Classroom Strategies to support dyslexic children in mainstream schools

What do you do with dyslexic children?

There are plenty of books about dyslexia and well-structured teaching packs that focus on the remediation of difficulties. But not much is written about the day-to-day work that goes on in mainstream classrooms. It is not surprising therefore, that the term 'dyslexia' evokes anxiety and uncertainty for some teachers who hear it being used to describe a child with whom they have contact. Anecdotal examples of this from my everyday work as an Educational Psychologist (EP) include:

- One child had made tremendous progress on small step targets for literacy set on his Individual Education Programme (IEP), yet his class teacher continued to comment in a negative way about how he was not able to do any better in class. A very successful remedial programme had led to an increase in literacy skills yet somehow this was not seen as helpful to the teacher. What could be done to lead to an improvement in performance in class? How could the class teacher be helped to support the child more effectively in day-to-day classroom work?

- Work with a child with reading difficulties had resulted in Statutory Assessment being undertaken and a Statement of SEN produced, offering support. A few days later the parent telephoned me and was quite concerned. Her son's class teacher had made a comment that she did not know anything about dyslexia. What could be done to support teachers and improve their confidence when working with dyslexic children?

What do we mean by dyslexia?

There are many definitions of dyslexia, each one emphasising slightly different features or views about the nature and causes of the difficulties. The working party of the British Psychological Society has offered a broad definition:

"Dyslexia is evident when accurate and fluent word 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. It provides the basis for a staged process of assessment through teaching."

The definition emphasises:

- Literacy difficulties at the word level
- The need for appropriate teaching
- Severity and persistence of the difficulties
- An interaction between teaching and learning

The definition is not exclusive and this means that any child with literacy difficulties that are severe and persistent and not responsive to well structured, frequently provided, remedial teaching could be considered as being dyslexic.
Other definitions outline a range of associated factors:

- Difficulties with short term memory capacity
- Difficulties with working memory
- Phonological difficulties (e.g. difficulty with sound awareness)
- Perceptual difficulties
- An unexpected difference between performance in some areas and performance in literacy
- A slow speed in noticing, processing and responding to information

For some children there are additional difficulties:

- They become over-reliant on adult support
- They may become reluctant to try, even when the task is well within their capability
- They may have low self-esteem and feelings of low self-worth

Evidence of good classroom practice

Learning and teaching are reciprocal and occur as a social interaction in which the more competent teacher structures the learning environment and tasks of the less competent pupil. This view of teaching and learning leads to seeing children's learning difficulties as being the teacher's teaching difficulties. Teaching is seen as involving more than delivering a curriculum and requires some thought as to how the teacher can help the learner to access the curriculum and record ideas. How will the teacher respond to the child's needs while covering the breadth of content within the curriculum?

Dyslexia is not new. It has been around for as long as people have endeavoured to read and write and has been recognised as a difficulty since it was first described by James Kerr and Pringle Morgan in 1896. Likewise, compulsory schooling with an emphasis on literacy has been around for well over a hundred years. There has been plenty of opportunity for teachers to encounter children with reading and spelling difficulties and to consider how best to support them across the curriculum. We would expect there to be a lot of good classroom practice in mainstream schools around the country. This is exactly what an Ofsted survey found in 1999 when they looked at over 50 schools in 10 LEAs to see how pupils with Statements for specific learning difficulties (SpLD) were progressing in reading, spelling and writing.

There are some things that both pupils and teachers report as being helpful. A few examples are cited from Cooper and McIntyre (1993):

- teacher discussions (recapping from previous lessons; story telling; leading class discussions; teacher explanations)
- supported reading (teacher reading out loud; pupils reading out loud)
- use of the blackboard (notes and diagrams as an aide memoir)
- use of pictures and other visual stimuli
- structure for written work provided by the teacher

This suggests that as a profession, teachers generally know what to do and have been doing it for a long time. What seems to be missing is an exchange of ideas that can promote reflective practice. In part this is being addressed through projects such as the BDA Dyslexia Friendly Schools’ initiative.

A small-scale project was set up with teachers from 5 mainstream schools and a booklet of ideas produced with the intent of sharing good practice. Strategies were collected together to provide a list that teachers could use to reflect on their own classroom practice. This was evaluated by asking teachers to rate their confidence in working with dyslexic children and through observations of some of their lessons. The use of the strategies led to an increase in teacher confidence when working with dyslexic children, to an increase in supportive strategies used, and to an increase in pupil on-task behaviour. The main suggestions and strategies contained in the booklet are indicated as follows:
The strategies
There will be some strategies that will be recognised as the 'I do that already' type. Others will seem like good ideas and worthy of being tried. Other strategies will simply not apply to the particular child in mind or may not fit the school or class situation.

It is suggested that you go through the list and select strategies to try out. Do not select too many to try in one go. When trying out the suggestion try to think about how you will see if it makes a difference. It is okay to evaluate changes in a subjective reflective way but it is better to try to find some measurable difference, e.g. "Johnny only asked for help twice during that lesson instead of his usual request every four minutes!"

Accessing Text
Differentiation of the text used
Teachers support children with literacy difficulties by carefully selecting books for them and by thinking about how text is used when preparing worksheets. Text can be differentiated in a number of ways:

- Thinking about the language structure used. Many of the indices for measuring reading ages of text consider sentence length; syllable counts and word familiarity. This is because:
  - Long sentences are harder to read than short ones.
  - High frequency words are encountered more often in reading and are more likely to be in the child's vocabulary.
  - Longer words place more demands on auditory memory for beginner readers than short words. Polysyllabic words make more demands on working memory for children who have learnt to chunk letters into sound groups.
  - Active verbs access the meaning of the sentence and are easier to understand and than passive verbs.
- Emotional impact. A large block of small writing can seem very daunting and off-putting. The following suggestions help to make it easier to approach:
  - Small blocks of text with spaces clearly defined. This includes the use of:
    - Paragraphs.
    - Boxes for text to separate out ideas or functions within the text (say instructions in one box, explanation in another).
    - Colour coding of text; use of bullet points and lists rather than continuous prose.
    - Use of diagrams and pictures to break up the text.
  - Larger text. This can give the child the feel of moving swiftly through a page or book.
- Competency and reading. Can the child read 90% of a sample of the text without direct support?

Improving worksheet layout to support reading.
This might include the use of boxes or colour to split up large chunks of text. This could support organisational difficulties if questions related to the text are included in the same box.
In comprehension exercises it will help children with working memory deficits by reducing the attentional capacity demands needed to remember the text location whilst pondering answers. It will reduce the need to re-read the text from the beginning if the child suddenly loses his or her place.

- Text is supported by other visual cues, e.g. pictures, diagrams, flow charts
- Blocks of text are broken up into chunks of related ideas surrounded by a box
- Comprehension questions are close to the information text rather than at the end of the text (i.e. instead of Information Text followed by 10 questions, have a small block of information then two questions, the next chunk of information and two more questions … etc)
- Use type rather than hand-written
- Choose a font that is clear and easy to read (e.g. Arial, Century Schoolbook, Garamond, Tahoma)
- Select a point size that is appropriate to the child. Small text requires both eyes to
scan and focus on a small area. Younger children find this difficult as they have not yet developed ocular stability. In some older children, a lack of ocular stability makes the letters on the page appear to move. Enlarging the text provides a bigger target for both eyes to focus on.

**Teacher Strategies when working with the whole class**
- Text cueing by the teacher. Directing the child's attention to the text to be read by visually cueing the child in, e.g. holding the book up to the class and identifying the area to be read:
  - By pointing at the target text
  - By identifying the colour of text box
  - By paragraph number
  - Using other cues e.g. "under the picture, on the left page, half-way down, just before the questions"
- Teacher pre-reading text with the class so that the child feels more confident when approaching independent reading. This also allows the child to make use of memory strategies to reduce need to read.
- Whole class discussion of the text prior to individual work

**Recording ideas**
Recording ideas and information in prose can move through a gradation:
- Voice recording e.g. to a tape recorder
- Dictation e.g. to a peer or adult; to a computer with speech recognition software
- Provide copy-writing models, graduated from over-writing to under-writing
- Copying
- Use sentence makers. Common words that the child needs are written on cards and the child assembles the sentence using the cards. The teacher checks the sentence and then the child copies the model into their book.
- Disrupted information. Instead of giving the child a block of text to copy, provide them with the sentences in a jumbled order. If the sentences are cut out before the lesson, they can re-assemble the order, checking the sequence with an adult or peer and then copy. This allows the child to apply some thought to the writing while being supported with independent writing.
- Copying the bulk of the text but completing missed out bits e.g. cloze procedure, sentence completion. This can be graduated further e.g. providing the answers for the child to choose from; having source text to find the answers; having only a blank space
- Writing independently using key words provided by the teacher. Support independent writing by providing key words on the black board, on cupboards in the classroom, on topic boards, in subject specific dictionaries.
- Writing to dictation
- Writing independently with help to organise ideas e.g. using writing frames, writing independently after planning
- Totally independent writing

**Board work**
- Different coloured chalk (or white board markers) can be used with each line of writing to be copied from the board to help the child with scanning and re-locating the next target word to be written. If the child has difficulty remembering his or her current position it may be easier to remember progress on the green line. Take care to check for contrast in different parts of the room.

**Other strategies**
- If worksheets are used then allow the child to write on the sheet, rather than copying into book. This will help to keep up with other children in the class by saving time re-reading, re-tracking the target text and help with slower writing speed and slower information processing speed.
- Reduce writing demands by teaching the child how to independently record information effectively, using mind maps and flow diagrams.
- Use sentence completion, providing most of the sentence as a model with space for
the child to complete. Gradation could include providing the answers in a jumble to be selected from.

- Give the child a book to make a personalised dictionary into which frequently used words can be written. Teach them effective use of the dictionary.
- Some children become over-reliant on phonic strategies and spell words as sounded. Try providing them with the Aurally Coded English (ACE) dictionary. This allows the child to look up words as they sound and then to find the correct spelling.
- With more competent children, encourage proof reading skills. Teach the children to check for spelling mistakes, grammar and then meaning
- Spelling should be taught as an integral part of every lesson.

**Technological aids**

A technological aid is simply a device to help the child with reading or writing. Some are very 'low tech' and can be made by the teacher or classroom assistant. Others are 'high tech' and may be used in school for other purposes or need to be specially purchased.

- Alphabet line to assist with independent dictionary skills
- Using a ruler to help with tracking in reading. A clear plastic ruler can be placed under the target text and this allows the child to see the next words on the line. It also allows the child to gauge how much of the page is left to read.
- If the child continues to have difficulty looking at the target word(s) then a cardboard mask can be made that exposes one or two words at a time.
- Enlarging text aids binocular control and helps children who experience the words moving on the page
- Using coloured paper can help some children (with magnocellular processing difficulties).
- Using coloured overlays can help to reduce apparent movement of letters.
- Use of an electronic spell-checker. These vary in complexity and price. The cheaper ones allow the child to type in the word as they think it should be typed and then offers them several possibilities to choose from. More expensive versions will provide definitions of the chosen word so that the child can check that they have the right meaning. Some features are not needed (anagrams, games, crossword solvers etc).
- Use of tape recorder
- Provide a taped commentary of the class text being read so that the child can re-wind and re-listen to the text e.g. during comprehension exercises
- To allow the child to record their own voice to help with reading and to use with word cards to support reading development

**ICT**

- Use a laptop computer with the spellchecker enabled to provide instant feedback to spelling errors and to allow child to select from restricted range of possibilities. If the child cannot get ideas down because the spellchecker distracts and stops the flow of thoughts, then turn it off and teach the child the habit of spell checking once the document is written.
- Use a word processor to allow the child to produce neat copies of work for display, to take home or to stick in class book
- Dictation software is getting better but the child will need a lot of training to use it effectively.
- Keyboard skills' training is essential if the child is to keep up with note taking. It should go beyond typing skills to include specialist keys and short cuts used with the software that the child needs.
- Mind-mapping software enables the child to record ideas visually and without having to type everything out in prose. Some software is free and down loadable from the Internet.
- Computerised script reader, i.e. software to read text files from the computer. Some versions of this are available free from the Internet. This could be used to read back the child's work or work prepared by the teacher. When linked with a scanner
Optical Character Recognition (OCR) software, it is possible to scan any text and have the computer read it out loud.

Adult support
- The teacher is able to circulate around the class rather than remaining at a fixed workstation. This allows for frequent, but short visits to ensure that the child is still coping with the reading or writing task.
- Adult pre-reading text, prior to the lesson with child, so that the difficult bits are identified and dealt with. This then improves confidence for independent reading during the actual lesson.
- Direct support in class through assisted reading with the child.
- Direct support through assisted writing or acting as a scribe.

Peer support
A more competent peer is used to support a weaker child. This could include:
- Paired reading
- Acting as a reader
- Acting as a scribe
- To act as a checker, e.g. proof reading the child's script and identifying three spelling errors
- As a tester for learning exercises

Classroom seating
- Sit the child near to teacher's table to allow easy access to adult support and to allow the teacher to monitor progress.
- Sit the child near to board and facing the board to help with:
  - Copying by reducing the time taken from looking at the target information and writing it down (helps reduce working memory demands).
  - Providing good literacy models from the class teacher
  - Providing a clear focus for board based explanations
  - Enabling support for organisation and long term memory through the use of flow diagrams and key words to support instruction following and extended writing.
- The child should be seated with supportive peers rather than in a group of children who are all experiencing difficulties.
- Child seated with other children of the same intellectual ability so that they can participate in discussions at an appropriate level. This may also be protective of self-esteem for a bright dyslexic child.

Teaching of specific strategies
These are strategies to help the child understand the purpose of reading and writing.
- PQRS strategy for reading (Preview, Question, Read, Summarise).
  - Preview. The idea is that we quickly look over the text to see if there are clues as to what it is about. Picture clues, headings, boxes etc give a quick idea. With more competent readers this is developed into scanning and skimming skills.
  - Raise questions to be answered. What do we want to find out? This might be very pertinent in looking for specific information from a textbook. With a story it might be that we want to know what happens to the main character.
  - Read.
  - Summarise. Briefly say what the text was about. What are the answers to the questions that were raised? If it is a story, then use this time to set up expectations for the next reading session. What might happen next?
- Metacognitive strategies are those strategies that involve thinking about the study skills needed. Areas to consider are:
  - Text - what type of material is to be learnt?
  - Task - purpose of reading. Am I reading for pleasure or to find something out?
  - Strategies - how to learn and remember the information
  - Learner - prior experiences, motivation, background knowledge, interests
There are also specific skills needed to deal with text. In addition to remedial teaching, the following strategies might be helpful:

- **Word-segmentation.** How can I break this big word down? Are there any smaller words in it that I recognise? Are there groups of letters that I have seen before (e.g. 'ing', 'ed')?
- **Syntactic checking.** Does the structure of the sentence read out make sense?
- **Semantic checking.** Does the meaning of the sentence read out make sense?

### Emotional support

Some dyslexic pupils excel during class discussions while other pupils with reading and spelling difficulties might not be prepared to try and give answers. These strategies are to help deal with emotional blocking (reluctance to work through a problem or answer a question)

- Encouraging risk taking e.g. "Have a go", "What's your best guess", modelling that it is okay to make mistakes
- Asking pupils to rate confidence that answer is known, asking for answer and then asking for rating again. Feedback if answers are correct to challenge low self-evaluation. E.g. you gave yourself 2/10 for being sure that was the right answer and your guess was right!
- Asking pupils to think of other examples where they have known the answer e.g. this is a bit like the problem with the sinking and floating… … what happened when I put the wood in water? How might that help us here?
- Class exploration of problems that have no 'right' answer to show that there are a range of possibilities.

Some pupils appear to give up and over-rely on adult support, waiting until the teacher or LSA is working with them before attempting things well within their capability. These strategies are to help in dealing with learned helplessness:

- Use of flow charts to take the child through routine procedures to increase the amount of time spent working independently from the teacher.

Pictograms and teaching how to use the chart will decrease reliance on reading instructions or on adult support.

- **Fade support in order to reduce the expectation that the adult will immediately provide help.** E.g. leave the child longer before providing input, while at the same time expressing an performance in class. How could the class teacher be helped to support expectation that they will successfully complete at least part of the task unaided?
- **Make use of forward chaining.** The child starts off the first few steps of the problem and the adult helps completion. Gradually increasing the number of steps that the child is asked to do, moves them towards greater independence.
- **Make use of backwards chaining.** The adult starts off the problem solving, leaving the child to complete the last few steps. As with forwards chaining, gradually increasing the number of steps that the child is asked to do, moving towards greater independence.

### Where now?

The teachers that I work with are committed professionals who want to do the best for the children that they teach. When they encounter a child who has difficulty learning, they want to find ways to adjust their teaching so that the child can cope better. The booklet of ideas used during this project has been re-written into a format that encourages teachers to engage in the process of self-reflection in a more structured way. It helps them to recognise what they can do already and how to extend their skills by trying out new strategies and by modifying what they do at the whole class level.

Using the booklet as a professional development tool encourages teachers to think about how to find out more to improve classroom practice. It is envisaged that they will identify key areas or strategies to develop further and this might involve:
• contacting members of the LEA support services (advisory teachers, SENSS, EP)
• working with a colleague who has some knowledge of the technique or strategy
• consider working with colleagues or other professionals as 'coaches' or 'mentors'

Having access to information about what is 'good practice' enables teachers to consider how best to meet pupils’ needs and this leads to an overall raising of standards for the pupils concerned. It helps to contribute towards an inclusive ethos of dyslexia friendly schools. As one teacher said, "Using these ideas has helped me recognise what I do already, it has given me some new ideas… …it has helped me feel more confident and it has helped my pupil be more confident in class".

References and further reading
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This article was produced as a result of a wider doctorate project: Squires, G. (2001) An evaluation of a booklet of ideas to support teachers in reflecting about the strategies used when teaching dyslexic children. Unpublished Doctorate Project, University of Manchester.