



Dyslexia Scotland

A Brief Guide for Parents

Dyslexia Scotland is a national voluntary organisation supporting people with dyslexia in Scotland. The headquarters are located in Stirling, with a network of volunteer-led branches across Scotland.

Amongst many other things, Dyslexia Scotland and its network of branches strive to raise awareness of the nature of dyslexia and how it can affect children, young persons, and adults in all aspects of their daily lives. Dyslexia Scotland provides a service which is unique in Scotland giving advice, information, and support to people with dyslexia, their families, teachers, employers and to other professionals who have an interest in dyslexia.

On behalf of people with dyslexia in Scotland, Dyslexia Scotland responds to consultation documents issued by the Scottish Government and aims to influence the educational policy of both central and local government. Dyslexia Scotland representatives attend meetings of all manner of formal and informal bodies to ensure that the voice of people with dyslexia in Scotland is heard by those who should hear it.

Dyslexia Help-line: A confidential telephone Help-line service is in operation, run by experienced knowledgeable staff. The Help-line is open Monday to Friday from 10.00 a.m. until 4.00 p.m. The calls are about all aspects of dyslexia and if you would like to discuss your individual circumstances, with an independent person, then Dyslexia Scotland has dyslexia advisors who can assist you. The number to call is: **0844 800 8484**.

Membership: Anyone can become a member of Dyslexia Scotland for a nominal annual subscription. Members are kept up-to-date on advancements in the world of dyslexia as well as on the activities of Dyslexia Scotland and its local branches. Membership application forms are available on request.

National Tutor List: This is an “information only” service. Application forms for prospective tutors are available on request. People who require the services of a tutor should contact Dyslexia Scotland for the relevant details.

Presentations: Dyslexia Scotland is experienced in presenting Workshops/Talks/Seminars for all manner of situations. These can be arranged for professional and non-professional groups with in-service training designed to suit your individual requirements. Dyslexia Scotland also runs National Conferences, seminars and road shows to raise awareness about dyslexia to a range of different audiences.

Information and Advice: Dyslexia Scotland works with a range of practitioners and providers to develop and co-ordinate materials and resources for teachers and others who work with people with dyslexia. Further details can be found on: www.dyslexiascotland.org.uk

Assessments: Dyslexia Scotland can provide information about chartered psychologists prepared to carry out independent assessments.

WHAT IS DYSLEXIA? Working definition of dyslexia: January 2009

The following working definition of dyslexia has been developed by the Scottish Government, Dyslexia Scotland and the Cross-Party Group on Dyslexia in the Scottish Parliament. This is one of many definitions available. The aim of this particular working definition is to provide a description of the range of indicators and characteristics of dyslexia as helpful guidance for educational practitioners, pupils, parents/carers and others. This definition does not have any statutory basis.

Dyslexia can be described as a continuum of difficulties in learning to read, write and/or spell, which persist despite the provision of appropriate learning opportunities. These difficulties often do not reflect an individual's cognitive abilities and may not be typical of performance in other areas.

The impact of dyslexia as a barrier to learning varies in degree according to the learning and teaching environment, as there are often associated difficulties such as:

- * auditory and/or visual processing of language-based information
- * phonological awareness
- * oral language skills and reading fluency
- * short-term and working memory
- * sequencing and directionality
- * number skills
- * organisational ability

Motor skills and co-ordination may also be affected.

Dyslexia exists in all cultures and across the range of abilities and socio-economic backgrounds. It is a hereditary, life-long, neuro-developmental condition. Unidentified, dyslexia is likely to result in low self-esteem, high stress, atypical behaviour, and low achievement.

Learners with dyslexia will benefit from early identification, appropriate intervention and targeted effective teaching, enabling them to become successful learners, confident individuals, effective contributors and responsible citizens.

People with dyslexia can be talented in many ways e.g. they can have strongly developed spatial awareness, have good problem solving skills and can often present themselves well orally.

WHAT ARE THE INDICATORS OF DYSLEXIA?

Many of the following characteristics, but not all, **may** be present and each individual will have his own individual combination of strengths and weaknesses.

General indicators

- * Underachieves academically
- * May perform well orally but finds difficulty with reading, writing and spelling
- * Spells phonetically or erratically
- * Low tolerance of own lack of achievement
- * Restlessness, poor concentration span, inattentive, forgetful
- * Can be considered clumsy.

Indicators of auditory processing difficulties

- * Poor articulation
- * Misuses words
- * Incorrect or confusing sentence structure
- * Difficulty learning and remembering new or unfamiliar words
- * Confusion of syllables in speech – ephelant, sghapetti
- * Confusion of sounds in speech – e.g. f /th /v
- * Difficulty recognising rhyming words

Indicators of visual processing difficulties

- * Says the words move around the page or the text is glaring at him
- * Has difficulty copying
- * Eyes may become inflamed when reading, complains of headaches
- * Often loses the place when reading

Indicators of short term (working) memory, both auditory and visual

- * Difficulty in remembering instructions
- * Difficulty in learning alphabet, days of the week, months of the year

- * Tendency to forget names of common objects and people
- * Difficulty with rote learning of multiplication tables and number bonds and other sequences
- * Forgetting what he was going to say, while waiting for a pause in the conversation or in the middle of a sentence

Indicators of directional confusion

- * Reversals in letters when writing and/or in numeracy which persists after the age of eight years
- * Poor sense of direction e.g. confusion of left and right
- * Difficulties in learning to use a clock or watch

Indicators of poor physical co-ordination

- * Difficulties in doing up buttons
- * Difficulties with handwriting
- * Difficulties tying shoelaces
- * Difficulties with swimming
- * Finds ball games difficult. Often misses catches

Indicators of poor organisational skills

- * Organising himself and his equipment

- * Organising his written work
- * Organising his timetables

Essay Writing Difficulties

- * Finds it difficult to plan and organise essays
- * Difficulty with punctuation.
- * Lack of paragraph concept
- * Faulty grammar and syntax
- * Slow laborious writing
- * Insecure spelling
- * Vocabulary confusions
- * Inaccurate proof-reading

Study Skills and Exams

- * Inability to take notes at speed
- * Lack of organisation in notes
- * Difficulty in understanding own notes

- * Inability to organise notes for study and revision
- * Lack of skill in knowing how to study and revise
- * Misreading examination instructions and questions
- * Finds it difficult to organise use of time in an examination
- * Lack of examination proof reading skills

Difficulties can range from mild to severe. However, if dyslexia is identified, and learners are given positive encouragement combined with strategies to help overcome their difficulties, there is no reason why people with dyslexia cannot reach their full potential.

People with dyslexia can be extremely:

- * Imaginative and creative
- * Adaptable and resourceful
- * Practical
- * Sensitive to the needs of others
- * Given appropriate help and understanding they can excel in many subjects within the school curriculum

Many famous and successful people are dyslexic. Some are listed below.

- * Sir Jackie Stewart - Three times Formula One World Champion
- * Richard Branson – Owner of Virgin
- * Johnny Depp – Actor
- * Albert Einstein – Physicist
- * Walt Disney – Founder of the Disney Empire
- * Jamie Oliver – TV chef

SO WHAT'S NEXT?

If the child's basic skills of reading, writing and numeracy do not appear to match his overall ability this may lead to frustration and anxiety and to possible behavioural problems.

Parents often have helpful insight into the nature of their child's difficulties.

Remember you are a key player in your child's education and it is important that you discuss any concerns you have at the earliest opportunity.

In the first instance, contact the relevant member of school staff to share your concerns and any information you have about your child and the difficulties he is experiencing in school. Your contact may be the Class Teacher, Head-teacher or Depute, Guidance Teacher or Principal Teacher with responsibility for Pupil Support. In all instances do ask for any agreements and discussions to be put in writing.

It is in your child's best interests if you can maintain a positive relationship with his teachers. You should also expect your concerns to be listened to and your child's difficulties to be fully investigated.

Schools can undertake assessments that can identify children who are dyslexic and the process may happen without you being aware of it. As a parent you can also request that a school undertake assessments and it is best to make this request in some kind of permanent format e.g. writing, audio tape etc.

It is important to remember that **PRIOR** to any teacher or psychological assessments being carried out, eye examinations and hearing checks must have been undertaken. It is important to rule out acuity problems before cognitive testing takes place.

The Support for Learning Teacher may also work in collaboration with an educational psychologist where the difficulties are more complex. In some instances the educational psychologist may be asked to carry out a psychological assessment that may highlight specific concerns as well as highlight any particular strengths. If you feel that it is necessary you can request that it is an educational psychologist who carries out an assessment with your child. The local authority must do this unless it deems the request unreasonable.

Educational psychologists are generally based at the local education authority and can be contacted directly by parents.

It may be appropriate for your child to have other types of assessments. This could be from a speech and language therapist, occupational therapist or from an optometrist for possible visual difficulties.

Assessments should help to inform teaching practice. You and your child should be kept fully informed by the school and included in any discussions to assess findings, and to decide suitable interventions to help your child learn and to meet his needs in the classroom.

Schools may use an Individualised Educational Programme (IEP) to record and review teaching provision considered appropriate for the individual child. Regular reviews can help to ensure that the strategies put in place are effective, and adapted or changed if necessary.

Only if a child has very complex problems involving a number of agencies will they require a co-ordinated support plan. This is a legal document, which records information about the support the Education Authority and other agencies provide for the child. Enquire, has published a Parents Guide to the new Additional Support for Learning (Scotland) Act 2004. It can be downloaded from its website (www.enquire.org.uk) or from Dyslexia Scotland's website (www.dyslexiascotland.org.uk). Alternatively, you can call Enquire for a postal copy (0845 123 2303). It includes information about Co-ordinated Support Plans.

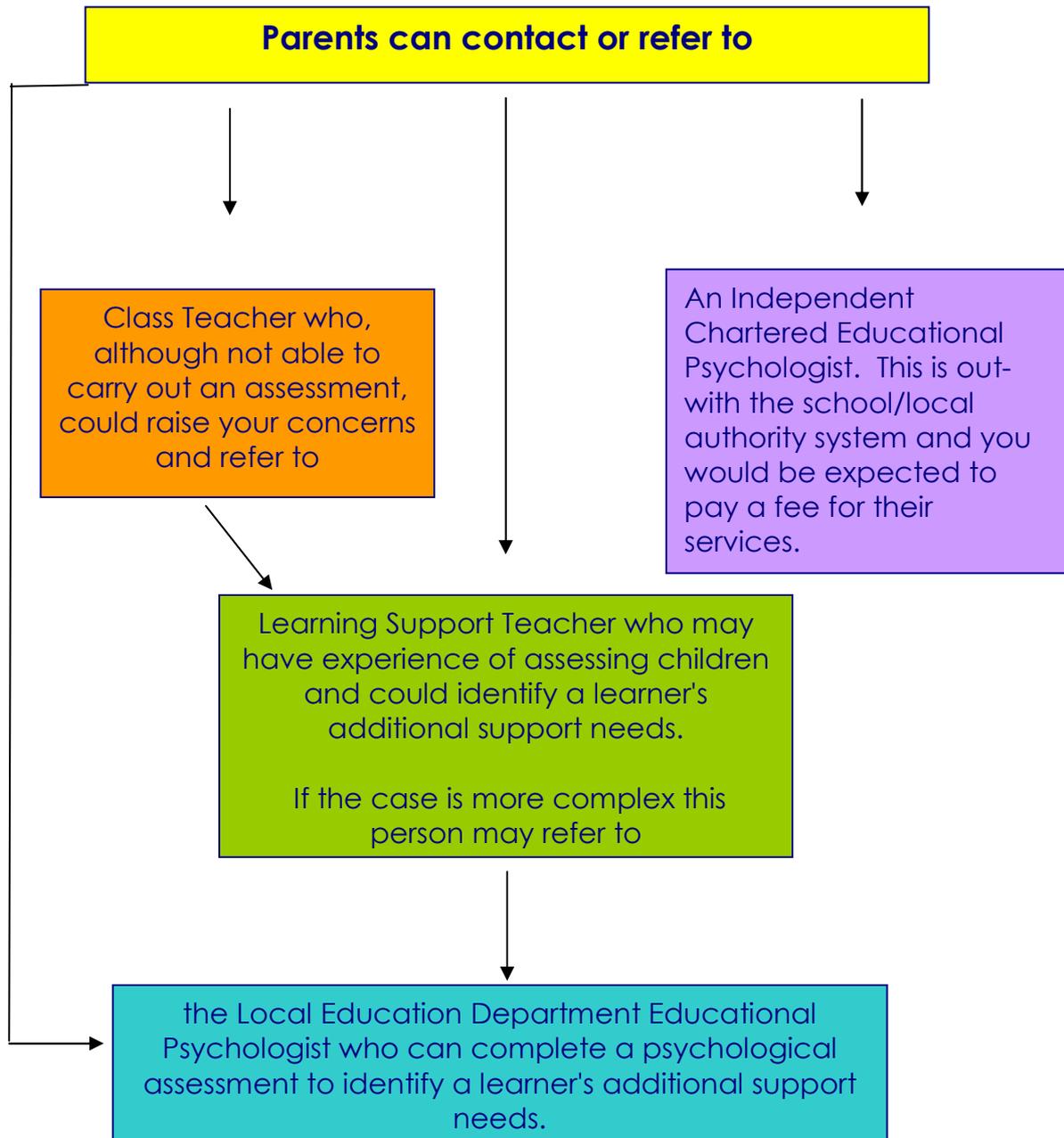
It is important to remember that the Education Authority and the school are responsible for making sure that children receive the support required.

Remember to ask for minutes of meetings, and copies of any reports or assessments carried out on your child.

You may find it useful to take a friend or relative to any meetings you have with your child's school.

ASSESSMENTS

So you would like to have your child assessed - how do you go about this? The previous section described possible ways that assessments can take place. The following flow-chart gives you the routes available. Dyslexia Scotland does advise that when requesting the assessment of a learner, the request should be in a permanent format i.e. in a letter, in an email, on an audio tape etc.



SUPPORTING THE DYSLEXIC CHILD AT HOME

Parents and carers should be aware that children with dyslexia, due to their processing difficulties, may have to work much harder than their peers, and may often achieve less. Therefore by the end of the school day they can come home exhausted and sometimes with their self-esteem shattered.

Support, encouragement and understanding are needed in order for the child to have enough self-confidence to keep trying and to realise he is not stupid.

The dyslexic child should not be expected to finish uncompleted schoolwork at home on a regular basis. If this happens often, share your concerns with the teacher.

Help your child to be more organised. For example, helping with the packing of schoolbooks and getting to school on time. You could make a colour-coded timetable so that he knows that on the 'green day' he needs to pack his PE kit etc.

Establish a routine for homework and try to keep distractions to a minimum. Since the child with dyslexia will take much longer than his non-dyslexic friends, a realistic limit should be agreed with the school so that there is time for other interests. If the school has an after school homework club encourage him to use it; great for taking the pressure off family life! Praise work well done and do not point out every mistake.

Think carefully before making a fuss about your child watching "too much" television. Many children learn things from television that they cannot learn from books. Rather, watch factual programmes together and on occasion discuss them.

Read to him, or if this is not practical CDs or MP3 downloads of good stories can be available from some local libraries and online.

BE PATIENT

- Avoid failure at home – he gets enough at school. Home should be a safe place.
- Don't show your anxiety. Try to be calm and encouraging.
- Talk to him about his problems – He knows what they are and may blame himself for them.
- Encourage him to try things for himself; tie his shoelaces, his tie, tell the time, use the phone, make toast.
- Give him props to tell left from right, e.g. put his bicycle bell on the left handlebar so that he can ride on the “bell-side” of the road.

BE POSITIVE

- Encourage him and praise him for the things he can do well.
- Read aloud to him, no matter what his age, as much as you can.
- Take time to play games with him, especially those using words, as long as they are fun. Home should be a “relaxing place” not a “remedial teaching place”.
- Establish a routine for him and try to keep distractions to a minimum.
- Ask for his school timetable and help him use strategies to be organised.

- Point out and praise those things he gets correct.
- Dyslexia should not be used as an excuse for poor work.

BE COMMUNICATIVE WITH THE SCHOOL

- ✦ Create good parent/teacher relationships.
- ✦ Set up a communications network at school and keep it going.
- ✦ If a new teacher arrives, introduce yourself.
- ✦ Do not assume that reports and information will automatically be passed onto everyone who needs them; politely and diplomatically make sure that they are.
- ✦ Nip any potential problems in the bud. If your child forgets to hand in homework repeatedly, work out a strategy to counter this.
- ✦ Forgotten work? - You could check his bag every night and ask that his teacher checks it every morning.
- ✦ If he forgets to write notes in his jotter – visit his teacher and explain the problem – ask her to provide a note of what is required. Have a classmate's phone number to hand so that you can quickly check with another student what is being asked for.
- ✦ Appreciate any efforts being made by the School Staff to help.
- ✦ Keep copies of any documentation between yourself and the school. If assessment or tests have been carried out; ask for copies.

If you are unsure about what the school and/or the authorities are doing - ask questions. It can be a daunting prospect but asking is the best way of finding out what is or is not happening.

Both the School and the local authority should have policies on how to deal with children who have additional support needs – you could ask for copies of these documents.

HOMEWORK

Younger children

- * Try doing homework in shorter time segments i.e. blocks of 15-20 minutes. Your child may concentrate better over the shorter time and also produce better quality work.
- * Try to relate the homework to an element of fun.
- * If the child has access to a computer, and providing you have the backing of the school, essays, reports, projects etc. could be produced this way.

Spelling is rarely consistent so it does not help to make a child `copy' the word several times. A child with dyslexia needs to be given a structured way in which to learn words.

- Try to encourage cursive (joined up) writing.
- Limit your target. Don't try to give too many words at the one time.
- Have the word in front of the child.
- Ask them to say the word.

- Ask them to write the word saying the sound of the letters as he goes, finishing by saying the whole word.
- This could be repeated a couple of times using a sand box for him to trace the letters out, magnetic letters, picture word cards etc.
- You might want to try asking him to hide the word then say the word and to spell it aloud without any aids.

Hints

- ★ Make a set of 'feely' letters. Children can benefit from being able to touch what they are seeing and feel things. It is a more concrete aid.
- ★ Computers/Notebooks can make homework much simpler and neater - it is also easier for recognising spelling errors and correcting them. A perfect piece of work is a great confidence booster.
- ★ Use lined paper, preferably cream or tinted in colour. Praise the content of work rather than criticise the standard of script.
- ★ Chunkier pens / pencils or using rubber grips can be beneficial, especially for those that have problems holding or gripping a pen/pencil.
- ★ When helping with reading or spelling, try to create a space where the child will feel comfortable.
- ★ Try to sit beside them, without restricting their writing arm.
- ★ Try to sit facing a wall with no distractions and ensure the area is well lit.

Before leaving School

- If it is difficult writing the homework down because of the time factor speak to the teacher and ask if they can help. Could the instructions be put on the board at the beginning of the lesson so that there is a longer period of time to write it down?

- Get the telephone number of a friend in class. If you don't get the homework written down, or you are not clear about what you are to do, you can check with them.

Once Home

- Establish a homework routine. If there is a lot of homework, try getting your child to do some immediately after arriving home and then some after tea.
- Try to make sure your child eats before beginning with homework. It is always difficult to concentrate if you are hungry!
- Pick a quiet place without any distractions. That means no television on in the room. Preferably with a table so there is plenty of room to spread out.
- Some people find it easier to work with music playing *quietly* in the background.
- Have a glass of water nearby.
- Have all homework books, sharpened pencils, eraser, pens, calculator and dictionary to hand before starting.

Getting Started

- Do the homework needed for the next day first.
- Do the hardest homework first.
- Plan long-term assignments. Do not leave everything until the last night.
- Read through class notes. Look at examples. Remind yourself before you start writing.
- Read instructions thoroughly.
- Read aloud.
- Sometimes explaining ideas to someone else makes everything clearer.
- Take rests, but *do not* switch on the television.

General Tips

- Have a pin-board with a calendar for marking when homework assignments are due.
- Use A4 hole-punched plastic wallets for handouts to avoid dirt and crushing.
- Use different coloured folders for different subjects.
- Make notes/rough workings.
- Use box files and cards to note important points, which can be stored under each separate subject. These will help when revising.
- Make sure you pack your schoolbag the evening before. Check the books against your timetable. Look to see if you will need a gym kit, musical instrument, lunch money etc.
- Use an A5 sized diary to write down the homework. Try to develop a habit of writing in the diary as much as you can.

Essay Writing

- Read instructions thoroughly. Underline the key words, for example, 'describe', 'discuss' and 'explain'.
- "Brain dump" all your ideas, in note form, onto different pieces of paper. These can be moved around and sorted into sequences that will form your paragraphs.
- Use a Mind Map.
- Read the question again.
- Think of the ending before you start.
- Write the introduction.
- In the main body of text, have one idea per paragraph.
- Draw the essay together with a conclusion at the end.

- Proof read. Read the essay through looking for spelling, punctuation and grammar errors. Read the essay aloud and follow each word with your finger or a pencil. This will help you notice omitted words.
- Proof read it again, but this time, work backwards from the end of the essay to the beginning.

General Tips

- Use Mind Maps. Mind Mapping is explained well in the video, "Get Ahead. A Short Cut to Straight "A's"" by Lana Israel, Tony Buzan and Richard Carylton. Produced by Island World Video
- Spider diagrams. The title of the essay is in the body of the spider. All the legs are ideas for the story. This helps keep your mind on the title of the essay.
- If you find writing difficult and you cannot put all your ideas on paper, ask the teacher if you can submit your essay in another format.
- Use a computer/notebook. The "cut and paste" facility and the spell checker are particularly helpful.
- Voice activated software can allow a young person in secondary school the freedom of producing quality reports, assessments, projects etc.

There are some excellent study skills books listed at the end of this booklet which are particularly useful for young people in secondary school.

BE AWARE

Your child may have disappointments but with your encouragement and help he may find ways of coping with them.

He may need help to organise himself. Don't let him miss his beloved football because he left the kit at home.

REMEMBER - School is only a part of your child's life. Encourage him to spend time on enjoyable things. A young person with dyslexia can be talented in other ways; some become highly skilled at the spoken word whilst others are talented artistically, athletically, musically or practically. Parents should encourage these strengths as they might well form the basis of a career or of a life long hobby.

HOW CAN A CHILD WITH DYSLEXIA BE HELPED IN SCHOOL?

Your child will spend most of his time in mainstream classrooms and with appropriate support many children with dyslexia can achieve success in this setting.

Many schools consider dyslexia as a whole school issue. In order to acquire and maintain effective dyslexia teaching strategies, Continuous Professional Development should be made available to all teachers on an annual basis. Such support enables teachers to develop an understanding of what works for children with dyslexia but which can also benefit the whole class.

It must be remembered that each child with dyslexia is an individual with his own particular strengths and weaknesses.

Some children need more intensive help from the support for learning staff. The support your child receives should reflect his own need both in the level and type of support. However there are general approaches that can make school life easier.

General Strategies

Children with dyslexia in the early years benefit from small group, structured, multi-sensory teaching which involves the children using their ears, eyes and movement in some way. They will also need much over-learning which, essentially, means being taught the same thing several times but in different ways.

The teacher can help by presenting information in different ways; visual as well as verbal, by being aware that the child has a difficulty and by having a classroom where it is okay to ask for help.

As most children with dyslexia in adolescence can have difficulties with the speed of processing information, this can make for difficulties in the classroom on a daily basis. For example if the teacher speaks too quickly, or gives too much information at once, children will miss vital parts of the information. The child may not admit that he missed information in case it is thought that he has not been paying attention. He may wonder why the class is getting on with a given task and he is left in complete bewilderment.

Strategies for the Lower Primary School

Some children find it helpful to be told that reading and writing is simply a recorded code for the way we speak. The sounds we speak are represented by a letter or group of letters that go together to make up words. What the child needs to learn is the code; i.e. how to put the symbols for sounds together in order to read and write words.

Classroom teaching of reading has become, in recent years, more dyslexia-friendly. However some children will benefit, particularly in the early stages, from more focused teaching either within a small group or on a one-to-one basis. A variety of structured phonic reading schemes are used in schools.

Children with dyslexia will also benefit from appropriate small group teaching for spelling. Spelling in the English language is not straightforward as many sounds can be spelled in several different ways and indeed different spellings can have the same sound, such as 'tail' and 'tale'.

For the child with dyslexia, learning to spell can be extremely difficult but once the child has learned the most important principles, spelling difficulties can be overcome using appropriate skills and technology.

Remembering times-tables and number bonds can also present difficulties even with extreme effort. It is important that such children are not held back in their

learning and understanding of the maths curriculum and the use of number squares and calculators should be available as a tool where appropriate.

HELP WITH READING

- ✦ Try to provide a positive, productive period to contribute actively to the lesson.
- ✦ Try to give the child the opportunity to practise his reading skills and show off his ability.
- ✦ Participate in his reading experience instead of listening.

Hints

- Encourage reading by looking at books together. Rag books, board books are great for younger children.
- Read aloud together - use expressive features, different voices to encourage the child to try this too.
- Joining a library can help establish a good attitude towards books.
- Encourage the child to look at things for information e.g. cereal box, streets, roads, maps.
- Together, read articles from the newspaper and discuss what they mean.
- Reading should be fun so try not to pressure him and don't expect too much too soon.

Keep It Fun

- ✧ Read stories at bedtime where it is quiet and you can be comfortable together.
- ✧ Make sessions fun by playing around with rhyming words and associated words.
- ✧ Read books that are comparable with his reading ability. There are many graded series that can be purchased even for the older child.

- ✧ To build self-belief it is sometimes better to start on an easier book to encourage and boost his confidence.
- ✧ Praise him for the attempted words he gets correct. Always look for the things that he can do rather than what he cannot.
- ✧ Use bookmarkers to keep place in a book.
- ✧ Encourage the child to try to decode the words himself. Don't leave him to struggle though! If he is stuck - give him a clue e.g. look at the beginning of the word, are there familiar letters, look at the picture, look at the words around, try giving the first sound.

Give him the chance to `make up' stories whilst you write them down for him. Then as he progresses, ask him to write them down as clearly and as accurate as he can. In time, you could ask him to transfer his story onto a PC to make it more presentable.

Strategies for the Upper Primary School

It is important that a range of strategies and study skills are taught as early as possible. These can include:

- ★ Keyboard and other computer skills
- ★ Mind mapping
- ★ Bullet pointing or highlighting work

What works for each child will depend on:

- ★ His own learning style
- ★ The demands of the task
- ★ The nature and severity of his difficulties
- ★ His areas of strength

It can be useful for the child to begin secondary school with an understanding, and with plenty of practice, of what strategies work for him.

It is also important that children feel they are not being judged solely on the level of their reading and writing.

Strategies for the Secondary School

The secondary school presents all children with a whole new range of experiences. While some children will be able to use and develop strategies previously learned, the difficulties of some children will only become obvious with the increasing demands of the secondary school curriculum. As some children will have strengths in particular areas such as art, sport, drama, music, maths, technology, computing, etc. the secondary school can present the learner with an opportunity to achieve high levels of success, perhaps for the first time.

It is in the learner's interests if subject teachers work in collaboration with the pupil support and guidance staff to further the understanding of a child's needs. Help can be given by:

- ★ Having high expectations
- ★ Giving clear instructions in different formats
- ★ Giving handouts so pupils do not have to copy information from the board
- ★ Making a glossary of key and technical words when new topics are being introduced
- ★ Allowing extra thinking time
- ★ Encouraging group discussions where pupils with dyslexia can often show their strengths
- ★ Asking the pupils what strategies they find most useful to aid their learning.

Dyslexia Scotland has distributed, free of charge, an 18-booklet pack on Supporting Pupils in the Secondary Curriculum to every secondary school in

Scotland. Each booklet covers a different subject e.g. one is for the Arts, one for science etc. Each teacher will have access to the booklet which relates to their specific subject providing guidance on how to support a young person with dyslexia within their classroom.

Examinations

The Scottish Qualifications Authority has a progressive and sympathetic policy towards pupils with dyslexia.

For a candidate with dyslexia these arrangements can include digital exams, extra time, a reader and/or scribe, use of a dictaphone, computers, transcription of work with or without correction.

Exam arrangements used will be specific to each pupil and it is important that the pupil is familiar with his chosen strategies.

Many schools use learning support time (one-to-one or small group) to explore with pupils the strategies they would find useful in exams. This may be for only one period a week and can be a time where children can gain insight into their own difficulties, learn specific strategies and study skills, (for exams, class-work and homework) and discuss any problems they are experiencing in particular subject areas. This is most effective if carried out from S1/S2 and not just some weeks before exams begin.

Free downloadable documents for students with additional support needs, for schools and for parents are available from the Scottish Qualifications Authority's website - www.sqa.org.uk.

Any problems that arise with arrangements for examinations should be resolved by talking with the class, guidance or support for learning teacher. You may also

contact the Headteacher who has responsibility for all children attending the school.

If you are still dissatisfied or if the problem persists you can contact the Area Network Teacher (who may have a different title in your area) within the Local Education Department.

It is always in your child's best interest if parents and schools can establish and maintain a good working relationship. If this breaks down, be persistent in trying to find solutions to your child's difficulties.

DYSLEXIA AND MATHS

There is now a greater awareness that difficulties in mathematics frequently occur with dyslexia. This can be related to the fact that mathematics is a sequential subject and that sequencing skills can be an issue for people with dyslexia.

Some are gifted problem solvers despite persisting difficulties in, for example, rote learning of basic facts. If the problem is not appropriately and continuously addressed, these learning difficulties may reduce the extent of the person's mathematical experiences, making it harder for him to develop concepts and to progress past the very basic levels of knowledge.

The following are areas that you may want to be aware of:

- ★ **Directional Confusion** - Children may write numbers backwards, E for 3, or be confused by the inconsistent 'starting points' of e.g. addition, subtraction or long division.
- ★ **Sequencing Problems** - It may be difficult for a child to count, especially using one-to-one correspondence. It is frequently difficult for a child to count backwards. They may have difficulty remembering the sequence of steps to follow for long division. It may be difficult for a child to see a sequence e.g. 4^0 , 4^1 , 4^2 , 4^3 .
- ★ **Visual Perception** - The pupil may confuse +, ÷, and x (especially if written carelessly) or 6 and 9, 3 and 5.
- ★ **Spatial Awareness** - Spatial awareness is needed for work such as place value or distinguishing between 2 and Z or three-dimensional geometry. In the classroom, the pupil may lose his place on the page (or board) from which he is copying. He may not be able to relate two-dimensional drawing to the three dimensional shape they represent.

- ★ **Short Term (Working) Memory** - Poor short-term memory can create several areas of difficulty and has a strong influence on how a pupil processes numbers. Deficits in short-term memory combined with long-term memory deficits create major problems e.g. a child trying to add 47 and 78 mentally has to hold the sum in his memory, work out $7+8$ (poor memory for basic facts), remember 5, carry 1, remember that he has to add $4+7$ (and the carried 1), work out $7+4+1$, recall the 5 and put them all together in the right sequence 125.

Short-term memory difficulties may even prevent a pupil from starting a problem; he may simply forget some or all of the teacher's instructions or, if his short-term memory is overloaded, he may be left with absolutely no clue as to where to start. The pupil may not be able to 'hold' the visual image of the sum he is trying to solve. He may not be able to hold the sum in visual auditory memory while he searches for a necessary number fact. (Indeed the working out of that fact, say, $9+6$ by counting on, may overload the memory and leave him not remembering the initial sum.)

- ★ **Long Term Memory** - Rote learning, as a means of loading information into long-term memory, is rarely effective with learners with dyslexia - teachers may persist in trying. Learners with dyslexia have significant difficulties learning basic facts such as times tables. This is particularly frustrating for parents who encourage the child to practise until he can do this only to find that he has forgotten again soon after.

Poor long-term memory may also hinder other areas of mathematics, such as recall of algorithms (methods) or formulae.

The language of Mathematics: Difficulties in Naming

Mathematics has its own language and symbols and this brings further problems for the learner with dyslexia whose language skills may be weak. To complicate

the issue further, the same symbol often has different names, e.g. + means add, more, plus, positive, and etc.

Word Skills (Kibel, 1992; E Miles)

A child needs to be able to read a problem with accuracy (and a certain amount of speed). The wording for mathematics problems tends to be precise and so needs accurate reading and interpretation. A child who misses key words or perhaps small words such as 'not' will be disadvantaged.

Cognitive Style

The child's cognitive style, the way he works out a problem, is significantly influenced by the factors previously mentioned. It may not match the teacher's cognitive style. Some writers use the terms learning and teaching style, which often refer to classroom styles, for example, informal or formal, a management aspect.

Although this is relevant in that a teacher whose style is predominately verbal will disadvantage a child whose style is predominantly visual, we are referring here to the cognitive styles of teacher and the learner.

Conceptual Ability

The child's ability to form concepts will be aided by the range and extent of the experiences he receives. Drill and practice is often used to reinforce a new topic. A student with dyslexia is typically slower and will often manage less practice for this reason alone. A child who continually fails in mathematics will also have a small variety of experiences and consequently will be less likely to be able to see patterns and to generalise and thus to form concepts. This has the effect of compounding his difficulties and hindering his progress.

Anxiety and Self Image

Overlaying all the above areas of difficulty is the child's poor self-image and his mathematics anxiety (Buxton, 1981). This is a cumulative and cyclic problem - more failure, more anxiety, more failure, poorer self-image, more failure, etc.

A list of books on how to support a student experiencing difficulties in mathematics is at the end of this booklet.

VISUAL DIFFICULTIES

Some children and adults who have difficulty with reading experience visual distortion when viewing a page of print. You may notice a few of the following:

- ★ Your child may blink a lot whilst reading
- ★ Get tired quickly when reading
- ★ Letters on a page move around
- ★ Letters are blurred
- ★ White paper with black text may appear to glare
- ★ Eyestrain
- ★ Regular headaches/migraines

The resulting visual discomfort and perceptual distortion may interfere with reading.

The distortion is common in people who have binocular instability for which eye exercises may be appropriate, but it can occur independently of any problem in people whose eyesight is otherwise perfect.

This particular problem can be helped by the use of colour in front of the eye. It can reduce the stress, the headaches, the migraines, the slow reading rate etc.

Testing is usually carried out by a specialist optician or an orthoptist. In education some local authorities have teachers who are able to use specialised testing kits to identify a suitable coloured overlay for children to use.

Meares Irlen Method

The Irlen Method is a way to treat light sensitivity and perceptual difficulties. Testing is carried out by a certified Irlen Practitioner and coloured filters are used either as glasses, contact lenses or applied to prescription lenses.

If you would like to know where the nearest person is who can carry out coloured overlay testing or Meares Iren testing you should contact Dyslexia Scotland on 0844 800 8484.

SUGGESTED READING LIST

<u>Books</u>	<u>Supplier</u>	<u>Phone No.</u>
Overcoming Dyslexia - Bevé Hornsby <i>(an overview of dyslexia and how it affects a child with useful hints and tips on how to help)</i>	SEN Marketing	0207 7223 1144
How To Detect and Manage Dyslexia by Philomena Ott <i>(an overview of dyslexia, history, definitions, what is etc. more like a handbook)</i>	Heinemann	01865 314301
This Book Doesn't Make Sense - Jean Augur <i>(Summaries the author's home and classroom experiences and has practical advice on how to help dyslexic people develop to their full potential)</i>	Whurr	0207 359 5979
Let's Discuss Dyslexia <i>(A book for young people (P6+) to read to help them understand dyslexia)</i>	Desktop Publishing	01652 688781
So You Think You Have Problems <i>(For young people in early primary school to help them understand dyslexia)</i>	Egon Publishers	01462 894498
A Parent's Survival Guide - Christine Ostler <i>(coping and dealing with a dyslexic child from the parents point of view - a good overview)</i>	SEN Marketing	01924 871697
Study Skills (suits late primary/secondary) by Christine Ostler <i>(hints and tips for organisation, studying, essay writing etc)</i>	SEN Marketing	01924 871697
Advanced Study Skills (suits secondary/ students by Christine Ostler <i>(more advanced tips for organisation, essay structure, timetabling - very good book)</i>	SEN Marketing	01924 871697
Toe By Toe - Keda Cowling <i>(Helps with teaching reading. Suits ages 8 - 80! see website for more info www.toe-by-toe.co.uk & www.kedapublications.co.uk)</i>	Keda Learning	01274 598807
Stride Ahead - Keda Cowling <i>(to aid comprehension - should have a reading age of 9 before beginning this)</i>	Keda Learning	01274 598807
Wide selection of `Mind Mapping' books	Buzan Centres	01202 674676

<u>Books</u>	<u>Supplier</u>	<u>Phone No.</u>
Seven Ways to Help Your Child with Maths <i>(practical suggestions for stimulating maths through everyday examples, games and activities)</i>	REM	01458 254750
Power of 2 <i>(reinforces and practices numeracy work suitable for all ages)</i>	SEN Marketing	01924 871697
Seven Ways to Help Your Child with Reading <i>(practical suggestions for stimulating reading through everyday examples, games and activities)</i>	REM	01548 254750
Dyslexia - Successful Inclusion in the Secondary School <i>(increasingly dyslexia is becoming an inclusive issue. This book gives useful help on addressing the needs of the dyslexic student, subject specific info, school management etc)</i>	SEN Marketing	01924 871697
Revised Structured Cursive Writing <i>(a programme to help with teaching cursive writing- Includes pen)</i>	Ann Arbor	01668 214460
The Word Wasp - Harry Cowling <i>(Structured multisensory one-to-one workbook teaches the spelling rules through phonic spelling)</i>	SEN Marketing	01924 871697
Specific Learning Difficulties (Dyslexia) A Teachers Guide by Dr. Margaret Crombie <i>(a practical guide for teachers who wish to know about teaching a dyslexic pupil)</i>	Ann Arbor	01668 214460
Maths & Dyslexics - Anne Henderson Maths for the Dyslexic - Anne Henderson <i>(information & practical guide to support dyslexic pupils with mathematic difficulties.)</i>	SEN Marketing	01924 871697
Mathematics for Dyslexics - Chinn & Ashcroft What to Do When You Can't Tell the Times Tables What to Do When You Can't Add and Subtract	SEN Marketing	01924 871697
Demystifying Dyslexia - Krupska, Klein <i>(practical and informative guide to dyslexia, adults/students)</i>	SEN Marketing	01924 871697
Dyslexia and Stress - Miles & Varma <i>(Presents documented evidence on dyslexia and stress. This book comprises a series of essays on stress at different ages and in a variety of circumstances)</i>	Whurr	0207 359 5979

<u>Books</u>	<u>Supplier</u>	<u>Phone No.</u>
Dyslexia in the Workplace <i>(A book more suitable for the employer and employee)</i>	Whurr	0207 359 5979
The Dyslexia Adult in a Non-Dyslexic World <i>(a comprehensive look at the world of dyslexic adults based on personal experiences. The book suggests strategies and creative solutions, capitalising on their strengths.)</i>	Whurr	0207 359 5979
SWAP & Fix Card Games <i>(These are essentially reading games, which can be played with a helping adult or by a group in the classroom. They are excellent for introducing and reinforcing a spelling family/rule. The simple compact design of the games appeals to primary secondary and adult learners.)</i>	GAMZ	01684 562158
Dictionary of Perfect Spelling By Christine Maxwell <i>This valuable resource is designed to make using a dictionary accessible to even the most reluctant speller. Look up a word as you think it sounds or as you think it is written. If you are wrong the word you looked up will be in red with the correct spelling in black. Hints of where to look, easy to read font, keys to symbols and spelling rules, words that can be confused are together with clues as to their usage, tinted page edges and useful appendices.</i>	SEN Marketing	01924 871697