context meaning pupils with MLD, SLD or PMLD). These can be used, among other things, to 'record pupils' overall development and achievement' (QCA, 2001c, p. 26). An example is performance description 7, which is:

Pupils communicate feelings and ideas in simple phrases. They move, with support, to new activities which are either directed or self-chosen. They make purposeful relationships with others in group activities and attempt to negotiate with them in a variety of situations, *for example, if other pupils wish to use the same piece of equipment*. They judge right and wrong on the basis of the consequences of their actions. They show some consideration of the needs of other people and other living things, *for example, offering food to a visitor or watering a classroom plant*.

(QCA, 2001c, p. 28, italics in original)

THINKING POINTS

Readers may wish to consider with reference to a particular school:

- ◆ the extent to which there is a coherent approach to the development of curriculum and assessment for pupils with SLD;
- ◆ the extent to which it is ensured that provision relating to the literacy strategy and numeracy strategy are adapted successfully for pupils with SLD;
- ◆ the degree to which other subjects and areas such as PSHCE are developed appropriately.

KEY TEXTS

Berger, A. and Morris, D. (2001) *Implementing the Literacy Hour for Pupils with Learning Difficulties*, 2nd edn, London, David Fulton Publishers.

This book demonstrates how the NLS and the literacy hour have been adapted by Bristol for pupils with severe, complex and profound learning difficulties. It links performance level descriptions to reception year learning objectives related to the NLS. It indicates how the framework can be used to develop a scheme of work for pupils.

Berger, A., Morris, D. and Portman, J. (2000) *Implementing the National Numeracy Strategy for Pupils with Learning Difficulties: Access to the Daily Mathematics Lesson*, London, David Fulton Publishers.

This book describes, in helpful detail, the approach to the NNS developed in Bristol County Council, involving a project to implement the NNS for pupils attaining below level 1 of the National Curriculum. The reception objectives are linked with small steps of learning and assessment.

Aspects of teaching and learning for pupils with severe learning difficulties

INTRODUCTION

Whereas the previous chapter mainly focused on the education of pupils with SLD in relation to the curriculum and assessment, the present chapter concerns mainly teaching and learning in relation to pupils with SLD, although the two clearly interrelate.

The approaches to teaching and learning described include multi-sensory approaches; interactive approaches; visual inputs; AAC; and encouraging communication through music. Also considered are using ICT to improve access to the curriculum; developing and using regular routines; starting with what is familiar; and choice and decision-making. Finally, the chapter examines using and developing understanding of questions; capitalising on practical activities; developing vocabulary; interactive storytelling; developing mobility and co-ordination; pupil grouping; a 'room management' approach; and resources.

Multi-sensory approaches

A multi-sensory approach, it has been suggested, aims to 'aid communication with the child' (Longhorn, 1988, p. 6). Seeking to engage several senses attempts to ensure that, where the pupil has a stronger sensory mode, this is stimulated and encouraged. Where the pupil has a weaker sensory channel, this may be in part compensated for or supplemented by the engagement of other senses. This notion has been used in different forms with pupils with MLD, SLD, PMLD, and specific learning difficulties such as dyslexia.

For example, Hemmens (1999) developed multi-sensory approaches linked to science for pupils with SLD and PMLD. The multi-sensory environments included a 'desert' journey with suitable sights, sounds, smells and tastes. Certainly, encouragement to use all the senses is an important aspect of the National Curriculum science 1 strand, 'scientific enquiry'.

Resource banks can be developed that relate to the senses of touch (soft, hard, smooth, rough, cold, warm); vision (shiny, matt, mirror); hearing (musical instruments, sounds around the school, animal sounds); taste (sour, sweet, spicy);

and smell (pot-pourri, wood, leather). Such resources help pupils focus on a particular sense and contribute to the development of a wider vocabulary. They can be used to indicate comparisons and contrasts.

A multi-sensory element is also important in encouraging pupils' involvement in and enjoyment of stories. It has been suggested that access to the experience of stories involves three paths. These are:

- ◆ communication systems (signs, symbols, moon, objects of reference, pictures of reference);
- ◆ technology to support the systems (switches, concept keyboard, electronic voice box);
- ◆ improving parents' and staff's interactions with children with PMLD (learning to listen, observe, giving choices, waiting for responses).

In line with this, a currently popular resource is that of Bag Books. Originally called tactile stories, Bag Books (Fuller, 1999) use multi-sensory methods to engage and involve pupils in a story.

Interactive approaches

Interactive teaching and learning aims to help pupils with multi-sensory impairments develop understanding of their environment. The pupils may have PMLD or dual sensory impairment. Interactive teaching and learning seeks to help pupils achieve better understanding of the environment through their interacting with others and building relationships. Bozic and Murdoch (1995) intimate that, as their interaction and relationships develop, pupils with visual impairments will want to participate and influence events, that is, they will become more active in initiating interactions and communicating. For pupils with SLD, encouraging interaction through activities such as those involving turn-taking, perhaps in games, lays down the precursors of and seeks to encourage further communication.

Intensive Interaction (Nind and Hewett, 2005) is used, for example, with people with SLD and can involve for some learners encouraging interaction as it were for its own sake. For others, it can enable interaction with other children and help the pupil gain access to the curriculum through improving language and interpersonal behaviour (Watson, 1994). It involves:

regular, frequent interactions between the practitioner (be it teacher, carer, professional from a range of disciplines) and the individual with learning disabilities, in which there is no task or outcome focus, but in which the primary concern is the quality of the interaction itself.

(Hewett and Nind, 1998, p. 2)

The aims and outcomes of Intensive Interaction have been summarised as follows: 'By using Intensive Interaction we are trying to help the person learn fundamentals of communication – eye contacts, facial expressions, turn taking' (Nind and Hewett, 2001, p. 17).

Visual inputs

The encouragement and stimulation of the visual sense has been considered important in relation to several types of SEN including SLD and PMLD. Aird (2001, p. 79) commends sight recognition as the principal means of teaching literacy (in part because of the other difficulties). Similarly, for pupils with SLD, the visual element of manual signing such as Makaton (Walker, 1985, 1993) or Signalong is important. Makaton is a language programme offering a basic means of communicating and can be used to encourage the development of verbal language skills. Signalong is a sign-supporting system that is based on British Sign Language and is used with pupils with learning difficulties and autism. Signing systems might be expected to be effective as a communication tool for pupils with SLD not only because they are visual but also because being visual the child's hand movements when signing can be modified and corrected by an adult. (Signing is further discussed in the book, *The Effective Teacher's Guide to Autism and Communication Difficulties: Practical Strategies*.) The use of visual symbols and whole word approaches for teaching and learning literacy with pupils with SLD also capitalise on visual input (e.g. Carpenter, 1991).

Where a pupil with SLD has difficulty with short-term auditory memory, strategies can emphasise the visual mode. For example, with reference to pupils with Down's syndrome, Alton (2001) indicates how an icon or pictogram can help make a connection to enable a child to link letter sounds to letter names. Alton also advocates the teaching of reading (perhaps indicated through the responses of signing, vocalisation or verbal approximations) to reinforce and encourage language skills. Where there are particular difficulties making phoneme-grapheme correspondences, whole word approaches use the (possibly stronger) visual skills of pupils by linking the sight of the whole word to the spoken response.

Where teaching and learning methods are so often predominantly auditory-vocal, a proper regard to the importance of the visual mode can supplement or compensate for this (Carpenter and Morris, 2001). Such attention to the visual mode is considered important for pupils with MLD (Pinsent, 1990), SLD (Abbot, 2000; Lawton, 1999) and PMLD (Lawton, 1999).

Augmentative and alternative communication

AAC uses an approach, or a combination of approaches, according to the pupil's skills and preferences, to enable communication. These approaches include the use of photographs and speech synthesisers. Other examples of AAC, signing, symbols and objects of reference are considered below.

Manual signing such as Makaton (Walker, 1985, 1993 and see address list) or Signalong (see address list) are used as indicated in the previous section. As well as being a method of communicating, signing can also aid in acquiring literacy. In part this is because manual signing and the pictorial aspect and positional aspects of visual symbols have areas of overlap.

It has already been indicated that the use of visual symbols for pupils with SLD capitalises on visual input (Carpenter, 1991). Symbols are used in connection with ICT, where computer programs include Writing with Symbols 2000 (Widgit Software, 2000). Symbols can also be used in a way that relates to

language sequencing skills as pupils select and place the symbols in order (Carpenter and Morris, 2001, p. 21). They are used for writing (Carpenter and Detheridge, 1994); to support emerging literacy (King-deBaun, 1990); and for reading (Musselwhite, 1993). Symbols have been employed to make literacy hour activities more accessible to children with learning difficulties by giving text meaning and by helping comprehension (Abbot, 2000).

The basis for using objects of reference is discussed by Park (1998). One use is for objects of reference to cue a particular activity; for example, a computer disk may be used to cue that it is time to use the computer. This is in part intended to help the pupil recognise when a change is proposed and what that change would involve.

The skills necessary for developing competence in communication have been described as involving:

- ◆ linguistic skills such as learning what pictures and symbols mean and combining symbols to make sentences;
- ◆ learning the technical skills required to operate the communication system, such as the layout of symbols;
- ◆ developing the knowledge and skills in social rules of interaction;
- ◆ developing skills to communicate effectively beyond the limits of competence in AAC (Light, 1989).

Encouraging communication through music

The central importance of communication has been discussed with regard to AAC. Other opportunities for communication and expression are also important. For example, in music therapy, the music is used in an attempt to make contact with a child's feelings and to stimulate the pupil to engage with the immediate environment. While music therapists are in short supply, some LEAs train teachers in the therapeutic use of music and in some of the techniques associated with music therapy (Mills, 1991). Work with deaf children suggests that music can be felt through vibrations in different parts of the body, depending on whether the tone is low, medium or high (Palmer, 2000). People with multi-sensory impairments can be involved by using simple, shared rhythms, suggesting that an adult response to a child's attempts to interact can together form a way of communicating – so-called 'co-creating communication' (Nafstad and Rodbroe, 1999). 'Soundbeam' (see address list), which has been used therapeutically and to encourage and develop communication, employs a beam of light, which, when intercepted by movement, creates a sound effect on a keyboard or synthesiser. Being able to control sounds and make preferred sounds motivates some pupils to respond (Ellis, 1996).

Using ICT to improve access to the curriculum

Regarding ICT, three kinds of access have been identified (Day, 1995): physical, supportive and cognitive.

Physical access concerns using ICT to eliminate or limit physical barriers to learning. Examples are a communication aid speech synthesiser with a bank of words and the flexibility to create new words, or a device such as a 'big mac', which allows brief phrases lasting up to about 20 seconds to be programmed into it enabling a pupil to participate and respond. Physical aids to using a computer such as a roller ball can allow a pupil to demonstrate and develop an understanding of mathematical concepts such as matching and sorting objects, perhaps in three-dimensional graphics, which the pupil may not be able to do physically.

Supportive access involves ICT aiding a pupil in carrying out a task that is difficult for him, such as using a word processor to help with presentation where handwriting skills are poor. Speech output devices such as speech synthesisers and speech recognition software to enable writing are other examples of technology used to offer supportive access.

To enable cognitive access, ICT is used to present the curriculum in ways that make it more accessible to pupils with SLD (and pupils with other SEN). Three ways in which ICT can enhance cognitive access have been suggested: 'through simplifying the writing process, by allowing pupils to explore ideas and try things out before committing themselves to a final outcome, and by presenting information in small quantities that can be easily assimilated' (Detheridge and Stevens, 2001, p. 164). 'Simplifying the writing process' might involve the use of an on-screen grid of words (or symbols) and phrases that pupils can transfer to their own text to assist the writing process. One way of allowing pupils to explore ideas and 'try things out' before deciding what the final product will be is the use of word processors that allow redrafting and editing before deciding on and printing off the final version. An example of 'presenting information in small quantities' is the use of talking books or CD-ROMs presenting manageable pieces of information, often enhanced with pictures, video clips, animation, spoken commentary or music.

Developing and using regular routines

In school, routines are developed that are used to extend a pupil's understanding and skills by building on what is familiar to the child.

The very regularity of a routine enables a pupil with SLD gradually to come to recognise patterns of what happens, to feel secure, to predict sequences of events, and to make choices about varying the routine. Aspects of the curriculum are enhanced through the use of regular school activities. For example, some aspects of PSHCE are developed in regular school routines, as well as, of course, in regular routines at home and elsewhere. These include morning greetings, meal and snack times, personal care routines and end of day farewells. The PSHCE aims and how and whether they are achieved should be made explicit in planning for these sessions if they are to be considered part of PSHCE provision. If not, a school's belief that it is covering PSHCE all the time may be misleading because the provision has become too diffuse.

Other increasingly complex routines can be established, such as what one has to do before, during and after a class visit. For example, preparation might involve preparing any food that might be taken; taking suitable clothing for the weather conditions; taking cameras, paper and pens, sketch pads and other

materials for recording what is seen and done; and working out the route and checking transport arrangements.

Starting with what is familiar and immediate

Starting with what is familiar is a sound general principle for all areas and subjects of the curriculum. For example, it has been suggested that a familiar focus can be a useful lead into PSHCE (Lawson and Fergusson, 2001, pp. 206–7). A pupil's self-awareness may be aided by encouraging her to express likes and dislikes, or learning how to control her personal environment, for example by using switches. Awareness of others may involve recognising familiar people such as members of the class group, the teacher and those who visit the school regularly but not every day. It may involve developing skills in turn-taking or joining in class and group activities such as singing.

A developing understanding of community may begin with a sense of the class or the school as a small community. This can involve classroom roles and duties such as helping to do things for the class, (for example making a snack). Regarding the whole school, activities may involve planning a class assembly for the school, serving on the school council or becoming a member of a 'circle of friends' for another pupil at break times. More widely, an understanding of local community can begin with visits from local people who help others, such as a nurse or a fire officer, and visits to places in the local community, such as a local library, police station, shops, museums, places of worship or post office.

Choice and decision-making

When the school seeks activities and approaches that help pupils to develop autonomy and independence, encouraging choice and decision-making provide a valuable contribution. Each lesson or activity plan can be examined to seek opportunities for offering choice. This will include a choice of food and drink, or leisure activity, musical instrument, or whether to examine a fruit or a vegetable in a science lesson. Initially the choice might be between two options, but later this can be extended to give more choice. Initially the support role of staff will be important to convey the idea of choice and to encourage the pupil to make choices. Where other pupils are involved, again staff support and encouragement may initially have to be high before the habit of choice is developed.

Such arrangements offer the opportunity for the pupil to make basic decisions but more complex decision-making can also be encouraged. The teacher might ask one pupil which of the other pupils should perform a task – for example, taking a message – and then ask why the particular pupil was chosen. Pupils can be encouraged to decide, when asked to complete three activities, in which order they will carry them out. Choice is the other side of the coin to regular routine, the former offering the security of predictability and regularity, the latter giving the opportunity for variation and exploration.

One way of ensuring that choice and decision-making are regular features of the school day is to develop a matrix in which daily activities are listed down the side of the matrix and opportunities for choice are set out across the top of

the matrix. The latter might be 'chooses between two or more activities', 'chooses between two or more items', 'chooses another pupil with whom to work' and so on. The intersections indicate that opportunities are offered in the ways indicated. For example, in daily numeracy sessions, the pupil might be given a choice of two activities each with a similar learning outcome. In leisure time, the pupil may choose from several activities. On trips outside the school the pupil can choose suitable clothing. The same matrix can also be used from time to time to record the range of choices offered and to record progress that the pupil is making in exercising choice. To ensure that choice and independence are encouraged at home, parents too may also use such an approach.

Using questions and developing the understanding of questions

An area of the curriculum in which the careful development of specific questioning skills is important is science. In this subject, collections of items can be made, building on multi-sensory work, perhaps using all shiny items or all rough items. This can lead to ideas about the properties of items. Why are all these shiny? Why are these rough? Heavy? Light? What will happen if you put this in the bowl of water? What will happen if you leave this plant without water for a week?

Pupils may record findings, perhaps representing different foods according to whether they are fruits or vegetables, meat or fish. Scientific questions evolve from such activities and involve examining materials and discovering something. If we put these two items in a refrigerator for ten minutes and take them out for five minutes, will one be colder than the other?

A useful approach to planning activities for Sc1 activities is suggested by Ritchie (2001, p. 60). It involves breaking down the statements in the programmes of study into component parts then developing various activities that will aid learning for each part. In Key Stage 2, when pupils are taught to ask questions that can be investigated scientifically and decide how to find answers to them, various components emerge that can help planning. These include: 'How might questions or ideas be turned into ones that can be investigated?' (turn into 'action' questions, simplify, limit the options or items, think of analogies, select more appropriate equipment); and 'What support do pupils need in carrying out an investigation?' (peer group discussion, adult prompts, adult guidance, adult demonstration.)

Capitalising on practical activities

In using practical activities and in emphasising the practical applications of subjects, the teacher and pupil can engage enjoyably and productively in the multi-sensory nature of many practical activities. For example, in mathematics, counting from one to ten can involve counting the number of pupils eating lunch (say five) using the numbers one to five, then counting the requisite number of place mats or knives or forks in order to set the table. This involves saying the numerals, hearing the numerals being said, and seeing and touching the number of place mats or cutlery. Measuring in metres and centimetres may involve measuring in the garden to work out how many bulbs are needed for a line in a plot. Again

this entails saying and hearing the measurement, seeing the distance involved, and touching the length of the plot of land.

As well as using different senses, practical activities help ensure relevance to daily life and learning. Counting the people and place mats for lunch is necessary if the pupil is to get the correct number. Measuring a plot of land is relevant to getting the right numbers of bulbs for the line to be planted. Reading off and understanding data could involve reading a train, bus or underground timetable for a proposed journey to check departure and arrival times. Another important skill that practical activities can involve is problem-solving. How will we be able to get the right number of place mats for the pupils at lunch? How will we work out the number of bulbs we need to plant? How will we know when the bus will arrive? Finally, such activities can and should be explicitly linked to other subjects and aspects of the curriculum; for example, many of the activities described from the starting point of mathematics have application to PSHCE and science.

Returning to the enjoyable nature of practical activities, one of the satisfying features is that they often have a clear beginning, middle and end and there can be a feeling of satisfaction that a task has been completed, as well as the fact that something useful has been learned or consolidated.

Developing vocabulary

Developing vocabulary is relevant to all areas of the curriculum. Again mathematics may be taken as an example. As with other subjects, it is important that layers of varied experience are associated with a word (spoken or signed) to help ensure that it is understood and used correctly. As indicated in the book, *The Effective Teacher's Guide to Dyslexia and Other Specific Learning Difficulties*, in the chapter, 'Dyscalculia', precursors to mathematics are an important foundation. (This applies in a similar way to that in which preliminary understanding and skills are needed for reading and writing as indicated earlier when discussing the Bristol Literacy Project.) So certain terms are taught and used in context. These include:

- ◆ one, a lot, many, one more;
- ◆ big, small, bigger, smaller;
- ◆ square, circle, triangle;
- ◆ full, empty, etc.

When introducing the practical and relevant activities that will be used in mathematics, it will be useful to note the vocabulary that is used by the pupil and begin by using this where possible as a bridge to more conventional or precise terms. If the teacher has a jug full of liquid and a jug that has no liquid, and encourages the pupils to say things about the jugs, a pupil may say of the empty jug, 'gone', referring apparently to the absence of the liquid. In a sense this is correct, although if the vessel is decorative it may never have had liquid in it. So the teacher can use this term when referring to the empty jug and other empty vessels while gradually introducing the term 'empty' to refer more precisely to the state of the jug. The pupil's words and understanding are used while the new

term is introduced, attempted, practised, understood and eventually correctly used. This leads to an understanding and use of such expressions as ‘The jug is empty.’

Interactive storytelling

Interesting work is reported with pupils with SLD and PMLD involving participatory poetry workshops and interactive storytelling.

One of the notions underpinning some of this work is that the ‘meaning’ of a poem or story might be ‘grasped through a kind of atmosphere created through sound and visions’ (Grove and Park, 1996, p. 2) and that the reader ‘must *construct a meaning*’ (Park, 2002, p. 14, italics in original). A step towards construction of meaning ‘might be to provide opportunities for the apprehension of text that somehow involves active participation. Instead of just hearing and seeing a piece of literature, we can explore the possibilities of acting it out and then see how people respond to the experience’ (Park, 2002, p. 15).

‘Affect’ and engagement are considered to be essential to responses to literature. For example, it has been suggested that ‘Meaning is grounded in emotion, or affect, which provides the earliest and most fundamental impulse for communication’ (Grove, 1998, p. 15). Therefore, when adapting literature for pupils with language difficulties, one can start by generating an emotional response to the text. This is to ‘build rich *affective* associations, using stretches of text as script, emphasising the feel of the meaning’ (p. 15, italics added). Recital and performance are seen as valid ways of experiencing stories, drama and poetry. This emphasises the ‘physicality of the text’, taking a view that ‘the appeal of a poem or story lies in its ability to excite the audience in a way which is first and foremost sensory’ (p. 11).

A further underpinning of this work is the encouragement and development of early communication skills. These have been summarised as awareness; anticipation; turn-taking; showing self (gaining someone’s attention through, for example, eye contact or vocalising); showing objects; giving objects; seeking physical proximity to another person; gaze alteration; joint attention; and declarative pointing (Park, 2004, p. 16).

These principles have informed poetry workshops using extracts from T. S. Eliot’s *Waste Land* and extracts from Joyce’s *Finnegan’s Wake*. A call and response structure was used, with one person calling out the line and everyone else repeating it, enjoying the rhythm and timing (Park, 1999, 2000). This approach ‘was a successful way of engaging every participant, including individuals with profound and multiple learning difficulties’ and was ‘very effective in generating affective responses to participation in the *performance*’ (Park, 2002, p. 15, italics in original).

In *Macbeth* poetry workshops at the Globe Theatre beside the Thames, performances offered ‘opportunities for direct sensory, or aesthetic, engagement with Shakespeare’s text’ (Park, 2002). The aims were:

- ◆ For participants to experience a story line, the atmosphere and the language of Shakespeare’s *Macbeth* on stage at Shakespeare’s Globe Theatre.
- ◆ For participants to develop language and communication skills within the framework of the poetry workshops. Each activity has the aim of

encouraging skills of communication such as awareness, anticipation, eye contact, turn taking, pointing, showing and naming.

(Park, 2002, p. 16)

The poetry workshop was ‘designed to encourage attentional communication of feelings and ideas which grow out of interactions between people.’ In particular the workshop was concerned with the development of early ‘declarative’ communication, that is, communication to share information.

Two groups of secondary-aged pupils with SLD or PMLD participated. The activities involved using extracts from text performed in a call and response structure. Participants without speech used ‘voice output communication aids’. In the call–response structure, sections were repeated with different delivery such as fast or slow, shouted or whispered. One participant beat a rhythm on a tambour.

The *Macbeth* workshop was evaluated using a framework for recognising attainment that involved encounter, awareness, attention and response, engagement, participation, involvement and achievement.

Developing mobility and co-ordination

Should the pupil with SLD have difficulties with mobility and co-ordination, specific programmes including physiotherapy may be followed. A balance is sought between support as necessary and the encouragement of independence where possible. Some of the approaches described in the book, *The Effective Teacher’s Guide to Dyslexia and Other Specific Learning Difficulties: Practical Strategies*, in the chapter, ‘Dyspraxia’, may be adapted.

In relation to handwriting, approaches described include ones for posture and writing position, pencil grip, pencil pressure, eye–hand co-ordination, form constancy, movement control, letter orientation, spacing between words and fluency. The reasons for such difficulties may not be the same for a child with SLD as they are for a child with dyspraxia, so discrimination and monitoring are necessary if adapting such approaches. But, to take one example, a strategy that can help with fluency of cursive writing for many pupils involves pre-writing patterns leading to the formation of letters with joins/integral exit strokes.

Regarding physical education, Black and Haskins (1996) have suggested ways in which activities can be structured to achieve co-ordination and mobility: parallel activity; inclusive adapted activity; and discrete adapted activity. These three approaches may be illustrated using the example of ball skills. In a parallel activity, pupils play a game together but in their own way so that they use different strategies to reach for the same goal. If the aim is to improve skills in being able to ‘send and receive a ball’ (DfEE, 1999c, p. 131, section 7a) then pairs of pupils who have acquired this skill can pass the ball while moving and from several yards apart, while others who are still developing the skill can pass while standing still and closer to each other. An inclusive adapted activity is one in which the games and activities are adapted so that all pupils can take part. For older pupils, a game of volleyball can be adapted using a lighter ball such as a sponge ball so that there is more time for pupils not having advanced skills in relation to the game to position themselves and reach the ball. In a discrete adapted activity,

pupils take part in pairs or practise individually. For example, in practising a skill for a game in which a bat is used to strike a ball (e.g. 'rounders'), a pupil with poor co-ordination may practise using a larger bat or a lighter ball.

Ensuring that there is a range of regular opportunities for movement and co-ordinated activity for practical and relevant ends can help consolidate and generalise skills. A review of the school week for a particular pupil can enable the teacher to ensure that such activities are provided. The pupil might use tools in horticulture; buy items in a supermarket, place them in a trolley and remove them again at the checkout; and use cutlery and drink containers with increasing control. He might pass objects round for inspection in a group session; take out and put away writing materials; mix food in a design and technology (food) lesson; or participate fully in a physical education period.

Pupil grouping

The grouping of pupils can enhance or hinder progress in the case of all pupils and, where learning and progress may be slower, it is perhaps particularly important to be fully aware of the aims when grouping (or not grouping). Pupils with SLD may work individually and unaided to encourage independence or may work one to one with a teacher. They may work with each other in pairs or small groups with or without the involvement of the teacher or learning support assistant.

Where pairs and small groups are used, this may involve bringing together pupils with similar skills to work at a similar level or pupils with different skill levels so one can help the other. Alternatively, 'jigsaw' grouping (Rose, 1991) may be used in which different members of the group need each other to complete an activity successfully, for example because different members of the group have different pieces of information all of which are necessary to complete the task. The activity may involve competition, co-operation or individual work at the pupil's own pace. For each of these arrangements, it is important that the chosen approach enhances the learning outcomes of the lesson.

Room management 'plus'

Room management is a specific term for an approach, used with groups of pupils, in which the adults are assigned to one of three roles: the individual helper, the group activity manager and the 'mover' (Lacey, 1991). The individual helper tends to be involved with one pupil at a time on intensive work, varying the time between several minutes to longer periods depending on the pupil, the task and other factors. The group activity manager makes sure that other pupils are occupied, perhaps experiencing a game or some other activity that is not focused intensively on skill building. The mover ensures the smooth running of the group, dealing with visitors, preparing materials, tidying away and so on. These adult roles are often rotated after an hour or so.

Among the strengths of this approach are that it increases the levels of adult attention for each pupil. However, it does not necessarily ensure that pupils are more engaged in the tasks (Ware and Evans, 1987). The level of the pupil's engagement should therefore be monitored. The mover might do this if there are few interruptions, preparation is done jointly before the sessions begin and there

is not too much mess to tidy up. Factors that increase pupils' engagement can then be noted and the approach can be modified in an ongoing way to try to ensure that pupils are optimally engaged. These modifications will take account of the pupil, the task, the time of day and any other factors that appear relevant. The aim is to get the best from the room management approach at the same time as ensuring that the potential weakness of pupils not being more engaged is corrected. The approach can be used with pupils having SLD or pupils with PMLD.

Resources

Resources can provide multi-sensory stimulation for all subjects. In history, a Victorian bread bin offers opportunities to feel the hard surface, hear the sound of the container, smell fresh bread inside it and taste the bread. This may lead to questions about how bread is stored today and why it is less usual to find such bins in the present day. Video, interactive compact disks, the internet, virtual reality and posters, and a host of artefacts such as postcards, old tickets, toys and household items can help convey a sense of things past. These can all be related to the way things are done now and the differences and similarities to the past. Visits to museums (particularly where arrangements can be made, perhaps through the school's liaison officer, to touch items and try on costumes), old factories, churchyards, ruins and so on can all help convey the different world of long ago.

In geography, three-dimensional maps, animated compact disks, video, real-time internet cameras showing other parts of the world, e-mail, maps and digital photography with its captivating immediacy are all used to stimulating effect. For any trip outside school or activity inside school a digital camera can be used to record events. The images can be transferred to computer and projected or shown to review the trip or activity very soon after it is completed.

To take a final example, religious education can involve artefacts representing some of the world faiths: incense, candles, statues, scrolls or items of clothing. Visits to places of worship will tend to be multi-sensory with distinctive smells, sounds, textures and sights. Resources used in a particular session can often appeal to all the senses.

THINKING POINTS

Readers may wish to consider with reference to a particular LEA and school:

- ◆ the range of approaches to teaching and learning that are used and the extent to which their effects are monitored;
- ◆ the way that decisions about pupil grouping are made and how this contributes to learning and the enjoyment of lessons;
- ◆ whether the range of resources in schools are used fully and well and whether their impact is assessed.

KEY TEXT

Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, 2nd edn, London, David Fulton Publishers.

This book provides a wide coverage of approaches to teaching and learning in the National Curriculum subjects and the whole curriculum as well as chapters concerned with across-subject issues and policy.

Profound and multiple learning difficulties

INTRODUCTION

This chapter examines definitions of PMLD. It considers the prevalence of such difficulties and causal factors associated with them. Identification and assessment are considered. Provision for pupils with PMLD is described with particular reference to curriculum and assessment, and teaching and learning. The latter concern multi-sensory approaches, enabling communication, linking resources and routines, and pupils controlling their surroundings. Also discussed are building on the pupils' interests, aptitudes and achievements; CB; and the effects of sensory impairment, physical disability and severe medical conditions.

Definitions

Guidance connected with the PLASC (DfES, 2003) (www.dfes.gov.uk/sen) concerns gathering information on the type of SEN for pupils for whom special educational provision is being made at Early Years Action Plus, School Action Plus or through a statement of SEN (p. 2). With regard to pupils with PMLD, the guidance states:

In addition to very severe learning difficulties, pupils have other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition. Pupils require a high level of adult support, both for their learning needs and for their personal care. They are likely to need sensory stimulation and a curriculum broken down into very small steps. Some pupils communicate by gesture, eye pointing or symbols, others by very simple language. Their attainments are likely to remain in the early P scale range (P1–4) throughout their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, p. 4)

People with PMLD have been defined as 'having two or more severe impairments, one of which is profound learning difficulties' (Ware, 1994, p. 5).

The Schools Curriculum and Assessment Authority (SCAA) (later Qualifications and Curriculum Authority) referred to:

pupils with profound and multiple learning difficulties, who, in some respects, appear to be functioning at the earliest levels of development and who additionally have physical or sensory impairments. Some of these pupils may be ambulant and may also behave in ways that either challenge staff and other pupils or result in their isolation, making it difficult to involve them in positive educational experiences. Most experience difficulties with communication.
(SCAA, 1996)

The *DSM-IV-TR* (American Psychiatric Association, 2000) uses categories for describing such conditions as 'mental retardation'. 'Profound mental retardation' is associated with an IQ level of below 20 or 25 (p. 42). Most people with this 'diagnosis' have an 'identified neurological condition' that accounts for the condition (p. 44). In early childhood, impairments of sensory neural function are evident. Referring to possible development, including that in adulthood, and the sort of provision to encourage it, *DSM-IV-TR* states, 'Optimal development may occur in a highly structured environment with constant aid and supervision and an individualised relationship with a caregiver. Motor development and self-care and communication skills may improve if appropriate training is provided. Some can perform simple tasks in closely supervised and sheltered settings' (p. 44).

As was the case with the identification of SLD (see Chapter 3), IQ levels must be interpreted with care, as IQ is not the sole criterion. The diagnostic criteria for mental retardation also include 'concurrent deficits or impairments in present adaptive functioning . . . in at least two of the following areas: communication, self care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety' (p. 49).

Taking a different approach, the *ICF* (World Health Organization, 2001, p. 3) seeks to give relative weight to individual and social factors using a bio-psychosocial model. Such a model can be used to help indicate the possible relative influences of individual and social factors (see Farrell, 2004, pp. 75–7 for a fuller description).

Prevalence

Regarding pupils with 'profound and multiple learning difficulty', in January 2004 in England (DfES, 2004, table 9), there were only 540 at School Action Plus representing 0.2 per cent of pupils at this part of the SEN framework and a further 7,250 pupils with statements of SEN or 2.7 per cent of pupils with statements. This indicates that pupils with PMLD constitute one of the smaller groups among pupils with SEN at both School Action Plus and among pupils with statements of SEN considering ordinary and special schools together. The figures for ordinary primary and secondary schools and for special schools are as follows. In primary schools, 300 pupils with PMLD were at School Action Plus (0.1 per cent of all pupils at School Action Plus in primary schools) and another 840 had

statements of SEN (what appears to be a mistake in the tables shows this as 0 per cent but in fact it should be over 1 per cent of all pupils with statements in primary schools). In secondary schools, the number was smaller, being 40 pupils at School Action Plus (under 0.1 per cent) and 220 with statements of SEN (0.3 per cent). In special schools, there were 190 pupils at School Action Plus (11.7 per cent) and 6,190 pupils with statements of SEN (7 per cent). The figures for special schools included pupils attending maintained and non-maintained special schools but excluded pupils in independent special schools and pupils in maintained hospital schools.

Causal factors

The *DSM-IV-TR* (American Psychiatric Association, 2000) considers ‘predisposing factors’ in terms of various elements. These include:

- ◆ heredity (e.g. Tay-Sachs disease, tuberous sclerosis, translocation Down’s syndrome, fragile X syndrome);
- ◆ early alterations of embryonic development (e.g. chromosomal changes such as Down’s syndrome due to trisomy; or prenatal changes owing to toxins, such as infection or maternal alcohol consumption);
- ◆ pregnancy and perinatal problems (e.g. foetal malnutrition, prematurity, hypoxia, infections including viral infections, and trauma);
- ◆ general medical conditions acquired in infancy or childhood (e.g. infections, trauma or poisoning, for example lead poisoning).

(pp. 45–6, paraphrased)

DSM-IV-TR observes that the greater the ‘mental retardation’, and especially if it is severe or profound, the greater the likelihood that the child will experience other conditions: ‘neurological (e.g. seizures), neuromuscular, visual, auditory, cardiovascular’ (p. 46).

Identification and assessment

The identification and assessment of PMLD, as its definition suggests, includes the use of identification of profoundly impaired cognitive functioning and the identification other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition.

Assessment relating to educational intervention involves determining areas of relative strengths and weaknesses using such assessments as developmental scales and intelligence tests, with particularly careful analysis of performance on subtests. Assessments such as the *Bailey Scales of Infant Development* may be used to assess motor, language and problem-solving skills. An example of cognitive assessment is the *WISC-III* for children aged 6 years to 16 years 11 months. Assessments are also made for adaptive functioning, again looking for a profile of strengths and weaknesses.

Provision

The provision for pupils with PMLD will be considered in relation to the curriculum, assessment, and teaching and learning approaches.

Curriculum

The curriculum for pupils with PMLD involves finding a balance between the challenges of responding to the subject-based structure of the National Curriculum on the one hand and the developmental learning needs of pupils with PMLD on the other (Aird, 2001). Also, additional curriculum requirements have to be integrated into the provision and include therapy and special programmes. A reflection of this is such observations as that the priorities for IEPs for pupils with PMLD are likely to involve the acquisition of basic and fundamental skills that do not always fit neatly into implied National Curriculum subject categorisation (Coupe O'Kane *et al.*, 1995).

In practice, such tensions often translate into a curriculum that is envisaged in part in subject-related sessions, and in these sessions some activities take place that develop basic understanding and skills that may not in fact be subject-related. For example, in a lesson designated as religious education, the activity may be based around the story of Noah and his ark. A rich variety of multi-sensory experiences may be created to reflect the story. These might include offering the pupils opportunities to see and touch a model ark, hear taped animal sounds, feel a fine spray of water and hold with other pupils a large blue sheet to convey the flood and so on. Within the session the pupils may encounter sights and tactile experiences and sounds. They may make choices about which animal sound to hear. They may give close attention to a particular feature such as the ark. All these experiences have the potential to extend the pupils' sensory experience and understanding, and develop their ability to choose. Some pupils may begin to develop an understanding of how the elements fit together to tell a story and in this case the experiences will move more towards early subject understanding. Such sessions help ensure that the pupil has a breadth of different contexts for experiences and offer the potential for those experiences to develop closer towards subject understanding for some pupils. This issue is explored in more detail in the later section on multi-sensory approaches.

An illustration of how teaching and learning approaches come together in the context of design and technology is given by Ouvry and Saunders (2001, pp. 248–52). The sorts of activities that may be aimed at teaching pupils with PMLD in mathematics include:

- ◆ respond consistently to objects which are presented in view;
- ◆ grasp objects placed in a hand;
- ◆ manipulate and explore objects;
- ◆ visually examine parts of objects;
- ◆ use objects consistently in similar and appropriate ways;
- ◆ communicate preferences about objects used in activities;
- ◆ show awareness of the relative sizes of objects when choosing between items; . . .

- ◆ show awareness of cause–effect relationships in familiar settings;
- ◆ imitate simple single actions;
- ◆ respond to instructions involving naming things;
- ◆ indicate preferences for items through gaze and/or body movements;
- ◆ imitate a sequence of two simple actions;
- ◆ use objects functionally;
- ◆ manipulate objects in ways that their attributes dictate;
- ◆ indicate ‘more’ and ‘again’.

(Panter, 2001, pp. 44–5)

Assessment

Breadth, quality, challenge, depth and laterality

As indicated in Chapter 3, an important aspect of assessing progress includes assessments in terms of breadth, quality, challenge, depth or laterality (Peter, 2001, p. 106). These will not be repeated here but the reader may wish to consult that chapter (pp. 32–3) for a reminder of these aspects.

Assessment and pupils with PMLD

Just as the curriculum involves a balance between general understanding and skills and more subject-based understanding and skills and subject contexts, so the assessment of pupils working below level 1 of the National Curriculum reflects a general and a more subject-specific focus.

For example, performance descriptions ranging from P levels 1 to 8 begin with three generic levels. Guidance states that:

The performance descriptions for P1 to P3 are common across all subjects. They outline the types and range of general performance that some pupils with learning difficulties might characteristically demonstrate.

(QCA, 2001c, p. 26)

They are as follows:

P1(i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses. Any participation is fully prompted.

P1(ii) Pupils show emerging awareness of activities and experiences. They have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects. They may give intermittent reactions.

P2(i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences. They begin to show interest in people, events and objects. They accept and engage in coactive exploration.

P2(ii) Pupils begin to be coactive in their interactions. They communicate consistent preferences and affective responses. They recognise familiar people,

events and objects. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time. They co-operate with shared exploration and supported participation.

P3(i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities. They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways. They observe the results of their actions with interest. They remember learned responses over more extended periods.

P3(ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities. They can remember learned responses over increasing periods of time and may anticipate known events. They may respond to options and choices with actions or gestures. They actively explore objects and events for more extended periods. They apply potential solutions systematically to problems.

Although these performance descriptors are general, they are still interpretable within the context of subject areas, as examples in the subject-specific guidance indicate. While some guidance elaborating the early P levels offer the same example, others are distinctive. For example, below are the P levels for English, including examples of how they might be interpreted (in italics, as in the original document).

P1(i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses *for example, startling at sudden noises or movements*. Any participation is fully prompted.

P1(ii) Pupils show emerging awareness of activities and experiences. They have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects, *for example, attending briefly to interactions with a familiar person*. They may give intermittent reactions, *for example, sometimes becoming excited in the midst of social activity*.

P2(i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences, *for example, withholding attention*. They begin to show interest in people, events and objects, *for example, smiling at familiar people*. They accept and engage in coactive exploration, *for example, focusing their attention on sensory aspects of stories or rhymes when prompted*.

P2(ii) Pupils begin to be coactive in their interactions. They communicate consistent preferences and affective responses, *for example, reaching out to a favourite person*. They recognise familiar people, events and objects, *for example, vocalising or gesturing in a particular way in response to a favourite visitor*. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time, *for example, showing pleasure each time a particular puppet character appears in a poem dramatised with sensory cues*. They co-operate with shared exploration and supported participation, *for example, taking turns in interactions with a familiar person, imitating actions and facial expressions*.

P3(i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities, *for example, pointing to key objects or people*. They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways, *for example, reaching out and feeling for objects as tactile cues to events*. They observe the results of their actions with interest, *for example, listening to their own vocalisations*. They remember learned responses over more extended periods, *for example, following the sequence of a familiar daily routine and responding appropriately*.

P3(ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities, *for example, prompting another person to join in with an interactive sequence*. They can remember learned responses over increasing periods of time and may anticipate known events, *for example, pre-empting sound or actions in familiar poems*. They may respond to options and choices with actions or gestures, *for example, by nodding or shaking their heads*. They actively explore objects and events for more extended periods, *for example, turning the pages in a book shared with another person*. They apply potential solutions systematically to problems, *for example, bringing an object to an adult in order to request a new activity*.

(QCA, 2001a, pp. 29–30, italics in original)

Other subjects provide different examples of how the general guidelines for assessment might be interpreted with reference to the subject context.

Assessment using more subject-related P levels

As already indicated, from performance level 4 onwards, the subject elements of the assessment are explicit in the wording of the assessment, not only in the interpretative illustrations. For example, the performance description 4 for PSHCE is:

Pupils express their feelings, needs, likes and dislikes using single elements of communication (words, gestures, signs or symbols). They engage in parallel activity with several others. Pupils follow familiar routines and take part in familiar tasks and activities with support from others. They show an understanding of ‘yes’ and ‘no’, and recognise and respond to animated praise or criticism. They begin to respond to the feelings of others, *for example, matching their emotions or becoming upset*.

(QCA, 2001c, p. 27, italics in original)

In mathematics, P4 relating to ‘using and applying mathematics’ is:

Pupils are aware of cause and effect in familiar mathematical activities, *for example, hitting a mathematical shape on the concept keyboard to make it appear on the screen*. Pupils show awareness of changes in shape, position or quality. They anticipate, follow and join in familiar mathematical activities when given a contextual cue.

(QCA, 2001b, p. 22, italics in original)

P4 for 'number' is: 'Pupils show an interest in number activities and counting' (p. 23).

Regarding 'shape, space and measure', P4 is: 'Pupils begin to search for objects that have gone out of sight, hearing or touch, demonstrating the beginning of object permanence. They demonstrate interest in position and the relationship between objects, *for example, joining in with stacking cups or building towers*' (p. 23, italics in original).

Recording the results of assessments

The purpose of recording the results of assessments relates of course to the purpose of assessment itself, which is often either to determine a starting point for a proposed intervention or to monitor progress. From a baseline assessment a prediction of progress is made and then (over and above that) a target is agreed for the pupil, the aim being to reach the target through a particular intervention or spending more time on an activity or the like. The teaching and learning then take place and are followed after a specified time by a further assessment. The recording of the baseline assessment and the subsequent assessment therefore indicate progress. They are also an indication of the effectiveness of the teaching method and activities used so that it informs the development of future lessons and approaches. Also important is recording important developments as and when they happen, for example something the pupil has not been observed to do before or something that the pupil appears to have transferred to a new situation.

Among the possible features of an assessment system suggested by Ouvry and Saunders are that the system should:

- ◆ allow for the recording of experiences given as well as responses or achievements made;
- ◆ be able to be completed by a variety of staff, not just the teaching staff;
- ◆ relate directly to each pupil's IEP;
- ◆ be able to take account of a wide variety of pupil responses to a situation;
- ◆ record achievement in subject-specific understanding and individual priorities;
- ◆ be capable of recording responses in whole class and small group sessions as well as individual sessions;
- ◆ allow for the recording of process as well as the final result.

(2001, p. 253)

Teaching and learning

Similarities and distinctions between pedagogies for pupils with SLD and PMLD

There are curriculum levels and levels of assessment typical of pupils with SLD and for pupils with PMLD as indicated by the attainment-related aspects of definitions in the document *Data Collection by Type of Special Educational Needs* (DfES, 2003, pp. 3–4).

There are approaches to teaching and learning that are rather more typical of working with pupils with SLD than with pupils having PMLD. For example, these

include using and developing the understanding of questions in science and developing vocabulary in mathematics, as described in Chapter 4. Similarly, there are teaching and learning strategies rather more typical of working with pupils with PMLD than with pupils having SLD. These include being particularly sensitive to possible efforts to communicate or to any response or reaction that might subsequently be invested with communicative intent such as will be described later in the present chapter.

As well as such differences, there are similarities in approach and areas of overlap between SLD and PMLD. In part this can relate to the overlap in the attainment aspect of the definitions of SLD and PMLD in the document *Data Collection by Type of Special Educational Needs* (DfES, 2003, pp. 3–4). A pupil identified as having PMLD but attaining at a high level may be assessed as attaining P level 4. A pupil identified as having SLD working at a low level may also be assessed as attaining P level 4. The ‘extra’ difficulties associated with PMLD may mean that the two pupils are working in different ways and that the teaching and learning approaches may not be identical. Nevertheless, the fact that the pupils are working at the same levels can lead to some overlap and similarities in teaching and learning approaches.

Even where a pupil with PMLD and a pupil with SLD are not working at a level indicated by a similar assessment in the P scales, similar approaches may be used, although their interpretation and application may differ. For these reasons, the reader might wish to review the approaches described in the previous chapter concerning pedagogy for pupils with SLD and consider how these might be adapted and developed for pupils with PMLD. These it will be remembered included:

- ◆ multi-sensory approaches;
- ◆ interactive approaches;
- ◆ visual inputs;
- ◆ augmentative and alternative communication;
- ◆ encouraging communication at all levels;
- ◆ using ICT to improve access to the curriculum;
- ◆ developing and using regular routines;
- ◆ choice and decision-making;
- ◆ pupil grouping and resources.

In fact, in the present chapter, some of these approaches are interpreted within the context of working with pupils with PMLD, for example multi-sensory approaches; encouraging communication; linking resources and routines; and pupils controlling their surroundings.

Multi-sensory approaches and pupils with PMLD

It has been pointed out that, with regard to pupils with PMLD, ‘They are likely to need sensory stimulation’ (DfES, 2003, p. 4). Sensory stimulation is one way of encouraging responsiveness in a child who may be less inclined or, because of accompanying physical and motor difficulties, less able than other children to

explore the environment without considerable support and encouragement. Sensory stimulation is a way of introducing different experiences to the pupil and encouraging his interest and response.

A sensory stimulation room is often a feature of schools for pupils with PMLD or SLD. These rooms may include devices that respond to touch or sound by producing sounds or visual effects, which may encourage responses from the pupil. There may be a soft room, perhaps with a ball pool, a projector, bubble tubes, fibre optic lighting, and a transmitter of sound effects or music. As well as stimulating the senses and acting as an encouragement to responses, the rooms can also create an environment with soothing sounds and soft lighting to help a child relax if they are frustrated or stressed. Schools do not always make the assumed educational and therapeutic effects of sensory rooms sufficiently explicit, nor is their supposed impact always sufficiently evaluated.

It was stated in Chapter 4 that a multi-sensory approach aims to engage several senses to ensure that, where the pupil has a stronger sensory mode, this is stimulated and encouraged. Where the pupil has a weaker sensory mode, this may be in part compensated for or supplemented by the engagement of other senses. I mentioned that versions of the approach in different forms have been used with different pupils, including those with PMLD. Hemmens's (1999) multi-sensory approaches linked to science for pupils with SLD and PMLD were mentioned. The resource banks mentioned in that chapter relating to the senses of touch, vision, hearing, taste and smell are also important for pupils with PMLD. Similarly, Bag Books (Fuller, 1999), using multi-sensory methods to engage and involve pupils in a story, are effective with pupils with PMLD. Use and development of the senses of movement and balance are included in such activities as action songs and mime.

Within the context of the curriculum framework outlined earlier, multi-sensory approaches are used with pupils having PMLD. Three ways of using a sensory approach have been suggested (Ouvry and Saunders, 2001, p. 245): to stimulate the senses; to be part of meaningful activities; and to help access to subject-based activities.

Senses are stimulated, for example, in order to develop perceptual skills to gain information from the environment. To the extent that this approach uses specialised equipment with no inherent meaning in situations lacking meaningful context, they tend to be employed, for example, to provide a starting point for the functional use of senses but have 'limitations as a long-term teaching technique' (Ouvry and Saunders, 2001, p. 245).

The second way is to incorporate sensory experiences into activities having their own 'structure and meaning' but that have been devised to give opportunities for sensory work. The sensory experiences are based on what are judged to be the priorities for a child (for example, attending to and 'tracking' an object) but will incorporate this in an activity such as drama (handling then watching a glove puppet as part of a story).

The third way in which sensory experiences are used is to enable participation in subject-based activities. These subjects, such as mathematics, science or history, have understanding, knowledge and skills associated with them, some of which may be accessible to pupils with PMLD. The activity is meaningful and involves

sensory aspects such as smelling, handling and seeing an old cooking utensil. As Ouvry and Saunders (2001, p. 245) point out, a difficulty is that, for a pupil with PMLD, the topic may or may not have meaning. If the topic is outside the pupil's understanding, the sensory experiences themselves may seem to the pupil random and meaningless.

The skill of the teacher is to identify in teaching contexts opportunities to encourage sensory experiences for the pupil that aid further development. This might be eventual progress from tolerating to attending, or from attending to participating, or from participating to understanding. The pupil should be able to grasp meaning in the sensory experience itself as well as develop an awareness of the meaning that the sensory experience has in relation to the context of the activity.

As indicated in the previous chapter, the encouragement and stimulation of the visual sense have been considered important in relation to PMLD (Aird, 2001, e.g. p. 79). The visual element of manual signing, such as Makaton (Walker, 1985, 1993) or Signalong (www.signalong.org.uk), are important. The use of visual symbols and whole word approaches capitalises on visual input. Where teaching and learning methods are so often predominantly auditory-vocal, a proper regard to the importance of the visual mode can supplement or compensate (Carpenter and Morris, 2001). Such attention to the visual mode is considered important for pupils with PMLD (Lawton, 1999).

Encouraging communication

It has been noted that most children with PMLD 'experience difficulties with communication' (SCAA, 1996), and that some pupils 'communicate by gesture, eye pointing or symbols; others by very simple language' (DfES, 2003, p. 4).

Some early responses may be spontaneous but, where an adult responds to them, they can come to have communicative significance. Such consequences are part of the development of language for all children. For example, if the pupil glances at an item, appearing to show signs of pleasure, the adult might respond by assuming that the pupil would like the object to be brought within reach and perhaps to touch it. If the pupil responds to this positively, an early cycle of communication begins to open up. Such responses and patterns of responses may take a long time to become routine and secure. The main point is that sensitivity on the part of the adult such as the teacher to what the pupil does and how he reacts is essential. It can lead to the teacher responding in a way that lays the basis for the gesture or sound or glance to be invested with communicative intent.

Such sensitivity is also necessary, when a pupil begins to have a repertoire of communication such as eye pointing or gesture, to try to ensure that attempts to communicate are not missed. Where symbols are learned, they open up the opportunity to communicate about items or people that may be present or at a more abstract level, about activities proposed and other matters.

Where a pupil can communicate 'by very simple language' (DfES, 2003, p. 4), it is important that this too is encouraged and that adults and other pupils are ready to respond. The spoken language used by adults to pupils with PMLD does not have to be over-loud, stilted and telegraphic, but neither should it swamp

the pupil with streams of talk. Key words can be naturally stressed and repeated and accompanied by the item to which the speaker is referring or manual signs or a symbol or an object of reference. Tone of voice, expression, body language and ensuring the pupil's attention are important.

As explained in Chapter 4 relating to pupils with SLD, interactive approaches aim to help pupils with PMLD to develop understanding of the perception of their environment through interacting with others and building relationships. For pupils with PMLD as well as for pupils with SLD, encouraging interaction, through activities such as those involving turn, taking, lays down the precursors of communication and seeks to encourage it further. Intensive Interaction (Nind and Hewett, 2001), as described in Chapter 4, is used with pupils with PMLD to encourage language and interpersonal behaviour.

AAC uses an approach, or a combination of approaches, according to the pupil's skills and preferences, to enable communication. These approaches include photographs and speech synthesisers, signing, symbols and objects of reference. The importance of encouraging communication at all levels is important, for example in music using resources such as sound beam (Ellis, 1996).

There is further discussion of communication in the later section concerning CB where, in particular, the relevance of determining the possible communicative intent of CB is examined.

Linking resources and routines

School routines such as morning greetings, meal and snack times and personal care procedures are used to extend pupils' understanding and skills by building on what is familiar to them. These can be linked to resources to further develop understanding. The resources themselves can come to acquire meaning by being associated with familiar activities. For example, a particular cup regularly used for snacks and mealtimes at school may come to be associated with these times. The opportunity then arises of using the cup to signal that a snack or mealtime is imminent, that is, using the cup as an object of reference for meal and snack times. This gives the pupil an indication that there is about to be a change and what that change entails.

Objects of reference can be developed in a similar way for regular classroom activities such as ICT (a computer disk); design and technology – food (a cooking utensil); or swimming and hydrotherapy (a swimming costume).

Relating to the point made in the section about seeking to link sensory experiences and meaningful activities, routines can also invest several items with meaning in the sense that one item might indicate to the pupil that another may follow. This notion of sequence can contribute to the activity being invested with greater meaning. For example, the pupil might be shown a cooking utensil to indicate that design and technology (food) is imminent. The pupil then sees bread and a toaster and begins to link the two items to toast being made. Each item, the cooking utensil, the bread and the toaster, gains in meaning and the activity begins to make sense as being one which is associated with food being prepared.

Pupils controlling their surroundings

An important aspect of provision for a pupil with PMLD is creating an environment that is responsive to movements and sounds made by the pupil so that these environmental responses will in their turn bring about a response in the child. Pupils should be enabled to ‘control aspects of their environment through their own action’ (Mittler, 2001, p. 338). Related to this is encouraging choice and decision-making, perhaps initially with much support, such as choice of food and drink, or leisure activity, whether to go out or stay in the classroom, or with whom to sit.

A range of approaches is brought together under the term, ‘responsive environment’ (Ware, 2003), which is considered important in the development of social, intellectual and communicative development. This is essentially the creation of an environment in which pupils with PMLD ‘get responses to their actions, get the opportunity to give responses to the actions of others, and have the opportunity to take the lead in interaction’ (p. 1).

Building on pupils’ interests, aptitudes and achievements

While of course for all pupils, drawing on needs, interests, aptitudes and achievements is part of the art of teaching well, for pupils with PMLD, where progress is often so hard won, it is crucial.

Establishing a pupil’s interests relates to what has been said earlier about enabling choice, because a pupil’s expressions of preference are an indication of what he is interested in. Such interests, whether in bright colours, shiny objects, soft toys or computers, can be used to help develop learning, for example by incorporating items of interest in activities. Careful ongoing assessments of what the pupil can do and what he finds particularly difficult give indications of the pupil’s aptitudes, which again can be used as foundations for consolidating and extending learning. The pupil’s achievements are used to encourage the pupil and to offer opportunities for the pupil to succeed. Again they suggest the possible future directions for learning.

Challenging behaviour

This section draws on the description of CB and some of its implications in Farrell (2003, pp. 29–32). Readers may also wish to consult *Challenging Behaviour: Principles and Practices* (Hewett, 1998).

It has been observed that some pupils with PMLD may ‘behave in ways that either challenge staff and other pupils or result in their isolation’ (SCAA, 1996). Not all pupils with PMLD, of course, present CB. Neither is behaviour that challenges staff, pupils and others exclusive to pupils with PMLD. But there are particular difficulties in managing and trying to modify such behaviours where a child also has profound learning difficulties, where a child has difficulties in communicating wants, and where other difficulties may make it hard for the child to comprehend that some behaviours are harmful or in other ways undesirable.

CB is behaviour that is socially unacceptable and significantly blocks learning. Because of its intensity, duration or frequency, the safety of the person exhibiting

the behaviour or the safety of others may be at risk. Such behaviour is likely to limit access to community facilities or prohibit it altogether in the short term. Other terms sometimes used to convey similar behaviour are 'problem', 'difficult', 'disturbing' and 'maladaptive' behaviour.

Agreement is not always found regarding what constitutes CB, partly because of varying standards of what is considered acceptable behaviour. Social class, culture, different chronological and developmental ages of children and different settings can all influence the assessment of the severity of CB. Sometimes there is not even agreement about whether CB is evident, either because of different interpretations about particular behaviour or because of different views about, for example, its severity. Examples of CB are self-injury or injury to others; damage to surroundings; severe lack of compliance; repeated absconding; and stereotyped behaviour (speech or movement). Other instances are faecal smearing; pica (habitually eating substances other than food such as paper or dirt); inappropriate sexual behaviour, such as public masturbation or exposing the genitals to others; persistent screaming; repeated vomiting; and extreme hyperactivity.

Work with children and young people with CB draws on research in the areas of child development, psychiatry, medicine and psychology. In some cases CB is linked to particular conditions such as Lesch-Nyhan syndrome, which is associated with self-injurious behaviour and often violence to others, spitting and vomiting. Other factors that can contribute to CB are the side effects of drugs, pain, stress, anxiety and depression. Various factors can also contribute to the maintenance of CB. It can be viewed in a developmental context ranging from early rhythmical behaviour to the changes brought about by adolescence.

Aird (2001, p. 62) provides a useful reminder of the possible reasons for CB, which includes pupils being unable to convey basic needs; the effects of phobias; limited language and understanding; intolerance of what the pupil perceives as overstimulation or conversely a low boredom threshold; discomfort from physical impairment or incontinence; and lack of emotional security because of sensory impairment.

From a cognitive-behavioural perspective, it is important to assess and measure the behaviour as part of the child's overall assessment. Hypotheses about the behaviour should be tested. For example, the causes, antecedents and consequences of the behaviour can be sought. Schools seek to create optimum learning environments for children with CB and to work out intervention programmes that take fully into account such factors as medical care and level of ability. Behavioural and psychodynamic approaches may be used.

Specific programmes are individually planned. Interventions must be carefully planned, systematically implemented and rigorously assessed, then modified or changed if ineffective. Children with CB may need, from time to time, additional staff, experiences or equipment or a modified timetable.

CB may have a communicative function for the child, making it important to have individual communication programmes devised in conjunction with a speech and language therapist. CB may be used to communicate a request for social activities (e.g. attention or interaction); a request for items such as food or a toy; a protest or refusal to comply with a request; or a wish to escape from a situation. It may indicate dissatisfaction; a comment or declaration such as a greeting or compliance with a request; or boredom, pain or tiredness.

An analysis of the possible communicative function of CB can lead to effective interventions. These may relate to events that precede the CB (antecedents) or events following the CB (consequences) as both antecedent and consequent events may support the CB. Interventions may be selected on the basis of functional analysis. However, their long-term effectiveness may be impaired, for example if the elimination of the unwanted behaviour is not supported by naturally occurring events that reinforce the new behaviour.

One way of ensuring that natural contingencies are applied is to teach new functional behaviours. These must result in reinforcing consequences similar to those available following the unwanted behaviour and the new behaviour must be reinforced by the same consequences that reinforced the unwanted behaviour. Successful intervention depends on expanding the limited response repertoires of people with learning difficulties rather than just trying to eliminate the inappropriate behaviour.

A range of interventions is used. Some interventions are designed to teach new communicative behaviours to replace unwanted behaviour, for example teaching a child desiring food to use a non-verbal sign rather than be disruptive. Others are developed to teach alternative functionally related behaviours to replace the unwanted behaviour. For example, this might involve teaching a child to listen to peaceful music on a headset to suppress an overstimulating environment instead of exhibiting unacceptable behaviour such as shrieking. Yet other interventions involve changing the events that lead up to the inappropriate behaviour. Such behaviour may indicate a wish to escape from a situation, for example because it involved learning that the person found too difficult. If the tasks were simplified and errorless learning was used, then the inappropriate behaviour might cease.

Early intervention is helpful. Children with CB may find change difficult so this should be implemented in a planned way and with an acclimatisation period. Changes of staff, peers, school and the changes of environment involved in using respite care all need to be planned.

The support and training of staff working with children with CB is very important and staff support groups and the active support of senior staff are necessary. Whole school policies will help ensure consistency in working with children with CB. This involves developing and maintaining appropriate attitudes to work with pupils with CB and also an open atmosphere in which difficulties can be shared and discussed is important. The development of management techniques and learning strategies must have a high priority for the whole school, and senior staff members need to be closely involved. It has been found effective for a senior member of staff to have overall responsibility for co-ordinating and monitoring behaviour management programmes while working with classroom staff.

All members of staff need to be trained in behaviour management techniques so that children with CB are not denied free movement in the school because of lack of overall staff expertise. There should be opportunities for individual help with programme planning and chances to observe colleagues who are particularly skilled. Close links with parents/carers and between teachers, psychologists, speech therapists and others is vital. Links with other schools and agencies (especially staff who provide respite care for the individual and their families/carers) are equally important so that a common approach to the management of the children can be developed and maintained.

Sensory impairment, physical disability and severe medical conditions

It has been noted that, as well as profound learning difficulties, pupils with PMLD have ‘other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition’ (DfES, 2003, p. 4). The reader may wish to consult another book in this series, *The Effective Teacher’s Guide to Sensory Impairment and Physical Disability: Practical Strategies*, for further information on such difficulties and educational and other strategies associated with them. The book includes chapters on ‘Visual impairment’, ‘Hearing impairment’, ‘Deafblindness’ and ‘Physical and motor disability, and medical conditions’. Some approaches suggested there may be adapted and interpreted to take into account the child’s profound learning difficulties.

For example, where a child with profound learning difficulties is also deaf, manual signing and lip-reading take on particular significance. If the child is blind, then aural-oral communication and opportunities to develop close familiarity with surroundings are important. Where a child with profound learning difficulties is also blind and deaf, then training in the significance and importance of touch is central and hand over hand signing may be used for communication.

Physical and motor disability may be associated with conditions such as spina bifida, which may be accompanied by profound learning difficulties. These disabilities will require the support and advice of a physiotherapist and occupational therapist and others to develop and oversee specific programmes encouraging optimum movement. Because movement and exploring the environment contribute so much to learning, where these are impaired it is vital to make the most of what mobility there is for pupils who have PMLD.

Medical conditions have their own implications both for care and in their effect on education and these are assessed for each child. For example, if a child who has profound learning difficulties has cystic fibrosis (a life-threatening condition in which a thick mucus is produced on the lungs and pancreas, resulting in cysts) this requires regular physiotherapy to clear the lungs. While this often takes place before or after school, it may also be necessary in school time so arrangements are necessary to enable this as part of school provision. A pupil with profound learning difficulties who also has epilepsy may require medication administered by school staff for seizures. For further information on the educational implications of epilepsy, see the book in this series, *The Effective Teacher’s Guide to Sensory Impairment and Physical Disability: Practical Strategies*, Chapter 5.

THINKING POINTS

Readers may wish to consider with reference to a particular LEA and school:

- ◆ how clearly PMLD are defined;
- ◆ the suitability of the curriculum and assessment structures for pupils;
- ◆ what interventions are identified as suitable for pupils with PMLD and how these are evaluated.

KEY TEXT

Aird, R. (2001) *The Education and Care of Children with Severe, Profound and Multiple Learning Difficulties*, London, David Fulton Publishers.

As the title indicates, this book discusses both SLD and PMLD. It is argued with feeling and covers a broad range of issues, including ensuring that the curriculum is sufficiently responsive to the learning and other 'needs' of pupils as well as what may appear to be requirements of the National Curriculum and other structures.

Conclusion

In this brief concluding chapter, I consider principles that apply to general learning difficulties and how they are refined when the learning difficulty is more severe, or profound. In other words, the chapter will examine why the term ‘general learning difficulties’ is used and why it can be useful.

The expression ‘general learning difficulties’ aims to distinguish such difficulties from specific learning difficulties, like dyslexia, dyspraxia and dyscalculia, in which one area of learning tends to be affected (literacy, the organisation of movement, or mathematics skills and understanding). This is not to imply that there appears to be overlap in the indications of some specific learning difficulties but that they do not affect in the same general way all or most aspects of learning as do moderate, severe and profound learning difficulties.

The difference of degree in general learning difficulties is indicated in guidance connected with the PLASC (DfES, 2003) (www.dfes.gov.uk/sen). The guidance concerns gathering information on the type of SEN for pupils for whom special educational provision is being made at Early Years Action Plus, School Action Plus or through a statement of SEN (p. 2).

According to the guidance, pupils with MLD ‘will have attainments significantly below expected levels in most areas of the curriculum, despite appropriate interventions. There needs will not be able to be met by normal differentiation and the flexibilities of the National Curriculum’ (p. 3). The guidance emphasises that such pupils ‘**should only be recorded as MLD if additional educational provision is being made to help them to access the curriculum**’ (p. 3, bold in original). Pupils with MLD ‘have much greater difficulty than their peers in acquiring basic literacy and numeracy skills and in understanding concepts. They may also have associated speech and language delay, low self-esteem, low levels of concentration and under-developed social skills’ (p. 3).

Pupils with SLD have ‘significant intellectual or cognitive impairments’. The guidance continues:

This has a major effect on their ability to participate in the school curriculum without support. They may also have difficulties in mobility and co-ordination,

communication and perception and the acquisition of self-help skills. Pupils with severe learning difficulties will need support in all areas of the curriculum. They may also require teaching of self-help, independence and social skills. Some pupils may use sign and symbols but most will be able to hold simple conversations. Their attainments may be within the upper P scale range (P4–8) for much of their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, pp. 3–4)

Turning to pupils with PMLD, the guidance states:

In addition to very severe learning difficulties, pupils have other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition. Pupils require a high level of adult support, both for their learning needs and for their personal care. They are likely to need sensory stimulation and a curriculum broken down into very small steps. Some pupils communicate by gesture, eye pointing or symbols, others by very simple language. Their attainments are likely to remain in the early P scale range (P1–4) throughout their school careers (that is below level 1 of the National Curriculum).

(DfES, 2003, p. 4)

It will be noticed that a difference in degree of learning difficulty is reflected in ‘within-child’ terms relating to the extent of cognitive impairment and in the curricular range in which the pupil is expected to work. For example, pupils with MLD are working ‘significantly below’ the level expected by the pupil’s age; for pupils with SLD, attainments may be in a range P4 to 8 for much of their school career; and, for pupils with PMLD, attainments are likely to be in the range P1 to 4 throughout their school career.

There is also a tendency for additional difficulties to be associated with increasingly severe and profound learning difficulties. This is reflected in provision in the sense that the emphasis of this differs according to whether the learning difficulty is moderate, severe or profound. For example, for pupils with MLD, the provision includes a modified National Curriculum with an emphasis on practical learning taking place meaningfully in the context in which it is used. In the case of pupils with SLD, while the principles of context and meaningfulness are still relevant, it is also important that the National Curriculum and assessment are seen as a part of provision, that the curriculum is modified and supplemented as necessary and that assessment involves small steps and other modifications. Regarding pupils with PMLD, as well as the more profound cognitive impairment, increasingly, the pupil’s additional difficulties are a particular focus to ensure that the curriculum, assessment and teaching and learning all take account of these. Even greater attention is paid to ensuring that the curriculum is sufficiently broad and responsive to particular learning requirements.

As the need to provide for additional difficulties increases, so it becomes increasingly necessary to develop teams with competence in medical aspects of provision. Aird (2001, p. 103) sets out a possible model seeking to ensure the cohesive working of teachers, teaching assistants and others. It involves teachers

working with teaching assistants who are trained and qualified at one of three levels, with levels two and three involving, among other features, increasing knowledge and skill in providing for the management of paramedical regimes. In addition, medical and paramedical staff would be responsible for such provision as specialist assessment and provision of aids. A care manager would, among other tasks, co-ordinate multi-agency advice and support and medication regimes. This involves both health authority funded and jointly funded posts.

The curriculum level and the levels of assessment, as well as approaches to teaching, are different depending on whether the pupil has MLD, SLD or PMLD as has been indicated in the earlier chapters of this book, although there are approaches that appear to work for pupils with both SLD and PMLD given the different curricular levels at which they are likely to be applied.

Addresses

ASDAN Central Office

Wainbrook House
Hudds Vale Road
St George
Bristol BS5 7HY

Tel: 0117 941 1126
Fax: 0117 935 1112
e-mail: info@asdan.co.uk
www.asdan.co.uk

Association for Dance Movement Therapy UK

32 Meadfoot Lane
Torquay
Devon TQ1 2BW

e-mail: queries@admt.org.uk
www.admt.org.uk

ADMTUK involves a national network of sub-committees. Its work includes quarterly workshops, conferences and seminars; professional registration; education and training; and publications such as *e-motion* and research.

The Association of Educational Psychologists

26 The Avenue
Durham DH1 4ED

Tel: 0191 384 9512
Fax: 0191 386 5287
e-mail: aep@aep.org.uk
www.aep.org.uk

The AEP is the professional association for educational psychologists in England and Wales and Northern Ireland.

The Association of Professional Music Therapists

61 Church Hill Road
East Barnet
Herts EN4 8SY

Tel/fax: 020 8440 4153
e-mail: APMToffice@aol.com
www.apmt.org

The APMT looks after professional matters relating to pay and conditions, standards of clinical practice and promoting music therapy.

The British Association of Art Therapists

The Claremont Project
24–7 White Lion Street
London N1 9PD

Tel: 020 7686 4216
Fax: 020 7837 7945
e-mail: info@baat.org
www.baat.org

The BAAT provides information to its members and to the public concerning all aspects of art therapy. It oversees standards of training and professional practice.

The British Association of Play Therapists

31 Cedar Drive
Keynsham
Bristol BS31 2TY

Tel/fax: 01179 860 390
e-mail: info@bapt.uk.com
www.bapt.info

The Association provides a support network for play therapists and information on training courses.

British Psychological Society

St Andrew's House
48 Princess Road East
Leicester LE1 7DR

Tel: 0116 254 9568
Fax: 0116 247 0787
e-mail: bps1@le.ac.uk
www.bps.org.uk

The BPS is the professional body for psychologists in the United Kingdom, having various sub-groups and divisions. It publishes monthly the magazine *Psychologist*, which is of generic interest to psychologists. Its specialist journals include *The British Journal of Clinical Psychology* and *The British Journal of Educational Psychology*.

The British Society for Music Therapy

61 Church Hill Road
East Barnet
Herts EN4 8SY

Tel: 020 8441 6226
Fax: 020 8441 4118
e-mail: info@bsmt.org
www.bsmt.org

The BSMT organises courses, conferences, workshops and meetings concerning music therapy, which are open to all. An information booklet giving details of music therapy, training courses, books and meetings is available to enquirers. The BSMT has its own publications and offers music therapy books for sale. Members receive *The British Journal of Music Therapy* and the *BSMT Bulletin*.

Down's Syndrome Association

155 Mitcham Road
London SW17 9PG

Tel: 020 8682 4001
Fax: 020 8682 4012
e-mail: hcopeland@downs-syndrome.org.uk
www.downs-syndrome.org.uk

Equals

PO Box 107
North Shields
Tyne and Wear NE30 2YG
Tel/fax: 0191 272 8600
e-mail: admin@equals.co.uk
www.equals.co.uk

Equals is a national organisation for teachers of pupils with moderate, severe or profound and multiple learning difficulties.

The Fragile X Society

53 Winchelsea Lane
Hastings
East Sussex TN35 4LG
Tel: 01424 813 147
e-mail: lesleywalker@fragilex.k-web.co.uk
www.fragilex.org.uk

Genetic Interest Group

Unit 4D
Leroy House
436 Essex Road
London N1 3QP
Tel: 020 7704 3141
Fax: 020 7359 1447
e-mail: mail@gig.org.uk
www.gig.org.uk

Harcourt Assessment (The Psychological Corporation)

Halley Court
Jordan Hill
Oxford OX2 8EJ
Tel: 01865 888 188
Fax: 01865 314 348
e-mail: info@harcourt-uk.com
www.harcourt-uk.com

Makaton Vocabulary Development Project

31 Firwood Drive
Camberley
Surrey GU15 3QD

Tel: 01276 613 90
Fax: 01276 681 368
e-mail: mvd@makaton.org
www.makaton.org.uk

NFER-Nelson

The Chiswick Centre
414 Chiswick High Road
London W4 5TF

Tel: 020 8996 8444
Fax: 020 8996 5358
e-mail: edu&hsc@nfer-nelson.co.uk
www.nfer-nelson.co.uk

NFER-Nelson are test suppliers whose test include ones relevant to BESD.

Partnership for Children

26-7 Market Place
Kingston-upon-Thames
Surrey KT1 1JH

Tel: 020 8974 6004
Fax: 020 8974 6600
e-mail: info@partnershipforchildren.org.uk
www.partnershipforchildren.org.uk

Prader-Willi Syndrome Association

125A London Road
Derby DE1 2QQ

Tel: 01332 365 676/668 790
Fax: 01132 360 401/668 790
e-mail: Office@pwsa-uk.demon.co.uk
www.pwsa-uk.demon.co.uk

The Signalong Group

Stratford House
Waterside Court
Neptune Way
Rochester
Kent ME2 4NZ

Tel: 0870 774 3752

Fax: 0870 744 3758

e-mail: mkennard@signalong.org.uk

www.signalong.org.uk

The Signalong Group provides training and publications.

Soundbeam

Unit 3
Highbury Villas
St Michael's Hill
Bristol BS2 8BY

Tel: 0117 974 4142

Fax: 0117 970 6241

e-mail: tim@soundbeam.co.uk

www.soundbeam.co.uk

Widgit Software

124 Cambridge Science Park
Milton Road
Cambridge CB4 0ZS

Tel: 01223 425 558

Fax: 01223 425 349

e-mail: info@widgit.com

www.widgit.com

Bibliography

- Abbot, C. (ed.) (2000) *Symbols Now*, Leamington Spa, Widgit Software.
- Aird, R. (2001) *The Education and Care of Children with Severe, Profound and Multiple Learning Difficulties*, London, David Fulton Publishers.
- Aitken, S. and Millar, S. (2002) *Listening to Children with Communication Support Needs*, Glasgow, Sense Scotland.
- Alton, S. (2001) 'Children with Down's Syndrome and short-term auditory memory', *Down's Syndrome Association Journal*, 95 (Winter): 4–9.
- American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)*, Washington, DC, APA.
- Audit Commission (2002) *Special Educational Needs: A Mainstream Issue*, London, Audit Commission.
- Berger, A. and Morris, D. (2001) *Implementing the Literacy Hour for Pupils with Learning Difficulties*, 2nd edn, London, David Fulton Publishers.
- , —— and Portman, J. (2000) *Implementing the National Numeracy Strategy for Pupils with Learning Difficulties: Access to the Daily Mathematics Lesson*, London, David Fulton Publishers.
- Black, K. and Haskins, D. (1996) 'Including all children in TOP PLAY and BT TOP SPORT', *British Journal of Physical Education*, Primary PE Focus (Winter), 9: 11.
- Booth, T. and Ainscow, M. with Black-Hawkins, K. et al. (2000) *Index for Inclusion: Developing Learning and Participation in Schools*, Bristol, Centre for Studies in Inclusive Education.
- Bozic, N. and Murdoch, H. (eds) (1995) *Learning Through Interaction*, London, David Fulton Publishers.
- Brooks, G. (2002) *What Works for Children with Literacy Difficulties? The Effectiveness of Intervention Schemes*, Research Report RR380, London, DfES.
- Carpenter, B. (1991) 'Unlocking the door: access to English in the National Curriculum for children with severe learning difficulties', in Smith, B. (ed.) *Interactive Approaches to Teaching the Core Subjects*, Birmingham, Lane Duck Publishing.

- and Detheridge, T. (1994) 'Writing with symbols', *Support for Learning*, 9, 1: 27–33.
- and Morris, D. (2001) 'English', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers.
- , Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, 2nd edn, London, David Fulton Publishers.
- Cornish, U. and Ross, F. (2003) *Social Skills Training for Adolescents with General Moderate Learning Difficulties*, London, Jessica Kingsley Publishers.
- Coupe O'Kane, J. et al. (eds) (1995) *Teaching Humanities to Pupils with Special Educational Needs: A Practical Resource*, Telford, Ergent Publications.
- Day, J. (1995) *Access Technology: Making the Right Choice*, 2nd edn, Coventry, National Council for Educational Technology.
- Department for Education and Employment/Qualifications and Curriculum Authority (1999a) *The National Curriculum Handbook for Primary Teachers in England*, London, DfEE/QCA.
- (1999b) *The National Curriculum Handbook for Secondary Teachers in England*, London, DfEE/QCA.
- (1999c) *The National Curriculum Handbook for Primary Teachers in England: Key Stage 1 and 2*, London, DfEE/QCA.
- Department for Education and Skills (2001a) *Special Educational Needs Code of Practice*, London, DfES.
- (2001b) *Inclusive Schooling: Children with Special Educational Needs*, London, DfES.
- (2003) *Data Collection by Type of Special Educational Needs*, London, DfES.
- (2004) *First Release: Special Educational Needs in England – January 2004*, London, DfES.
- Detheridge, T. and Stevens, C. (2001) 'Information and communication technology', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 156–69.
- Ellis, P. (1996) *Sound Therapy: The Music of Sound*, Bristol, Sound Beam Project.
- Equals (1999) *Schemes of Work: Mathematics for Pupils with Severe Learning Difficulties*, North Shields, Equals.
- Evans, J. and Lunt, I. (2002) 'Inclusive education: are there limits?', *European Journal of Special Education*, 17, 1: 1–14.
- Farrell, M. (2000) 'Educational inclusion and raising standards', *British Journal of Special Education*, 27, 1, March: 38.
- (2003) *The Special Education Handbook*, London, David Fulton Publishers.
- (2004) *Special Educational Needs: A Resource for Practitioners*, London, Sage/Paul Chapman.

- Fletcher-Campbell, F. (2004) 'Pupils with moderate learning difficulties', in Lewis, A. and Norwich, B. (eds) *Special Teaching for Special Children?*, Maidenhead, Open University Press.
- Fuller, C. (1999) 'Bag books tactile stories', *The SLD Experience*, 23: 20–1.
- Gartner, A. and Lipsky, D. K. (1989) 'New conceptualisations for special education', *European Journal of Special Needs Education*, 4, 1: 16–21.
- Gillberg, C. and Soderstrom, H. (2003) 'Learning disability', *The Lancet*, 362: 811–21.
- Greenwood, C. (2002) *Understanding the Needs of Parents: Guidelines for Effective Collaboration with Parents of Children with Special Educational Needs*, London, David Fulton Publishers.
- Grove, N. (1998) *Literature for All*, London, David Fulton Publishers.
- and Park, K. (1996) *Odyssey Now*, London, Jessica Kingsley Publishers.
- Hatcher, P. (2000) 'Sound links in reading and spelling with discrepancy-defined dyslexics and children with moderate learning difficulties', *Reading and Writing: An Interdisciplinary Journal*, 13: 257–72.
- Hemmens, A. (1999) 'Learning through the senses', *Primary Science Review*, 59: 20–3.
- Hewett, D. (1998) *Challenging Behaviour: Principles and Practices*, London, David Fulton Publishers.
- and Nind, M. (eds) (1998) *Interaction in Action: Reflections on the Use of Intensive Interaction*, London, David Fulton Publishers.
- Hornby, G. (2003) 'Counselling and guidance of parents', in Hornby, G., Hall, C. and Hall, E. (eds) *Counselling Pupils in Schools: Skills and Strategies for Teachers*, London, RoutledgeFalmer: 129–40.
- King-deBaun, P. (1990) *Storytime: Stories, Symbols and Emergent Literacy Activities for Young Special Needs Children*, Park City, UT, Creative Communicating.
- Kirby, A. and Drew, S. (2003) *Guide to Dyspraxia and Developmental Co-ordination Disorders*, London, David Fulton Publishers.
- Lacey, P. (1991) 'Managing the classroom environment', in Tilstone, C. (ed.) *Teaching Pupils with Severe Learning Difficulties*, London, David Fulton Publishers.
- Lawson, H. (1996) 'Exploring the relationship between teaching, assessment and research methodology: an enquiry into pupil involvement with pupils who experience severe learning difficulties', unpublished Ph.D. thesis, University of East Anglia.
- and Fergusson, A. (2001) 'PSHE and citizenship', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 193–213.
- Lawton, J. (ed.) (1999) *Reading for All: Ideas for Stories and Reading for Children and Young Adults with Severe and Profound Learning Disabilities*, London, Mencap.
- Lewis, A. (2001) 'Assessment', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 228–39.
- (2004) 'And when did you last see your father? Exploring the views of children with learning difficulties/disabilities', *British Journal of Special Education*, 31, 1: 3–9.

- Light, J. (1999) 'Towards a definition of communicative competence for individuals using augmentive and alternative communication systems', *Augmentive and Alternative Communication*, 5: 134–7.
- Longhorn, F. (1988) *A Sensory Curriculum for Very Special People: A Practical Approach to Curriculum Planning*, London, Souvenir Press.
- Male, D. (1996) 'Who goes to Special Schools?', *British Journal of Special Education*, 23, 1: 35–41.
- Marchant, R. and Cross, M. (2002) *How It Is*, London, National Society for the Prevention of Cruelty to Children.
- Mills, J. (1991) *Music in the Primary School*, Cambridge, Cambridge University Press.
- Mitler, P. (2001) 'Preparing for self advocacy', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 328–45.
- Musselwhite, C. (1993) *RAPS: Reading Activities Project for Older Students*, New York, Chapel Hill.
- Nafstad, A. and Rodbroe, I. (1999) *Co-creating Communication*, Dronninglund, Forlaget Nord Press.
- Nind, M. and Hewett, D. (2001) *A Practical Guide to Intensive Interaction*, Kidderminster, British Institute of Learning Difficulties.
- and — (2005) *Access to Communication: Developing the Basics of Communication with People with Severe Learning Difficulties*, 2nd edn, London, David Fulton Publishers.
- Norwich, B. and Kelly, N. (2004) *Moderate Learning Difficulties and the Future of Inclusion*, London, RoutledgeFalmer.
- Office for Standards in Education (1999) *Inspecting Schools 3–11: Guidance for Inspectors and Schools*, London, Ofsted.
- Ouvry, C. and Saunders, S. (2001) 'Pupils with profound and multiple learning difficulties', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 240–56.
- Palmer, R. (2000) 'Feeling the music philosophy' (www.kolumbus.fi./ritta/lahtinen).
- Panter, S. (2001) 'Mathematics', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 36–51.
- Park, K. (1998) 'Using objects of reference: a review of literature', *European Journal of Special Needs Education*, 10, 1: 40–6.
- (1999) 'Riverrun and pricking thumbs: the use of poetry', *The SLD Experience*, 25: 11–12.
- (2000) 'The resonance board', *The SLD Experience*, 26: 15–17.
- (2002) 'Macbeth: a poetry workshop on stage at Shakespeare's Globe Theatre', *British Journal of Special Education*, 29, 1: 14–19.
- (2004) 'Interactive storytelling: from the Book of Genesis', *British Journal of Special Education*, 31, 1: 16–23.

- Peter, M. (2001) 'Art and design', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 110–19.
- Pinsent, P. (1990) *Children with Literacy Difficulties*, London, David Fulton Publishers.
- Qualifications and Curriculum Authority (2001a) *Planning, Teaching and Assessing the Curriculum for Pupils with Learning Difficulties: English*, London, QCA.
- (2001b) *Planning, Teaching and Assessing the Curriculum for Pupils with Learning Difficulties: Mathematics*, London, QCA.
- (2001c) *Planning, Teaching and Assessing the Curriculum for Pupils with Learning Difficulties: Personal, Social and Health Education and Citizenship*, London, QCA.
- Rinaldi, W. (2001) *Social Use of Language Programme*, Windsor, NFER-Nelson.
- Ritchie, R. (2001) 'Science', in Carpenter, B., Ashdown, R. and Bovair, K. (eds) (2001) *Enabling Access: Effective Teaching and Learning for Pupils with Learning Difficulties*, London, David Fulton Publishers: 52–65.
- Ritney, C. D. (2003) 'Learning difficulties: what the neurologist needs to know', *Journal of Neurology, Neurosurgery and Psychiatry*, 74, 30–6.
- Rose, R. (1991) 'A jigsaw approach to group work', *British Journal of Special Education*, 18, 2: 54–8.
- Schools Curriculum and Assessment Authority (1996) *Planning the Curriculum for Pupils with Profound and Multiple Learning Difficulties*, London, SCAA.
- Sebba, J. (1995) *Geography for All*, London, David Fulton Publishers.
- Tilstone, C. and Laton, L. with Anderson, A. et al. (2004) *Child Development and Teaching Pupils with Special Educational Needs*, London, RoutledgeFalmer.
- Wade, J. (1999) 'Including all learners: QCAs approach', *British Journal of Special Education*, 26, 2: 80–2.
- Walker, M. (ed.) (1993) *Makaton Resource Vocabulary: National Curriculum Series Part 1*, Camberley, Makaton Vocabulary Development Project.
- (1985) *Symbols for Makaton*, Camberley, Makaton Vocabulary Development Project.
- Watson, J. (1994) 'Using interaction in the education of pupils with PMLDs (ii) Intensive interaction: two case studies', in Ware, J. (ed.) *Educating Children with Profound and Multiple Learning Difficulties*, London, David Fulton Publishers.
- Ware, J. (1994) 'Introduction to working with people with profound and multiple learning difficulties', paper written for Course Unit 1: 'People with profound and multiple learning difficulties (Part A: The population)', Birmingham, The University of Birmingham.
- (2003) *Creating a Responsive Environment for People with Profound and Multiple Learning Difficulties*, London, David Fulton Publishers.
- and Evans, P. (1987) 'Room management is not enough?', *British Journal of Special Education*, 14, 2: 78–80.
- Whittles, S. (1998) *Can You Hear Us?: Including the Views of Disabled Children and Young People*, London, Save the Children.

Widgit Software (2000) *Writing with Symbols 2000*, Leamington Spa, Widgit.

Wilson, J. and Frederickson, N. (1995) 'Phonological awareness training: an evaluation', *Educational and Child Psychology*, 12, 1: 68–79.

World Health Organization (2001) *International Classification of Functioning, Disability and Health*, Geneva, WHO.

Index

- AAC *see* augmentative and alternative communication
- abstract reasoning 20–1
- achievement *see* assessment of progress
- additional difficulties: MLD 15–16, 23–4; PMLD 72, 76–7
- adult–pupil conferences 36
- affect, storytelling 51
- Aird, R. 30, 70
- Alton, S. 45
- apparatus, concrete/visual 20–1
- assessment of difficulties 18, 29, 59
- assessment of progress 32–6, 61–4, 69
- auditory difficulties 30, 45, 72
- augmentative and alternative communication (AAC) 45–6, 68
- Bag Books 44
- Bailey Scales of Infant Development* 59
- behaviour, challenging (CB) 69–71
- behavioural, emotional and social difficulties (BESD) 24
- Black, K. 52
- Bristol literacy/numeracy approaches 30–1
- B Squared assessment 35
- causal factors 17–18, 28, 59
- challenging behaviour (CB) 69–71
- Children’s Trusts 9–10
- choice 48–9, 69
- chromosomal abnormalities 28
- citizenship 38–40
- CMV *see* cytomegalovirus
- cognitive access, ICT 47
- cognitive development 20
- communication 23, 32–3, 34, 45–6, 51–2, 62–3, 67–8, 70–1
- community, understanding 48
- computers 46–7
- concept development 20–1
- concrete apparatus 20–1
- co-ordination, physical 52–3
- Cornish, U. 24
- cross-curricular links 31, 40
- curriculum *see* National Curriculum
- cytomegalovirus (CMV) 28
- Data Collection by Type of Special Educational Needs* (PLASC guidance) 4–5, 13–14, 27–8, 57, 75–6
- decision-making 48–9, 69
- Department for Education and Employment (DfEE) 37–9
- Department for Education and Skills (DfES) 3–5, 6, 7–8, 10, 11, 13–14, 27–8, 57, 58–9, 75–6
- DfEE *see* Department for Education and Employment
- DfES *see* Department for Education and Skills
- Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* 14, 28, 58, 59
- disability, physical 72
- discrete adapted activities, PE 52–3
- Down’s syndrome 28, 45
- drawing skills 32
- DSM-IV-TR* 14, 28, 58, 59

- Early Support Pilot Programme (ESPP) 9
- Early Years Action (Plus) 4
- Education Act (1996) 7–8
- emotion, storytelling 51
- English, performance descriptions 62–3
- environment, control of 69
- environment, understanding 44
- environmental factors 17
- ESPP *see* Early Support Pilot Programme
- experience, practical 21–2, 31, 49–50
- exploratory learning 22
- familiarity 48
- Foundation Stage, PSED 37
- Fragile X syndrome 28
- general learning difficulties 3–8, 75–7
- grouping pupils 53
- guided discovery 22
- Haskins, D. 52
- hearing *see* auditory difficulties
- Hemmens, A. 43
- Hewett, D. 44
- Hornby, G. 10–11
- ICF see International Classification of Functioning, Disability and Health*
- ICT *see* information and communications technology
- identification of difficulties 18, 29, 59
- inclusion 7–8, 16
- inclusive adapted activities, PE 52
- Inclusive Schooling: Children with Special Educational Needs* 7–8
- Index for Inclusion* 7
- information and communications technology (ICT) 46–7
- intelligence levels 14, 28, 58
- intelligence tests 29, 59
- Intensive Interaction 44
- interactive approaches 44, 68
- interactive storytelling 51–2
- International Classification of Functioning, Disability and Health (ICF)* 17–18, 58
- intervention overview 6
- IQ *see* intelligence levels; intelligence tests
- ‘jigsaw’ grouping 53
- Kelly, N. 14, 15, 18–19
- Key Stage guidelines: citizenship 38–40; PSHE 37–8, 39–40
- language 23, 34; *see also* communication
- learning approaches, PMLD v. SLD 64–5
- learning pace 22
- LEAs *see* local education authorities
- Lesch-Nyhan syndrome 70
- lesson planning 32
- Lewis, A. 11, 36
- literacy 19–20, 30
- local education authorities (LEAs) 4, 9, 15–16, 18
- Macbeth* poetry workshops 51–2
- mainstream schools 7–8, 16
- Makaton 45
- mathematics 10, 31, 32, 49–50, 50–1, 60–1; assessment, progress 33–4, 34, 63–4
- meaning, storytelling 51
- medical conditions 72
- medical provision 77
- memory 45
- mental retardation 14, 28, 58, 59
- MLD *see* moderate learning difficulties
- mobility 52–3
- moderate learning difficulties (MLD) 5, 6, 13–14, 16–18, 39–40, 75, 76; additional difficulties 15–16, 23–4; provision/interventions 18–24
- multi-sensory interventions 21, 43–4, 49, 49–50, 54, 60, 65–7
- music therapy 46
- National Children’s Trust Framework 9–10
- National Curriculum 29–32, 33–5, 36–40, 60–1, 76; assessment 32–6, 61–4; citizenship 38–40; PSED/PSHCE/PSHE 36–40
- National Curriculum Handbook for Primary/Secondary Teachers in England* 37–9
- National Literacy Strategy (NLS) 30
- National Numeracy Strategy (NNS) 30–1
- neurological conditions 58, 59
- Nind, M. 44
- Norwich, B. 14, 15, 18–19

- operational thinking 20
Ouvry, C. 64
- pace of learning 22
Panter, S. 10, 60–1
parallel activities, PE 52
parental collaboration 10–11
Park, K. 51–2
pedagogies, PMLD v. SLD 64–5
performance, poetry 51–2
performance descriptions (P scales) 33–5, 61–4
Performance Indicators for Value Added Target Setting (PIVATS) 34–5
personal, social and emotional development (PSED) 37–8
personal, social, health and citizenship education (PSHCE/PSHE) 33, 36–40, 47, 63
Phonological Awareness Training 19
physical access, ICT 47
physical disability 72
physical education (PE) 52–3
Piaget, Jean 20
PIVATS 34–5
PLASC *see* Pupil Level Annual School Census
PMLD *see* profound and multiple learning difficulties
poetry workshops 51–2
practical activities 21–2, 31, 49–50
pre-operational thinking 20
prevalence 16–17, 29, 58–9
problem-solving 50
professional collaboration 8–10
profound and multiple learning difficulties (PMLD) 5, 6, 39–40, 51–2, 57–9, 76; additional difficulties 72, 76–7; challenging behaviour 69–71; provision/interventions 60–9
P scales 33–5, 61–4
PSED *see* personal, social and emotional development
PSHCE/PSHE *see* personal, social, health and citizenship education
pupil–adult conferences 36
pupil grouping 53
Pupil Level Annual School Census (PLASC) 4–5, 13–14, 27–8, 57, 75–6
pupil participation 11, 36
Qualifications and Curriculum Authority (QCA) 7, 30, 33–4, 37–40, 40, 58, 61–4
questions, understanding 49
reading 45
Reading Intervention project 19
Records of Achievement (RoAs) 35
resources 43–4, 54, 68
'responsive environment' 69
retardation, mental 14, 28, 58, 59
Ritchie, R. 49
room management 53–4
Ross, F. 24
routines 47–8, 68
Saunders, S. 64
School Action (Plus) 4, 17, 29, 58–9
Schools Curriculum and Assessment Authority 58
science 31, 34–5, 49
self-awareness 48
SEN *see* special educational needs
sensory impairment 30, 45, 72
sensory stimulation 45, 65–7; *see also* multi-sensory interventions
severe learning difficulties (SLD) 5, 6, 27–9, 64–5, 75–6; assessment, progress 32–6, 40; curriculum 29–32, 36–40; provision/interventions 43–54
Shakespeare workshops 51–2
short-term memory 45
Signalong 45
signing systems 45
SLD *see* severe learning difficulties
SMSC *see* spiritual, moral, social and cultural (development)
social factors 17
Social Use of Language Programme 23
Soundbeam 46
special educational needs (SEN) 7–8, 15–17, 58–9; legal definition 5–6
Special Educational Needs and Disability Act (2001) 7–8
Special Educational Needs Code of Practice 3–4, 6, 10, 11
special schools 7–8
spiritual, moral, social and cultural (SMSC) development 37, 38

stories, multi-sensory 44
storytelling 51–2
subjects, understanding 31
supportive access, ICT 47
symbols, visual 45–6

targets, intermediate 31
teaching approaches, PMLD v. SLD
64–5

visual apparatus 20–1
visual difficulties 72
visual inputs 45, 67
visual symbols 45–6
vocabulary 50–1

Wechsler Intelligence Scale for Children
(*WISC-III*) 29, 59
writing 47, 52