

Rose: Key strategies 2

Adapted from ROSE 2009¹

What you can do in school to support children with dyslexia and literacy difficulties

Continue to support those with reading difficulties

Ensuring that as many children as possible are able to “read to learn” is not a responsibility that ends when children leave primary school. It is essential that secondary schools continue to identify children who are falling behind because of literacy difficulties and that they provide appropriate interventions. Professor Greg Brooks’ guidance states that although there are relatively few interventions that have been produced specifically for secondary school-aged children, there are some that have been evaluated as being effective, especially for reading. Brooks notes that “provided they receive continuing support, children ... should be better able to cope with the secondary curriculum”.

Make sure children understand what they are reading

It should not be assumed that because a dyslexic child’s word recognition skills are improving, their understanding of what they are reading improves at the same rate. Difficulties with comprehension can be particularly persistent for a number of reasons:

1. When decoding is effortful, readers are likely to be unable to give sufficient mental resources to understanding what is being read.
2. Some children with dyslexia may have additional difficulties with aspects of language, for example the understanding of grammar.
3. When decoding difficulties are longstanding, children may not have developed efficient strategies for reading comprehension because of limited practice and low print exposure.
4. Lack of reading practice can impact on the development of vocabulary knowledge which, in turn, makes reading more difficult and less rewarding. It is therefore important to monitor the comprehension of children in reading interventions as well as monitoring the development of their decoding skills.

¹ Adapted from *Identifying and teaching children and young people with dyslexia and literacy difficulties: An independent report from Sir Jim Rose to the Secretary of State for Children, Schools and Families June 2009*

Children with reading comprehension difficulties

Some children have problems in reading comprehension but little difficulty with decoding because they may not have been identified as having reading comprehension difficulties in the early stages of primary school.

Although they would not be described as dyslexic, it is, of course, important that they are given support to develop their comprehension skills. Research is still at an early stage in terms of our understanding of the characteristics of this group of specific 'poor comprehenders' and the approaches to teaching that are the most effective for them.

Brooks concludes that "children's comprehension skills can be improved if directly targeted ... Engaging the child in exploring meaning embeds the relevance of reading for life, expands vocabulary and broadens the range of texts. Children falling behind their peers need both carefully structured reading material and rich, exciting texts". His guidance contains details of suitably evaluated interventions.

To help children address reading comprehension difficulties, Dyslexia Action suggest that the following adjustments and strategies can be effective. Some of these strategies are designed to support comprehension directly and others do so by minimising the impact of inefficient decoding skills.

Adjustments to classroom environment – what could be provided?	Teaching strategies – what could be done?
<p>Talking worksheets.</p> <p>Visual symbols to support poor reading ability – e.g. labels on resources.</p> <p>Voice recorders.</p> <p>Simple dictionary/thesaurus.</p> <p>Providing subject glossaries in hard copy and electronic format.</p> <p>Highlighter pen for key words/concepts.</p> <p>Whiteboard adjustments.</p>	<p>Highlighting and discussing new subject vocabulary.</p> <p>Use of differentiated reading materials.</p> <p>Use of visual cues to support reading.</p> <p>Teaching how to highlight key words.</p> <p>Checking understanding. Using ICT.</p> <p>Teaching metacognitive strategies (see heading below 'Giving children control of their own learning').</p>

Addressing difficulties with spelling and writing

Even when good progress has been made in reading, problems in spelling and writing may persist as part of continuing difficulties in encoding i.e. turning sounds into print. On the other hand, it may be only later in school, when a child's oral work appears considerably better than his or her written work that teachers and parents begin to consider the possibility of dyslexia. Whether identified early or late, there is no doubt that problems with spelling and writing are an enduring characteristic of dyslexia. Some children with dyslexic difficulties may have additional problems with the physical aspects of handwriting, with some reversals and badly formed letters and omissions of words. For others, handwriting may be neat, but slow (which can lead to difficulties with note taking).

If the process of writing is very effortful, it can be difficult for a child to concentrate on what they are trying to get across. As a result, written work may drift off the point, or be extremely short. Difficulties with self-organisation (discussed below) can show themselves in the ability of a child with dyslexia to plan and deliver long pieces of more complex written work. To help children address difficulties in spelling and writing, the following adjustments and strategies can be effective.

Adjustments to classroom environment – what could be provided?	Teaching strategies – what could be done?
<p>Choice of handwriting tools.</p> <p>Cue card key ring for spelling.</p> <p>Displays/cue cards for specific spelling rules/ difficulties with reversals etc.</p> <p>Written homework instructions.</p> <p>Suitable writing tools and ICT. Other technology e.g. digital recorder.</p>	<p>Using errors to inform teaching points.</p> <p>Using ICT for recording (e.g. a laptop/ tablet for written work which enables the child to correct mistakes without mess, or more easily to insert material missing from an earlier part of a written account).</p> <p>Encouraging different ways of recording information.</p> <p>Using a multi-sensory teaching environment.</p> <p>Teaching strategies to help with planning written work.</p> <p>Avoiding the requirement to copy from the board.</p>

Adjustments to classroom environment – what could be provided?

Brooks says that 'ICT approaches work best when they are precisely targeted...the mediation of a skilled adult is essential... thus ICT should be seen as part of the solution and not the complete solution: simply giving students access to technology without supporting them in understanding how it works and then embedding its uses in classroom routines is unlikely to succeed'

Examples of helpful use of ICT include (see Identifying and teaching children and young people with Dyslexia and literacy difficulties: Page 126-128 for further information on all of the approaches listed below):

1. Spell checkers
2. Text to speech functions
3. Speech recognition programmes

Teaching strategies – what could be done?

Addressing difficulties with verbal memory and verbal processing speed

Verbal memory is the ability to retain an ordered sequence of verbal material for a short period of time for example to recall a list of words or numbers, or to remember instructions. Verbal processing speed refers to the time taken to process familiar verbal information, such as letters and digits.

Difficulties in verbal memory, may include an inability to recall verbal instructions, and slow or no responses to questions, both of which can lead to the impression that the child has not been paying attention. At later stages of schooling, problems with note taking, essay planning and self-organisation can be seriously troublesome for a child with greater than usual difficulties in verbal memory.

To help children and young people who have difficulties with verbal memory and verbal processing speed, the following adjustments and strategies can be effective.

Adjustments to classroom environment – what could be provided?	Teaching strategies – what could be done?
<p>Timetable with analogue clocks.</p> <p>Colour coded timetable.</p> <p>Colour coding to aid organisational skills</p> <p>Examples of planning strategies e.g. graphic organisers, concept maps, flowcharts, timeline.</p> <p>Written homework instructions.</p> <p>For more extended pieces of writing students with dyslexia may need explicit strategies to help them overcome the barriers of poor short term memory. For example they may need structured support for planning:</p> <ol style="list-style-type: none"> 1. A scaffolding format, which helps them to plan a sequence of events. 2. A range of key words/sentences (provided by the students) which they can refer to throughout their writing. 3. The creative development of a storyline. 	<p>Clear short instructions with visual support.</p> <p>Refer to a visual timetable.</p> <p>Give time to finish/ complete tasks.</p> <p>Show how to work backwards from a deadline to plan work or revision.</p> <p>Always give the big picture- an overview of what you want to cover in a lesson at the beginning and a summary of what was covered at the end.</p> <p>Small steps with clear learning intentions.</p>

Addressing difficulties with language

There is strong evidence of overlap between specific language impairment and dyslexia: between 35 and 40% of children with reading problems have been reported to have language impairment and vice versa. Longitudinal studies of young preschool children indicate that broader oral language skills influence whether a child has a word reading difficulty at a later age (Bishop (2008), Bishop and Snowling (2004), McArthur et al, (2000), Catts et al (2005).

Adjustments to classroom environment – what could be provided?

Give visual supports to supplement the information that you are providing (e.g. facial expressions, video, quick drawings, using real objects, demonstrations, graphic organisers)

Note taking

To structure notetaking and support the student you could provide them with:

- Wide lined A4 paper.
- Provide headings and subheadings and marking subsections with letters or numbers.
- Provide coloured highlighters and pens.
- Encourage the student to write on only one side of the paper so that extra pages can be inserted later (the aim should be to have one set of notes that ties together all the aspects of a particular topic).
- Support the student to use particular colours of paper, folders or dividers for particular topics.
- After the lesson the student may need help to organise the notes into Main point, supporting points and summary.
- Provide a note making grid such as a KWL grid (What I know, What I want to know, What I've learned) or a QUADS grid (Question, Answer, Detail, Source).
- Multi-sensory approaches.

To provide the best possible opportunity for pupils to understand and retain information, you should use and incorporate a repertoire of multi-sensory approaches:

- Use a full range of media, for example, visual and hands-on materials such as symbol/vocabulary charts, written questions, concept maps, writing frames.
- Encourage pupils to express preferences about what helps them to record etc.
- Use all forms of ICT (assistive technology and technology to enable learning).
- Offer a range of ways of recording responses to a task.
- Working for pupil independence.

All pupils should be able to participate in classroom dialogue. Plan for involvement by:

- Providing plenty of opportunity for pupil participation.
- Carefully scaffolding questions to build confidence.
- Ensuring that you and other adults hold back and give pupils time to talk.
- Making explicit links to previous learning.
- Ensuring that pupils are familiar with the range of resources they could use.
- Identifying with the pupil a source of assistance when they have a problem in the lesson, for example, a named peer, appropriate adult
- Also see Key strategies for supporting pupils with SLCN in class: in Inclusion Development Programme Primary and Secondary: Teaching and supporting pupils with speech, language and communication needs.

Teaching strategies – what could be done?

Chunking – one instruction at a time.

Re-ordering – say things in the order that you want them to be done. So instead of 'Before you sit down, I want you to show me your homework' say 'Show me your homework and then you may sit down'.

Cut down the amount that you say (Studies have shown that in some classrooms adult talk for about 90% of the time).

Slow down.

Avoid idioms, sarcasm, double meanings.

Simplify the grammar.

Pause after you have asked a question to allow for processing time or ask a question and say that you are coming back for the answer in a few minutes (or at the end of the lesson).

Commenting: commenting on what students are writing rather than asking them questions can encourage dialogue and supports their thinking and learning for example 'So plants need light and water to grow...I wonder what would happen if...'.

Prepare appropriate questions for individuals/groups and aim to use open questions. Consider the range and level of questions that can be accessed by different pupils and adjust accordingly.

Encourage discussion with peers in advance of feeding back to the group or answering questions.

Teach pupils to ask for help, using supports for this, such as prompts.

Check for understanding, perhaps involving other adults in the class.

Accept all attempts from pupils to show their knowledge and understanding, both orally and when recording.

Supporting students to gain self-control of their learning (metacognition)

Metacognition is a term used to describe the understanding of one's own learning processes. All teachers will be helping students towards this important goal but this is particularly important for students who have specific difficulties and are at risk of over-generalising from negative experiences believing themselves to be incapable of success. Having an awareness of the processes of learning and thinking can help to show them that difficulties are limited and specific and that there are possible ways around them. Students should be encouraged to apply the following questions to all of their work.

Purpose	Why am I doing this? Do I know what the objectives are for this lesson?
Outcome	What am I expected to produce? Do I know what a good example of this looks like? WAGOLL (What a good one looks like).
Strategy	Do I know what strategies to use to help me achieve this?
Monitoring	Did I meet the learning objective for this lesson?
Development	How could I improve on this?
Transfer	What have I learned from this lesson that I could use in another subject or situation?

Hearing and sight related impairments

If a child is experiencing oral language difficulties, it should be checked whether there may be a hearing difficulty. Addressing hearing difficulties is outside the scope of this review, however, guidance on teaching children with hearing impairments has been produced by the National Deaf Children's Society.

Where literacy difficulties are identified alongside a hearing impairment, consideration should be given to ensuring that difficulties associated with the hearing impairment and with acquiring and developing literacy skills are being fully addressed. This may entail seeking advice from a Hearing Impaired Specialist Teacher alongside an experienced literacy teacher or a specialist dyslexia teacher (whether or not dyslexia has been identified).

Hearing and sight related impairments continued

Visual stress is a term used to describe the experience of eye strain, difficulty in focusing, headaches, and illusions of colour or movement in written text. These experiences may become more marked when reading for prolonged periods. Estimates indicate that about 20% of the general population experience some degree of visual stress, but lighting conditions, type and size of font, and degree of background contrast all affect susceptibility and severity. Visual stress is not generally recognised as a medical condition, although many optometrists and hospital eye clinics will identify it and provide treatment. Visual stress has sometimes been referred to as 'visual dyslexia', but there is no evidence supporting a causal link between visual stress and dyslexia. Although there is some evidence of increased prevalence of visual stress in children and adults with dyslexia, it is important to note that assessment of visual stress and response to treatment is usually by subjective report.

Where visual stress is identified or suspected, the most widely used intervention in schools is a tinted acetate overlay. Many schools used pastel coloured paper for worksheets and handouts to alleviate these problems. The use of buff-coloured paper, for example, can cut down on visual anomalies and can support reading fluency and text access.

Arithmetic

It is not uncommon for children with dyslexia to experience difficulties with aspects of arithmetic, particularly mental calculation and numerical operations. For example, they may find it hard to learn and remember tables, and may find various mathematical symbols confusing. A child struggling with understanding number symbols and operations is unlikely to be able to give sufficient attention to understanding the conceptual problem to which an operation relates. Such children may also find it difficult to undertake tasks involving sequencing. Some dyslexic children continue to find simple mental calculations difficult, even if they are grasping higher mathematical concepts. There can also be difficulties with memorising formulae.

Alongside dyslexic children experiencing difficulties with numbers, there are other children who have problems with arithmetic and who seem to lack a 'sense of number' – this is referred to as dyscalculia. Less is known about this group of children whose primary problem is with number skills but it is clear that some of them also have problems with reading.

To help support children who have difficulties with mathematics, the following adjustments and strategies can be effective.

Adjustments to classroom environment – what could be provided?	Teaching strategies – what could be done?
<p>Posters on the wall – e.g. as constant reminders of mathematical signs and formulae.</p>	<p>Teaching how to use support materials.</p> <p>Structured, small steps teaching with over-learning built in.</p> <p>Extended use of concrete materials may be required. Putting number work into practical contexts.</p> <p>Small packs of cards may be produced to aid the repetition and over learning of number bonds, tables etc. – the question on one side and the answer on the other. The child can then work through the pack from either side.</p> <p>Pelmanism and other matching games will help with reinforcement.</p>