



## Dyslexia

### What is Dyslexia

- Dyslexia is a learning difference, a combination of strengths and weaknesses which affects the learning process in reading, spelling, writing and sometimes numeracy.
- Dyslexic learners may also have accompanying weaknesses in short term memory, sequencing and the speed in which they process information. These are skills that everyone needs if they are to learn effectively in the classroom. They are also key skills for life.

Dyslexia doesn't mean that the child is unintelligent or lazy.

The tests we use may indicate that your child's difficulties may be labelled as dyslexic. This does not mean that there is something 'wrong' with your child but that they have specific differences in the way they learn. It is not a question of having or not having dyslexia but being somewhere on a dyslexia continuum, in other words it could be quite a mild difficulty or it could be more complex. Neither is there a 'cure'. In dyslexia friendly schools the focus has changed from establishing what is wrong with children in order to make them 'better', to identifying what is right in the classroom in order to *enhance the effectiveness of learning*. What we as teachers and parents need to do is to analyse the type of need within the dyslexia spectrum and to provide the best possible learning environment for the child to overcome the difficulties they may be experiencing.

### Route to identifying Dyslexia

Family history is important as dyslexia is often inherited.

#### **Through their school careers a dyslexic child may:-**

- Appear bright and able, but unable to put their ideas down on paper
- Show a discrepancy between receptive and expressive language
- Have areas in which they excel, particularly in drama, art and debating
- Be clumsy
- Act as the 'class clown' to mask what they see as their academic failure
- Become withdrawn and isolated, sitting at the back and not participating
- Be able to do one thing at a time very well but can't remember an entire list
- Demonstrate short term memory limitations, for instance finding it hard to remember arithmetic tables the alphabet or classroom instructions
- Looked 'glazed' when language is spoken too quickly
- Go home exhausted at the end of a normal day because they have had to put so much effort into learning
- Have a poor sense of direction and confuse left and right
- Show difficulty tying shoe laces and dressing.
- Hesitant or laboured reading
- Omit lines or repetition of the same line - loss of place in text
- Muddling words that look alike, e.g. 'no' and 'on'
- Have difficulties in saying multi-syllabic words.

Have problems understanding difficulties

Confusion b, d, p

Messy work, for example, curled pages, crossings out and badly set out

Handwriting that looks heavy and laborious

The same words spelt differently in the same piece of work

Confusion between upper and lower case letters

Find difficulty with the concept of letter name and sound

Be bullied

### How you can help

- Ensure child has an up to date eye and ear test.
- Share your concerns with the class teacher and support staff.
- Be patient and supportive when helping with homework. If your child has difficulties with homework explain to the class teacher.
- Don't overload them or ridicule them.
- Don't ignore signs that they have had enough.
- Don't expect immediate answers, give thinking time.
- Establish a 'can do' culture, don't be afraid to use 'tough love', setting small targets may help.
- Give one instruction at a time and be prepared to talk through it or repeat it.
- Give them time to adjust to new routines.
- Support self organisation; use checklists of things they need to remember every day (these could be in a photographic/ visual format).
- Use coloured overlays / rulers.
- Use buff paper instead of white.
- Use visual thinking strategies.

Give guidance about how to tackle tasks systematically. Dyslexic children often need to be taught many things that other children pick up without specific adult help. This might include: how to tidy a drawer; put their toys away; get dressed; look for something they have lost; pack their school bag; tie a tie or shoelace. Adults need to recognise the importance of taking time to teach these skills in a systematic and repeated regular routine.

# Dyscalculia

## Is like dyslexia for numbers



Dyscalculia is a specific learning disability involving maths skills.

It may be a difficulty with understanding simple number concepts, they may lack an intuitive grasp of numbers and have problems learning number facts and procedures. As a result they might have difficulty counting and calculating, understanding abstract maths concepts or working with numbers and symbols.

Key characteristics

Children with dyscalculia may have:

- normal or above average verbal skills and a good visual memory for the printed word
- difficulty understanding maths concepts, rules and sequences, especially time and money
- a tendency to make substitutions, transpositions, omissions and reversals when reading and writing numbers

## Identifying pupils with dyscalculia

There are various warning signs and indicators that a child or adolescent may have dyscalculia:

### Numbers

Pupils May:

- Find difficulty estimating, even small quantities visually
- Be inaccurate when counting objects and show other counting errors
- Be reliant on tangible counting methods, such as fingers, tally marks
- Find counting backwards difficult
- Be unable to learn and recall number facts, such as number bonds, times tables
- Fall into the 'Counting Trap' of always having to count in ones and not be able to use other strategies (E.g number bonds)
- Be unable to make connections and transfer knowledge (e.g.  $4+4=8$ , therefore  $14+4=18$ )
- Lack understanding of place value

## Difficulties with the language of mathematics

Pupils May:

- Misunderstand maths language (e.g. comparative terms- more, less, confuse terms such as 'equal to', 'larger than')
- Find it difficult to talk about mathematical processes
- Not ask questions, even when he or she evidently does not understand
- Find it difficult to generalise learning from one situation to another
- Make mistakes in interpreting word problems

### Poor memory

Pupils May:

- Have difficulty in remembering basic mathematics facts
- Be unable to remember what different symbols mean
- Forget previously mastered procedures very quickly
- Recite the entire multiplication table to get an answer for  $9 \times 3 =$
- Complete multiplication tables by 'adding on'
- Forget the question before the answer can be worked out

### Ineffective use of visual images

Pupils May:

- Not be able to locate a number on a number line without searching up and down
- Not notice visual patterns such as the 0 in 10, 20, 30, 40 etc
- Not relate to visual representation of fractions/decimals such as circles divided in half etc.
- Have difficulties with sequences
- Lose track when counting/reciting tables
- Have difficulty in navigating back and forth, especially in twos and threes etc

### Difficulties with position and spatial organization

Pupils May:

- Be confused about the difference between 21 and 12
- Put numbers in the wrong place when redistributing or exchanging
- Set out calculations and their work on a page poorly
- Not understand the importance of working left-right or taking the bottom number away from the top.
- Scatter tally marks instead of organising them systematically
- Get confused with division: Is it 3 into 6, or 6 into 3?
- In tens and units takes the smaller number from the larger, regardless of position
- Find rounding numbers difficult
- Find telling the time on an analogue clock difficult
- Be easily overloaded by pages/worksheets full of figures
- Copy work/shapes inaccurately
- Have difficulty with measurement and understanding of space including, symmetry, tessellation and geometry.

## Reliance on imitation and rote learning instead of understanding

Pupils May:

- 'Do' sums mechanically but cannot explain the process
- Sometimes use the wrong working method such as treating a ten as a one (or vice-versa) in exchanging or redistribution
- Be unable to decide what arithmetical operation is required
- Be unable to build on known facts, eg they may work out that  $3 + 4 = 7$  but not realise that, therefore,  $4 + 3 = 7$  as well.
- Have a poor sense of direction (eg. confusing left and right, getting easily lost, losing things) and time (eg. often arriving late)
- Have difficulty recalling names and faces
- Have poor mental maths skills
- Demonstrate poor coordination when involved in activities requiring change of direction such as aerobics, exercise and dance sessions
- Have difficulty with keeping score in games or working out strategies in chess.

## Slowness

As a result of this pupils are very likely to be slow in giving answers to maths questions and in working, compared to others in class.

## Identifying pupils with dyscalculia

If a child shows some of these signs of dyscalculia then we can complete a **Dyscalculia Assessment**, which will provide a 'Numeracy profile' identifying a pupil's strengths and areas of difficulty.

Support can then be offered, both within the classroom and on a small group work or individual basis to give the child strategies to help their learning.