# PHILOMENA OTT

# TEACHING CHILDREN with Dysexia

# **A Practical Guide**

with a foreword by SIR RICHARD BRANSON

## Teaching Children with Dyslexia

*Teaching Children with Dyslexia* is essential reading for any teacher, parent, Special Educational Needs Co-ordinator, teaching assistant or student who needs an incisive, up-to-the-minute account of the best ways to successfully tackle dyslexia and dyspraxia – at home and in the classroom.

This book is packed with photocopiable checklists, activities, recommendations for resources and tests, advice and suggestions for strategies and techniques that are instantly transferable to teaching environments. Written by one of the most well-regarded and experienced practitioners in the field, the author's 'hands-on' experience makes this an indispensable teaching companion. It includes chapters on:

- dispelling the myths about the existence of dyslexia and dyspraxia with help for early recognition
- creating dyslexia-friendly environments
- suggestions for establishing good home-school partnerships
- when, why and how to teach synthetic and analytic phonics
- essential principles and processes for teaching reading
- a rationale for the most effective use of the different spelling methods
- guidelines for developing confidence and overcoming difficulties for reluctant writers.

Philomena Ott has a well-deserved reputation for cutting through the jargon, explaining complex scientific theories and research findings in a palatable and accessible way. She provides a succinct overview of the most recent research about the characteristics of dyslexia, as well as ways of dealing with it by using well-established methods. Written specifically to bolster experienced teachers' confidence and to empower Newly Qualified Teachers (NQTs) with the key to unlocking literacy problems in challenging pupils, this resource book should be on the shelf of every staff room.

**Philomena** Ott is an internationally recognised expert on teaching pupils with specific learning difficulties. She is currently an independent educational consultant, trainer and speaker on dyslexia, and has conducted seminars and given lectures worldwide.

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# Teaching Children with Dyslexia

A practical guide

Philomena Ott



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#### Foreword by Sir Richard Branson

Dyslexia is an issue frequently in the media spotlight. It arouses passionate debate including diverse opinions about the condition and its characteristics. Sceptics dismiss it as a mythological condition found among the well-heeled classes. Academics removed from the day-to-day realities argue about definitions. The reality is that many individuals are haunted by a lifelong incapacity with certain aspects of language which does not diminish with age or experience. Evidence is reported globally and in multi-lingual settings from those with a specific pattern of difficulties.

Scientists using MRI scans show individual differences in brain architecture and function when different tasks are undertaken. Studies show that some dyslexic people activate their right brain more frequently which explains why they have artistic, creative and spatial abilities, whereas they often struggle with language activities which are associated with left brain activities.

Talents and creativity are sometimes unrecognised, undervalued or stifled during school days in environments where literacy and numeracy are prized and prowess in these constantly assessed. Those who struggle to jump through the academic measurement hoops often fall behind, feel inferior and worthless because they cannot pass routine tests and frequent examinations. Confidence is eroded and self-belief ebbs because of constant exposure to repeated failure with tasks that the majority take in their stride.

I was one of these. My school days were a struggle. I never forgot the day when I was taking an IQ test and just looked at the sheet of paper for one hour without being able to answer anything. My mother refused to accept that I was just careless and lazy and encouraged me in all kinds of out of school activities, and fortunately I ended up being top in sports. At my senior school I opted out of the challenge of writing essays. In those days computers were not readily available for word processing and spellchecking. And the problems didn't end when I started Virgin! Amusingly it wasn't until my 50th birthday that I could finally tell the difference between 'net' and 'gross'. You can imagine. The Virgin Group board meetings. Results £10 billion gross, 'no Richard that's NOT profit, you can't spend it. It's turnover!' A friend sat me down and said 'Think of a fishing net in the ocean. The fish you have in your net is what you've earned not your profit'.

Hey presto, I had it!

Technology, when used appropriately, has revolutionised the lives of those who struggle to spell. The Internet has made the contents of library shelves accessible at the touch of a button. Multimedia resources enable text to be read and speech recognition technology transfers words to the page. Computers enable people now to train for careers and allow them to do jobs that at one time would have been unthinkable because of handwritten requirements.

#### x Foreword

The challenge for parents and teachers is to identify the signs of dyslexia before it blights confidence. This book offers practical advice about what readers need to know, and when they dip into it, it provides sensible answers. It is derived from real-life experience and based on up-to-date international research. The key facts are accessible and easily located for the general reader. Early recognition of dyslexia and dyspraxia empowers parents and teachers who want to support and encourage the ten per cent of children who learn differently and it will help to prevent a further increase in the 16 million adults in the workforce with low literacy levels. Understanding specific needs and providing support has shown that prevention of problems results in many talented and successful dyslexic people reaching stellar goals in many walks of life.

**Richard Branson** 

London, July 2006

### Preface

Like millions of viewers round the world while watching the marriage of the Prince of Wales to Lady Diana Spencer in July 1981 my telephone rang, just as the Archbishop of Canterbury solemnised the union. The caller was a primary school teacher who was 'worried about her dyslexic son's lack of progress at school'. Her call and concerns were not unique as shown later by an e-mail I received from a parent in Buenos Aires who too was worried because 'his teachers do not know how to help him because of his dyslexic difficulties'. This resulted in an invitation to Argentina where the seminars I conducted became the nucleus of a book. I was prompted to expand on the contents because of continuing concerns about how to teach those who fail to learn to read and write.

The House of Commons Education and Skills Committee ordered an inquiry in 2005 because of the 'unacceptably high numbers entering secondary school with poor levels of literacy. Former Ofsted director Jim Rose consulted practitioners, visited schools and considered scientific research findings. These included the Universities of York and Sheffield's review of the research which acknowledged the importance of the United States National Reading Panel's Reports that 'based on the scientific evidence, the essential components of any reading programme must include systematic and direct instruction in phonemic awareness, phonics, reading fluency, vocabulary development and comprehension strategies'. The Rose Review recommended in 2006 that 'systematic phonic work should start by the age of five'. This book argues for the inclusion of these teaching principles.

Meanwhile, a dedicated group of teachers who have had specific training in Orton-Gillingham methods had been using programmes which have had systematic, synthetic phonics as a core element to teach dyslexic children, for over forty years in the USA and UK. Their contribution was largely ignored and dismissed by many mainstream educationalists in the 1980s. The wheel has turned a full circle because the teaching principles and methods used for teaching children with dyslexia have been established as effective. The Government has announced that special needs co-ordinators (SENCOs) will have to complete a nationally accredited qualification to provide the right expertise in the classroom and it is to establish a dyslexia trust to provide specialist support in all schools which will include many of the recommendations discussed later. This is something that the various dyslexia organisations have campaigned for, for three decades.

### Acknowledgements

My thanks to colleagues who have answered queries, shared their knowledge and experience and commented on chapters in the manuscript, including Professor Greg Brooks, Ann Cooke, Dr Nata Goulandris, Jean Hutchins, Ian Litterick, Bernadette McLean, Elaine Miles, Penny Rose, Professor Maggie Snowling and Dr Benita Thomson. I am indebted to Steve Cuthbert, Peter Dale, Alison Foyle, David Jefferson and Lesley Munroe for their advice and support. Thanks are due to the pupils I have taught, from whom I have learned so much, and especially to their parents for their faith and fortitude for following many of the recommendations and suggestions given here. A special thank you to Cecilia Malbran and her son Jose for making it possible for me to lecture in Argentina. Much of the content was prepared for this occasion.

#### Note

For convenience, the learner is 'he' and the teacher is 'she' throughout the book, but 'she' and 'he' could be substituted in every case.

# Abbreviations

ACID	Arithmetic, Coding Information and Digit Span
ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
AMBDA	
ASN	additional support needs
BAS	British Ability Scales
BDA	British Dyslexia Association
BPS	British Psychological Society
BSA	British Skills Agency
COP	Code of Practice
COPP16	Code of Practice for Providers of Post-16 Education and Related Services
COPS	Cognitive Profiling System
COPSH	Code of Practice for Schools
CSP	co-ordination support plans
C-V-C	consonant-vowel-consonant
DCD	Developmental Co-ordination Disorder
DDA	Disability Discrimination Act 1995
DDAT	Dyslexia, Dyspraxia and Attention Deficit Disorder
DECP	Division of Educational and Child Psychology
DfES	Department for Education and Skills
EAL	English as an additional language
EP	educational psychologist
GCA	general conceptual ability
IALS	International Adult Literacy Survey
ICT	information and communication technology
IDEA	Individuals with Disabilities Education Act
IEP	individual education plan
INSET	In-Service Education and Training
IPS	Independent Parental Support
IPSEA	Independent Panel for Special Education Advice
IQ	Intelligence Quotient
ITA	Initial Teaching Alphabet
JCQ	Joint Council for Qualifications
LEA	local education authority
LSA	learning support assistant

NAA	National Assessment Agency
NAEP	National Assessment of Educational Progress
NARA	Neale Analysis of Reading
NLS	National Literacy Strategy
NPPN	National Parent Partnership Network
NRP	National Reading Panel
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education
OCR	Oxford, Cambridge and RSA Examinations
Patoss	Professional Association of Teachers of Students with Specific Learning
	Difficulties
PDA	personal digital assistant
PGCE	Post-Graduate Certificate in Education
PIRLS	Progress in International Reading Literacy Study
PRD	Preventing Reading Difficulties in Young Children
PTA	parent-teacher association
QCA	Qualifications and Curriculum Authority
RAN	Rapid Automatised Naming
REA	Reading Excellence Act
SATs	Standard Achievement Tasks
SCAD	symbol search, coding, arithmetic and digit span
SEN	special educational needs
SENCO	special educational needs co-ordinator
SENDA	Special Educational Needs and Disability Act 2001
SENDIST	Special Educational Needs and Disability Tribunal
SLI	specific language impairment
SMS	short messaging service
SpLD	specific learning difficulty
SPS	School Psychological Service
STEPS	Spelling Test to Evaluate Phonic Skills
WISC	Wechsler Intelligence Scale for Children
WORD	Wechsler Objective Reading Dimensions
wpm WRAT	words per minute Will Dan an Achieven and Test
WKAI	Wide Range Achievement Test

#### Chapter I

### The really useful guide for parents, carers, teachers and professionals dealing with dyslexia and dyspraxia at home and in pre-school settings

#### Outline

- What is dyslexia?
- What are the early warning signs of SEN? Guidelines for concerned parents and carers
- Who's who of educational and healthcare professionals
- What is the significance of early intervention for those with SpLD?
- Extrinsic factors that may affect language acquisition
- Checklist to help identify children at risk of dyslexia/dyspraxia
- What speaking and listening skills do children need to function effectively?
- Speech and language disorders indicative of SEN with suggestions to help compensate and overcome them.
- Activities to help with sequencing and with fine and gross motor difficulties
- What is dyspraxia (DCD)?
- Indications of dyspraxia with suggestions to help
- Difficulties associated with laterality, directionality and time; suggestions to help compensate and overcome them
- Terms and conditions to include in a happy family's 'homework treaty'
- Websites for pre-school activities, homework and revision
- · Checklist for resources and a shopping list for dyslexic and dyspraxic pupils
- Hints on why and how to use ICT resources
- Summary and conclusions

The word 'dyslexia' has entered into mainstream conversation and is commonly used, but it still generates controversy. A crossword puzzle in *The Times* gave the letters 'dy', 'x' and 'a' as a clue for 'dyslexia' and the answer was 'a reading disorder'. This pinpoints the inaccuracies, misinformation and folklore that still surround a condition that:

implies vastly more than a delay in learning to read, which is but the tip of the iceberg. [It also should be applied to] the use of words, how they are identified, what

they signify, how they are handled in combination, how they are pronounced and how they are spelt.

(Critchley, 1981)

Years after this was written, a Working Party of the Division of Educational and Child Psychology (DECP, 1999) of the British Psychological Society (BPS) concluded that 'dyslexia is evident when accurate and fluent reading and/or spelling develops very incompletely or with great difficulty. This focuses on literacy learning at the "word level" and implies that the problem is severe and persistent despite appropriate learning opportunities.' This definition forms the basis for LEAs' policies. Its narrowness and superficiality dismayed practitioners (Johnson et al., 2001), resulting in strong criticism from fellow psychologists. Pumfrey (2002) conceded that 'even at the level of single word decoding it is unlikely that all workers would agree that this represents a comprehensive analysis of the situation'. Fawcett (2003) pointed out that it 'overlooks research findings'. Thomson (2003) broadened the argument, saying: 'it is my view that children are being misidentified and barred from receiving appropriate help due to misconceptions arising from the BPS Working Party Report.' He quoted evidence from an LEA psychologist's report which argued that a child was not dyslexic according to the BPS definition because it was not necessary to have 'a significant discrepancy between cognitive ability and attainments scores' and 'a particular pattern of cognitive scores'. Educational policies are based on definitions, and assessment and provision depend on interpretation. McGuinness (1998) admonished readers to 'clear your minds of notions like "dyslexia" and "learning difficulties" and claimed that 'there is no validity to the diagnosis of dyslexia'. Elliott's (2005) claim, in an interview for the Channel 4 documentary Dispatches: The Dyslexia Myth, that 'dyslexia is no more than a snobbish label and a myth which hides the scale and scandal of the reading disability' caused world-wide reaction including rage among academics and insult among sufferers.

This shows that the condition is still shrouded in misunderstanding and polarised opinions about causation, the nature of the condition, and the extent of the problem; there is no universally accepted definition. Some would argue that different definitions serve different purposes including identification, assessment, research and legal issues.

#### What is dyslexia?

The word dyslexia is derived from *dys*, which is a Greek prefix meaning 'poor' or 'inadequate', and *lexis* which is Greek for 'words' or 'language', and so means literally a 'trouble with words' (Cox, 1985).

The International Dyslexia Association (1998) expanded this, saying:

Dyslexia is a learning disability characterised by problems in expressive or receptive, oral or written language. Problems may emerge in reading, spelling, writing, speaking or listening. Dyslexia is not a disease, it has no cure. Dyslexia describes a different kind of mind, often gifted and productive, that learns differently. Dyslexia is not the result of low intelligence. Intelligence is not the problem. An unexpected gap exists between learning aptitude and achievement in school. The problem is not behavioural, psychological, motivational or social. It is not a problem of vision; people with dyslexia do not 'see backwards'. Dyslexia results from differences in the structure and

function of the brain. People with dyslexia are unique, each having individual strengths and weaknesses. Many dyslexics are creative and have unusual talents in areas such as art, athletics, architecture, graphics, electronics, mechanics, drama, music or engineering. Dyslexics often show special talent in areas that require visual, spatial, and motor integration. Their problems in language processing distinguish them as a group. This means that the dyslexic has problems translating languages into thought (as in listening or reading) or thought into language (as in writing or speaking).

The British Dyslexia Association (BDA) says:

Dyslexia is best described as a combination of abilities and difficulties which affect the learning process in one or more of reading, spelling and writing. Accompanying weaknesses may be identified in areas of speed of processing, short-term memory, sequencing, auditory and /or visual perception, spoken language and motor skills. It is particularly related to mastering and using written language, which may include alphabetic, numeric and musical notation. Some children have outstanding creative skills, others have strong oral skills. Dyslexia occurs despite normal teaching, and is independent of socio-economic background or intelligence. It is, however, more easily detected in those with average or above average intelligence.

(Peer, 1999)

# What are the early warning signs of SEN? Guidelines for concerned parents and carers

The Education Act 1996 defines a child as having a learning difficulty if 'he has a significantly greater difficulty in learning than the majority of children of his age' and if he 'has a disability that either prevents or hinders him from making use of educational facilities of a kind generally provided for children of his age in schools within the area'. In the USA the term 'learning disability' is used to describe a wide range of disorders in listening, speaking, reading, writing and mathematics. The terms 'specific learning difficulty' are interchangeable and both apply to individuals with dyslexia and dyspraxia.

Parents are usually the first to notice that a child has unexpected difficulties in acquiring specific skills. Parents have rights and needs when dealing with children with special educational needs, including knowing what help is available, and how and where this help can be obtained. Parents also have responsibilities according to the Children's Act 1989, including a 'collection of duties, rights and authority'.

The Code of Practice (COP) (DfEE, 1994) highlighted the importance of partnership between professionals and parents. The revised COP (DfES, 2001a), stated that

all parents of children with special educational needs should be treated as partners and should:

- Play an active role in their children's education.
- Be informed of their children's entitlement within the SEN framework.
- Make their views known about their children's education.

• Have access to advice and support during assessment and education decision making for their children.

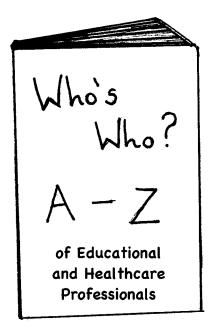
This resulted in the setting up of a parent partnership scheme which offers support, advice and information to parents including access to an independent parental supporter who is often a voluntary worker or an LEA Parent Partnership Officer. The SEN Disability Discrimination Act (2002) gives parents the right to appeal to the SEN Tribunal in cases of unlawful discrimination against those with SEN.

# What should parents do when they are concerned about their child's progress and when should they do it?

- Parents are best placed to recognise their child's strengths and weaknesses. For example, a child may be verbally bright but have inexplicable expressive and receptive language difficulties such as saying familiar words, naming everyday objects or remembering simple instructions.
- Comparisons between difficulties with academic, social and emotional skills are unexpected and not consistent. For example, 8-year-old Charlie could not write his address or a birthday card to his granny but won a gold medal for poetry recitation at a local arts festival and subsequently was asked to audition for a part in *Oliver*, a West End production.
- Parents need to be aware of the characteristics of dyslexia, including difficulties with literacy, sequencing, organisation, information processing, short-term and working memory and the automisation of skills.
- Parents can find information about assessment and intervention by contacting voluntary organisations such as the BDA's helpline (0118 966 2677) and website (http:// www.bdadyslexia.org.uk). Publications include How to Detect and Manage Dyslexia (Ott, 1997) and Dyslexia: a Complete Guide for Parents (Reid, 2005).
- Initially they should discuss their concerns and their own observations with the child's class teacher. The Code of Practice (COP, 2001) states that 'parents hold key information and have a critical role to play in their children's education' and 'positive attitudes to parents, user-friendly information and procedures and awareness of support needs are important'.

The Code promotes a new, enlightened approach which augurs well for meeting the needs of children who somehow do not fit the norm because something is 'not quite right' about their performance and/or behaviour. It should become ever less likely that parents are dismissed as 'being over anxious', 'pushy', 'thinking that all their geese are swans' or having 'unrealistic expectations for their not very bright child' who may be 'thick, clumsy and bone idle'.

- It may be possible to arrange a meeting with the school's SEN co-ordinator (SENCO). All maintained schools are legally bound to produce a special educational needs policy document which should point the way forward for parents with concerns about their child's progress or lack of progress.
- Other physical factors such as hearing, speech, eyesight and the development of gross and fine motor skills should be considered and checked.





#### Who's who of educational and healthcare professionals

*Educational psychologists* (EPs) are involved in the study of mental, emotional, physical and social behaviour in children and adults. They usually have a degree in psychology, a Post-Graduate Certificate in Education (PGCE) teaching qualification followed by two years' teaching experience culminating in a master's degree in educational psychology. They are then able to carry out assessments. To practise they have to be registered by the British Psychological Society as chartered psychologists (www.psych-ed.org).

The LEAs employ about 2,000 EPs but there is a shortage, with a number of advertised posts not being filled. Turner (1997a) pointed out that there are 'perhaps 300 teachers for every educational psychologist'. Referral to the School Psychological Service (SPS) for psychological assessment may be made by:

- the head teacher often on the recommendation of the school's SENCO
- community paediatricians
- *parents*, who may ask the school to make the necessary arrangements or write directly to the LEA to request an appointment.

There is often a long waiting list and it can take up to twelve months to be given an appointment. However, if the school in consultation with the parents decides that a statutory assessment needs to be made 'the LEA normally have six weeks to decide whether to do so' and the timetable for the assessment should 'not normally exceed 26 weeks'.

Some parents seek help from an independent educational psychologist. The Psychological Society (www.bps.org.uk) has a list with details of chartered psychologists who can be contacted in the appropriate geographical location.

Dyslexia Action (DA) formerly the Dyslexia Institute (www.dyslexiaaction.org.uk) arranges for assessments to be carried out by independent consultant psychologists. It has over seventy-five who work at all the main DA centres throughout the UK.

The BDA local dyslexia associations have helplines which can offer information about centres and individuals such as specialist teachers, healthcare professionals and psychologists who carry out assessments (http://www.bdadyslexia.org.uk; e-mail: info@ dyslexiahelp.org.UK).

*Education welfare officers* are employed by the LEA and are education social workers who provide support and counselling for parents and children, including those with SEN, regarding school attendance.

General practitioners (GPs) are often the first contact for parents of children with special educational needs. They can make referrals to the Clinical Medical Health Officer at a clinic or Child Development Centre which can involve other healthcare professionals.

*Health visitors* usually see children in their own homes and can arrange for a child to be seen by other healthcare professionals such as the Special Needs Health Visitor.

Learning support assistants (LSAs) work with an individual child or a small SEN group who are usually withdrawn from the classroom. Critics say that this makes children feel 'different' and can affect self-esteem. Ofsted (1997) reported on the effectiveness of in-class support, especially for secondary pupils.

Optometrists diagnose and treat children with eye disease and vision abnormalities such as:

- myopia (short-sightedness)
- hyper-myopia (long-sightedness)
- astigmatism, which causes blurred vision
- strabismus (lazy eye), when the eyes are misaligned
- binocular instability, when eye movement is irregular which can cause letters to jump about on the page (treated with eye exercises)
- lack of a fixed reference eye can cause problems when reading (treated by patching the unstable reference eye)
- Meares-Irlen Syndrome (MIS) sensitivity to glare and colour (treated with coloured glasses or coloured overlays). The Assessment with the Intuitive Overlays Test (Wilkins, 2001) and Wilkins Rate of Reading Test (MRC, 1996) use coloured overlays for people with reading difficulties and visual discomfort. There are less expensive and more widely available than the Wilkins Intuitive Colorimeter which is an instrument to test for preferred hue, saturation and brightness of a large range of colours to alleviate some of the symptoms of MIS.

*Paediatric occupational therapists* see children at Child Development Centres or hospitals. Referrals are usually made by a medical officer. They assess, plan and deliver programmes for children with everyday problems, for example with dressing, feeding, playing and walking. They also assess underlying skills such as fine motor and gross motor as well as movement difficulties often associated with developmental co-ordination disorders including dyspraxia. They use a combination of activities to strengthen muscles, co-ordination and balance.

Parent partnership officers are appointed by the LEA as part of the Parent Partnership Scheme to provide 'a menu of flexible services for parents whose children have SEN in order to empower them to play an active and informed role in their child's education' (DfES, 2001a). LEAs must give information about the parent partnership service when they decide whether or not to make a statutory assessment. Some parents may prefer an Independent Parental Support (IPS). The National Parent Partnership Network (NPPN) has a database of information (www.parent.partnership@hertscc.gov.uk).

*Physiotherapists* see children in Child Development Centres, hospitals or privately. Referrals are usually made by a medical officer. They treat children with physical conditions such as cerebral palsy and orthopaedic problems arising from accidents or injuries, using methods including exercises, manipulation, massage and heat treatments.

Special needs advisory teachers are employed by LEAs and advise schools on early identification and provision for SEN children. They co-ordinate the support given to parents by the health authority and other agencies such as the social services.

Special educational needs co-ordinators (SENCOs) are responsible for the day-to-day implementation and management of the school's SEN policy. They liaise with parents, co-ordinate staff involvement, and manage learning support assistants and external agencies such as the LEA and educational psychology services. They are also responsible for in-service training of staff to increase awareness and effectiveness in dealing with pupils with SEN according to the Code of Practice (COP, 2001). Some SENCOs also provide learning support to pupils and give advice to parents and teachers about SEN resources. They must keep records and monitor, identify and assess progress including children's individual education plans (IEPs).

Specialist teachers have undertaken a recognised training course such as a BDAaccredited course to qualify for associate membership of the BDA (AMBDA) or approved teacher status (ATS) (http://www.bdadyslexia.org.uk), Dyslexia Action's postgraduate diploma (http://dyslexia\_inst.org.uk) or the Oxford, Cambridge and RSA (OCR) examinations diploma or certificate (www.patoss-dyslexia.org). They teach and some assess children with SpLD including dyslexia and dyspraxia.

Speech and language therapists identify and assess children's receptive (listening) and expressive (spoken) language skills and developmental communication disorders. They devise and implement programmes to help children communicate and develop sub-skills necessary for literacy including understanding rhyme, alliteration and categorisation of sounds.

*Teaching assistants* work either with individual children such as those with a statement or with a small group of children, giving in-class support as well as helping when the curriculum has been modified or differentiated. Some work with pupils who are withdrawn for additional support and help with the planning and implementation of IEPs.

# What is the significance of early intervention for those with SpLD?

- It can prevent lack of self-confidence, low self-esteem or secondary emotional and behavioural problems from developing as a result of repeated failure and frustration.
- Basic skills can be taught including language, motor, auditory, visual and literacy skills which may lessen or prevent a loss of motivation.
- Research studies from the US government's programme Project Head Start showed

that early intervention is effective. A fifteen-year longitudinal study showed the longterm effects of early intervention. Children did not have to repeat a grade, did not have to be placed in special education classes, scored higher on IQ tests and were more likely to finish high school at 18 (Lazar and Darlington, 1982).

- Lyon (1998) pointed out that if reading difficulties are identified early and appropriate help is given, 90–95 per cent of pupils catch up, but only 75 per cent catch up if problems are not identified until they are 9 years old.
- The gap between attainment and underachievement is often smaller initially. It gradually widens with age. Usually the greater the gap the more difficult it is to catch up.
- Early intervention is more cost effective for schools and society.
- Early intervention can ultimately reduce the numbers of students who drop out of college because of low literacy skills.
- Early identification and appropriate intervention can lessen the chance of unemployment and delinquency in adolescence and adulthood.

However, intervention is often delayed because legislators in the UK have based their criteria for support for an individual with a 'learning disability' on 'a severe discrepancy between the student's apparent potential for learning and his low level of achievement'. This has resulted in what is known as the discrepancy formula, in other words a 'wait and fail' policy. In practice this means that children have to be given the opportunity to learn to read and write before they can be formally assessed as having difficulties, requiring a document called a 'statement of special education needs'.

#### Extrinsic factors that may affect language acquisition

Language is an innate skill in humans but develops through practice and experience. The child needs plenty of exposure to language to lay solid foundations for future growth. The following factors may inhibit language acquisition:

- a lack of parental interaction and communication such as talking during family meals or chatting about school and friends
- poor-quality child minding or day nurseries where physical needs are taken care of but little time is spent on language development through either play or social interaction
- carers such as nursery assistants, child minders, au pairs or nannies who do not speak the child's mother tongue and consequently may be poor role models for language, even if they are good carers in the physical sense
- excessive use of slang and 'short hand' rather than 'proper' conversation, perhaps impairing language development
- watching television or videos or playing computer games to the exclusion of social interaction and conversation. The National Literacy Trust (Close, 2004) reported that too many 'inappropriate TV programmes' inhibit language development in 3–5-year-olds. But viewing shared with an adult improves vocabulary as does the repetition element in video and children's television programmes.

#### Medical problems

Medical problems such as hearing loss due to otitis media (glue ear) should be eliminated as underlying causes of difficulties. This inflammation of the middle ear causes a build-up of fluid in the ear and a discharge due to infections or inflamed tonsils and adenoids. It may also be caused by swimming and diving and is sometimes linked to allergies. Grommets are sometimes inserted to help ventilate the eardrum and to improve hearing loss. However, after the grommets are removed some children have bouts of intermittent hearing loss even from a common cold. A history of hearing loss due to middle ear infections and fluctuations in hearing can exacerbate the difficulties of dyslexic children. Intermittent hearing loss can interfere with language and learning even though it is not the primary cause of difficulties. Up to 25 per cent of 5-year-olds entering school will have suffered from glue ear at some time (Macpherson, 1995) affecting their understanding of speech and language and use of language. They may be unable to remember instructions, follow a story, or join in playground games/conversations often resulting in behavioural problems. The child who consistently turns the volume up very high on the television set and frequently says 'What did you say?' may need to have his hearing tested.

Checklist to help identify children at risk of dyslexia/dyspraxia				
Name:				
Date of birth:				
School:				
Class teacher:				
Is consent given for this information to be used by other professionals?				
• Was the pregnancy normal?				
<ul> <li>Did you have any illness requiring medication?</li> </ul>				
• Was he a full-term, late or premature baby?				
• Was the delivery normal, forceps or by Caesarean section?				
• Was oxygen required?				
• What weight was the child at birth?				
Family history				
• Did either parent have difficulties with reading, spelling or writing?				
• Did maternal/paternal grandparents have similar difficulties?				
• Do any other siblings or relatives have similar difficulties? If so, enumerate.				
Speech and language development				
• How old was he when he said his first words?				
<ul> <li>How old was he when he spoke properly?</li> </ul>				
• Did he frequently mispronounce words?				
• Did he reverse words or put words in the wrong order in sentences?				
<ul> <li>Did he find it hard to remember the names of familiar objects or people when he wanted to explain or describe something?</li> </ul>				
• Did he tend to give one-word answers?				
• Did you teach him to say nursery rhymes?				
• Was he able to say nursery rhymes?				
Developmental milestones				
Gross motor skills				
• Did he crawl?				
<ul> <li>How old was he when he learned to walk?</li> </ul>				

	•	Did he have difficulties climbing down stairs?				
	•	Did he frequently fall over or bump into objects?				
	•	Did he find it hard to learn to ride a bicycle?				
	•	Did he find it difficult to turn door handles?				
	•	Did he find it difficult to walk in a straight line?				
	•	Was he able to join in and play childhood games such as musical chairs or Simon says?				
	•	Was he able to skip, hop and jump in time to musical games?				
	Fin	e motor skills				
	•	How old was he when he used the same hand consistently?				
	•	Did he tend to spill his food and knock over drinks?				
	•	Did he continue to feed himself with his fingers or a spoon long after his peers were using a knife and fork?				
	•	Did he find it difficult to feed himself?				
	•	Did he find it hard to cut up the food on his plate with a knife?				
	•	Did he find it hard to sit still?				
	•	How old was he when he was able to write his own name?				
	•	At what age was he able to colour in pictures and do dot-to-dot activities?				
	•	Was he constantly falling off his chair?				
	•	Did he find it difficult to dress himself?				
	•	Did he find it difficult to learn to tie shoelaces?				
	•	Did he sometimes put his clothes on back to front?				
	•	Did he find it hard to button and unbutton his clothes?				
	•	Did he find it difficult to cut with scissors?				
Auditory memory						
	•	Did he sometimes confuse similar-sounding words?				
	•	Did he forget to do what he was asked to do?				
	•	Was he able to remember and follow simple instructions?				
	•	Was he able to remember and say the names of close family members?				
	•	Was he able to remember the words of simple songs or ditties?				
	•	Was he able to fetch an item when asked to when shopping in a supermarket?				
	•	Was he taught to say the alphabet and can he remember it?				

Visual memory

- How old was he when he recognised his own name?
- Could he play simple board games involving matching pairs of pictures?

- Was he able to do jigsaw puzzles?
- Was he able to sort objects according to shapes and sizes?
- Was he able to thread beads?
- Was he able to remember where he left an object such as a favourite toy?

#### Temperament

- Was he good at occupying himself?
- Did he remain on task?
- Did he get on well with siblings and other children?
- Was he able to sit and listen to a story being read to him?
- Was he able to remember and follow a story when it was read to him?
- Was he able to sit with an adult and watch children's television?
- Was he able to interact with the characters in the story?

Please list the activities he enjoys doing:

Please list activities he is good at:

Include any further relevant information or comments including details of illnesses requiring hospitalisation or serious accidents.

Do these results warrant further investigation and an assessment?

# What speaking and listening skills do children need to function effectively?

- They need vocabulary to make sense of what they see and hear, including specific vocabulary for names of people, toys, household objects, food, pets.
- They need to know and understand the differences between fact, fantasy and reality in stories.
- They need to be able to give, process and understand information.
- They need to be able to use questioning for understanding and clarification with words such as: *how, what, when, where, why.*
- They need to be able to find out about why and how things happen.
- They need to be able to express emotions and feelings with words such as: *like*, *love*, *happy*, *hate*, *horrid*, *nasty*.
- Skills to tell and listen to stories and give a recount or a report with words such as: *before, after, later, this morning, last night, yesterday, tomorrow.*
- An ability to communicate with family and friends as well as being able to listen to a conversation. The responses may indicate that a diagnostic assessment is required.

# Speech and language disorders indicative of SEN with suggestions to help compensate and overcome them

- Some children have a language delay and their speech is indistinct or unintelligible until they are about 2.06 years. This may warrant a referral to a speech therapist. A normal 3-year-old child has a vocabulary of about 1,000 words and a 5-year-old can use 3,000 words. Children can learn vocabulary by looking at picture books with a parent modelling the words which the child repeats. Stories can be read to them.
- He may have constantly mispronounced words and said things like 'I've lost my teddy dare' when his teddy bear went missing or when asked what his barrister father's job was he replied 'My dad's a banister'.
- He may have had hesitant or laboured speech and a tendency to use circumlocution because he cannot find the word he wants to use. He said 'Give me the thingamy for cutting paper' when he wanted to say the word 'scissors'. Or perhaps he had a word retrieval problem: for example, when his mother pointed to her watchstrap and asked 7-year-old Brian, 'What's this?' he replied 'Oh! it's a belt mum.' There is a large body of scientific research which has found evidence of difficulties with word naming at speed (Wolf *et al.*, 1986). Denckla and Rudel's (1974) Rapid Automatised Naming (RAN) theory showed that some children have difficulty with word naming. Help the child by showing him a collection of objects on a tray. Then ask him to name as many as he can in one minute. Have a game to see how many he remembers on successive occasions. Use a variety of objects such as food, toys, clothes. Commercial resources are available from www.nesarnold.co.uk.

Some children switch off when asked what they got for Christmas or their birthday. They may say 'I don't know' because they cannot find the words they want to use. These are the children who give one-word answers to questions. They put up their hand in class and then forget the answer. Others give muddled or indistinct answers, for example when asked to describe what they have just watched on *The Simpsons* or *Blue Peter*.

- Their use of grammar may be poor even when surrounded by a language-rich environment. They say things like 'Do you remember the time at we went to the shop and I boughted ours Lego?'
- Many of these children are literal thinkers and find sentences such as 'My dad has a pair of crocodile shoes' perplexing. Idioms like 'pull your socks up' are similarly mystifying, and proverbs such as the 'early bird catches the worm' can be very confusing for them. They need explicit teaching of the meanings.
- Some children are described as having a 'semantic-pragmatic disorder', meaning they have difficulties with the meaning of words (semantics) and with using language socially (pragmatics). Others fail to understand the subtle nuances of language when censured or reprimanded. They may smile when they should appear contrite. Others totally ignore a reprimand and carry on doing what they have just been told not to do.
- Others confuse words with similar sounds, like 8-year-old Thomas who said, 'I had a great time at Auntie Sue's wedding, when I was a page and I had to wear a quilt.' He was in fact wearing a kilt.
- Remembering a series of instructions can be problematic because of short-term and working memory problems. When asked to get his shoes, his football kit and his coat from his bedroom, a boy went to the top of the stairs and said, 'What did you say?' Just ask him to do a maximum of two things at a time. Encourage oral repetition and keep in eye contact with him to monitor his reactions. Use role-play for this. He can pretend to be a robot. Then he can, for example, tell the robot how to change the baby's nappy. He can play a matching pairs game. The object is to find and say the missing words such as: 'He put salt and ... on the table' (pepper).
- Bradley and Bryant's (1983) work showed that some children find it difficult to say nursery rhymes and play games involving rhythm or rounds such as 'Old Macdonald had a farm' or 'Ten green bottles standing on the wall'. Teach them these as they help with sequence and phonological awareness (awareness of the sounds in words). Teach them to identify sounds by recording, for example, a dripping tap, a kettle boiling, a fire engine. Clapping out sound patterns, bouncing a ball, playing a drum all develop awareness of rhythm.
- Songs such as 'The twelve days of Christmas' help improve sequencing and numeracy skills.
- The researchers tell us that children should learn 'chants, action, verses, poetry and stories'. Children's radio and television programmes such as the American series *Sesame Street* and the BBC's CBeebies have many ideas for teaching language through play.
- Practise these communication skills. Ask your child to tell his little brother about Tom's party. He can pretend he is a news reporter on TV when he tells Dad about the football match he played in at school that afternoon.

- Try to avoid the situation where the non-dyslexic brother or sister does all the talking and interrupting and is always answering the question.
- Repeat instructions if necessary and give the child time to process the information – speak slowly. There is research evidence which shows that he processes language slowly (Tallal *et al.* 1997).
- Do not put him on the spot by asking him a question if you know he has not been listening or if it is something you cannot help him answer.

Delamain and Spring's Speaking, Listening and Understanding: Games for Young Children (2003) includes many useful activities (www.speechmark.net).

#### Tests

Hatcher, P. (1994) Sound Linkage (Whurr Publishers; www.whurr.co.uk) is suitable for 7+ years.

Wagner, R., Torgesen, J. and Rashotte, C. (1999) Comprehensive Test of Phonological Processing (CTOPP) (www.harcourt-uk.com) is suitable for 5–24 years.

# Activities to help with sequencing and with fine and gross motor difficulties

The muscles that perform motor skills are controlled by the brain. Problems may occur with some or all of the following:

- gross motor skills involving the arms, large muscles of the legs, neck and body, such as are used when kicking or throwing a ball
- fine motor skills involving the small muscles in the tongue, toes or fingers, such as are used when repeating a nursery rhyme, names, cutting with scissors, colouring in or tracing over lines
- graphomotor function involving the hands and fingers, used when tracing, drawing and doing handwriting or keyboarding
- oromotor function involving the music motor memory such as is used when remembering a tune or slogan or saying a poem.

Some find doing jigsaw puzzles very difficult. These children have difficulties with visual perception such as seeing the difference between the size and form of objects and shapes. It is helpful to start with puzzles with large wooden pieces. Those with a knob on the individual pieces are initially useful. It is important to be aware of a wide discrepancy between dyslexic children's skills and weaknesses. Some are excellent with Lego and Meccano and construction toys; others find these difficult or have no interest in them. The mother of a very bright 9-year-old said that when she had new brake shoes fitted in her car her son was watching. The mechanic was having difficulty fitting them. Her son suggested pushing the spring rather than pulling it. To their surprise Austin's suggestion was right and it worked.