Supporting Children with Dyslexia

Strategies for Schools

Communication, Learning and Autism Support Service (CLASS)

ISEND
EXCELLENCE THROUGH INCLUSION
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Dyslexia

In East Sussex, we use the following definitions of dyslexia:

“Pupils with dyslexia have a marked and persistent difficulty in learning to read, write and spell, despite progress in other areas. Pupils may have poor reading, comprehension, handwriting and punctuation. They may also have difficulties in concentration and organisation and in remembering sequences of words. They mispronounce common words or reverse letters and sounds in words.”
(www.teachernet.gov.uk)

“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 a basis for a staged process of assessment through teaching.”
(British Psychological Society: Division of Education and Child Psychology, 1999)

Up to 10% of children may be on the dyslexic continuum, i.e. two to three in every class.

Characteristically children with dyslexia have problems with auditory and visual processing (see Glossary), as well as some of the following difficulties:

- Organisational problems
- Poor fine motor control
- Poor spoken and/or written language
- Poor concentration
When **reading** the following may be noticed:

- Hesitant and laboured reading
- Words/whole lines omitted or repeated
- Over reliance on one cueing system (see Glossary) e.g. context, phonics etc.
- Visually similar words/letters confused e.g. on/no, b/d.
- Difficulties reading multi-syllabic words
- Difficulty decoding shorter words
- The child may complain words look blurred or appear to move on the page.

During **written work** the following may be noticed:

- A disparity between what the child can write and their spoken language
- Untidy work and use of 'camouflage strategies' i.e. covering possible mistakes with poor handwriting
- Slow and laborious handwriting which may be extremely small or large
- Confusion between upper and lower case letters in writing
- Difficulties planning written work
- Difficulties copying from the interactive whiteboard
- Difficulty taking notes
- Poor spelling which is often difficult to read
These difficulties, especially poor spelling, can persist even when mechanical writing difficulties have been overcome.

If these difficulties are not identified and addressed at an early stage, children can become demotivated and their self-esteem and confidence can be damaged. Children who do not feel they are reaching their potential often become frustrated when they compare themselves with their peers. In some cases, this can lead to behavioural difficulties. The suggestions included in this pack should enable teachers to provide strategies to help children overcome and circumvent some of their difficulties.
**Features and Strategies**

Although this section is divided into Key Stages, many themes will apply to all children regardless of age.

**Key Stage 1**

Even at this stage early signs of dyslexia can be detected. These should be addressed as soon as possible in order to prevent the child losing self-confidence and becoming entrenched in their difficulties.

The following may be apparent:

- No interest in words or letters despite an obvious enjoyment of books
- Poor concentration and listening skills
- Difficulty in remembering instructions
- Speech delay or disorder
- Poor fine/gross motor skills
- Difficulty clapping syllables
- Difficulty hearing and reproducing rhyme
- Difficulty learning alphabet sounds and names
- Difficulty with sequencing, e.g. the alphabet, days of the week
- Difficulty blending and segmenting phonemes
- Difficulty learning words by sight
- Difficulty remembering shapes of letters and order to write them in
- Considerable difficulties learning to read
How to Help

- Value the child for what he/she can do, praise frequently wherever appropriate.
- Continue to develop the child’s interest in books through shared reading, discussion of content, encouraging the child to join in at certain sections, repetitive texts e.g. chanting with known parts.
- Provide repeated, clear instructions, checking the child understands.
- Expand the child’s sentences and model correct responses.
  - Provide triangular pencils or pencil grips to encourage correct grip when writing. Make sure writing implements are not blunt.
  - Encourage and model correct letter formation using tactile letters, ‘roll and write’ equipment, drawing in sand, drawing on white board and gel boards.
- Encourage the child to listen for syllables in words e.g. clapping syllables in each other’s names.
- Provide frequent opportunities to listen to and use rhyme e.g. poems, make rhyme books, make rhyming sentences (the fat cat sat on the mat) and illustrate them.
- Play lots of games where the child has to isolate the first sound in a word e.g. I spy.
- Teach picture links with alphabet sounds e.g. alphabet mats.
- Teach letter sounds and word building using multi-sensory techniques e.g. sight, sound, speech and touch.
- Use predictable texts that encourage re-reading and texts at an appropriate level for independent reading.
● Encourage the child to point to words in the text as they are read.
● Provide the child with a variety of interactive activities in order to help the child learn sight words e.g. motivation charts, adapted games such as Bingo.
● Interest and involve parents whenever possible, being aware that they too may have similar difficulties.

Key Stage 2

At Key Stage 2 difficulties with reading and spelling become more apparent. The child may be more self conscious about their literacy problems with consequent effects on motivation and behaviour.

Difficulties in Key Stage 1 may persist, in addition:
● Instructions may not be remembered or understood.
● The child dislikes reading and does not want to read.
● There may be an over-reliance on the use of one particular cue for reading e.g. they depend on context or always try to sound out words letter by letter.
● Words or whole lines may be omitted or repeated when reading
• Decoding or encoding multi-syllabic words cause difficulty.
  • Meaning may be missed when reading because of a lack of fluency.
  • There may be a disparity between what the child can write and their spoken language.
  • Spelling may be unusual/unrecognisable or phonic bound, with every word spelt as it sounds.
• Spelling rules prove very difficult to grasp and retain.
• There may be confusion between upper and lower case letters in writing, e.g. He is a Boy.
• There may be problems with reversal and orientation of letters and words e.g. b/d, was/saw, upper case B & D may be used to avoid this.
• Writing may be slow, untidy and sometimes indecipherable.
• Planning written work may be problematic.

How to Help
• Ask the child to repeat instructions to ensure they understand the task.
• Help with organisational skills by providing brief checklists and a visual timetable to remind the child about routine activities such as the layout of a piece of writing.
  • Provide books at an appropriate reading level and ensure regular reading and discussion time is available.
  • Involve the child in the selection of texts.
  • Avoid asking the child to read aloud unless they specifically volunteer, then keep the passage reasonably short.
• Provide the opportunity to warm-up the text prior to reading.
• Provide tools to aid a child to be able to follow a text, e.g. transparent reading markers.
• Discuss with the child what strategies can be used to decode unknown words. Encourage the use of a range of alternative strategies, not just one.
• Make sure the child has a clear view of the interactive whiteboard.
• Do not ask the child to copy from the board; provide them with a copy of the text on their desk.
• Teach highlighting techniques to promote location of information in text - key points etc.
• Allow and encourage use of ICT for writing using such programs as Clicker 6/7, Read/Write Gold and Communicate in Print.
• Use writing frames to aid organisation of information when writing.
• Encourage use of a variety of dyslexia friendly dictionaries to assist with spelling.

Key Stage 3

Difficulties encountered at primary school may persist into Key Stage 3. For example, there may be problems with reading, spelling, listening, planning, organisation, motivation and self-esteem. For Key Stage 3, please also refer to the section on Key Stage 2.

In addition, the organisation and structure of secondary education presents the young person with additional challenges.

Young people at this stage may have these difficulties:

• Following a daily timetable
• Organising books and equipment needed each day
• Recording and completing homework
• Note-taking - especially from spoken input or videos
• Writing quickly and copying from the board
• Writing notes etc which give an adequate record of work
• Revising from notes and organising themselves in exams

How to Help

Please also refer to KS2 when considering how to help the young person at this level as obviously there is a great deal of overlap.

• Encourage good use of a planner/homework diary with a timetable clearly set out possibly colour coded according to lesson). Clear notes and diagrams to show what equipment is required each day.
• Make sure the young person has recorded homework correctly. Possibly write homework in their book or provide work on clearly printed sheet. Read it through to them (or ask a peer to) before they take it home.
• Allow the young person to use alternative methods of recording: drawing, diagrams, photos, Dictaphone, using ICT e.g. Powerpoint, Clicker 6/7.
• Limit the amount of written work by allowing the use of a proforma, a chart or a writing frame.
• Provide sheets of key words for topic or have
them displayed around the classroom. In subjects such as science, label equipment clearly with visuals.

- Avoid marking all incorrect spellings but highlight one or two to concentrate on.

- Either provide revision sheets or help the young person to plan their own best methods for revision, e.g. using diagrams.

- Check that they have sufficient notes to make revision possible and if not photocopy ‘buddy’s’ work.

- Check to make sure the young person has understood instructions.

- Choose a suitable ‘buddy’ who can provide additional explanations.

- Allow the young person to use a computer wherever helpful and practicable, including for homework.
Supporting Literacy

Supporting Reading in the Classroom

- Ensure your child has a book he/she can read! Use the five finger test as a rough guide (no more than five errors on a page of text)

- Use reading records to make constructive comments about strengths and areas that need help and encouragement e.g. using initial letters

- Ensure the child attempts to use a balance of cues when reading and encourage the use of these at the appropriate time: picture cues, initial letters, meaning, reading on and back, use of syntax (grammar) and more advanced phonic knowledge when appropriate

- Be clear about what reading strategies should be used and provide explicit feedback including reasons why success has been achieved.
  “Well done! You re-read that sentence and managed to work out that word you didn’t know.”

- Provide opportunities for reading with an adult as often as possible. The child does not have to read all the text, it can be shared with an adult, e.g. teacher 2 paragraphs, child 1 paragraph

- Make sure reading level of support materials is appropriate and that presentation is clear and logical. The child may need to be taught techniques for reading the information, e.g. highlighting key words and main points either by teacher or the child
• Use buff/non-white background for information and worksheets

• Sit the child next to a “reading buddy” who can help them with reading when necessary

• Establish good home/school links and encourage parents to hear their child read. If this causes difficulties at home, help parents to work with their child in less stressful ways, e.g. via games
Reading and Comprehension for Information

Provide differentiated worksheets for varying ability levels, for non-readers it may be necessary to present information through pictures or charts plus a few key words. Alternatively children can select responses from lists provided (multiple choice).
If children do not understand what they have read, suggest the following:

- Read text aloud
- Break texts down into small, easily remembered pieces of information. This can be done with highlighting pens
- Highlight key words in both the questions and the text
- The skills of scanning and skimming texts are helpful for older children. They will need practice in this type of exercise.
- Write a summary of the text out in their own words
  - Make a mind map of the text. (A mind map is a non-linear, visual way of presenting information. Mind mapping involves taking the main ideas as lines from a central subject and then showing other points arising from these as branches from these lines)
- Convert information from text into pictures or cartoons
- Teach use of index and content pages
- Show how chapter and paragraph or section heading can be used
- Look for an overall summary.
Spelling and Writing in the Classroom

Children who are dyslexic have difficulty with spelling. They can have poor visual and/or auditory memories so they cannot remember what a word looks like or what it sounds like. Sometimes they cannot match phonemes with symbols, that is, they lack sound/symbol correspondence.

These are some of the strategies that children can be taught to help them spell:

- **Look Say Cover Write Check Say.** The child looks at the word, says the word aloud, covers it, writes it from memory and checks to see if it is correct. Finally the child says the word again.

- For young people who have a good knowledge of letter names and sounds, **Simultaneous Oral Spelling (SOS)** may be useful. The child reads the word, then writes it saying the names of the letters as s/he writes them, he/she then checks the word and if correct the process is repeated

- **Multi-sensory methods.** Both the above methods are multi-sensory, but there are other ways of utilising all the senses, e.g. tracing letters in the air, writing letters in sand, spelling words with plastic letters (sometimes with eyes shut) or using plastic letters to muddle and remake words

- **Mnemonics (cued spelling)** for common irregular words. Link this to a picture, get the child to draw and visualize it e.g. **big elephants can add up sums easily = because**

- **Syllabic division.** This encourages the child to tap number of syllables in the word to be spelt. Alternatively the word can be
written onto card and cut into syllables. Children find it easier to learn and remember words when they are divided into smaller units.

- **Saying words as they are spelt**, e.g. Wed/nes/day and Feb/ru/ary. This helps them include indistinct sounds.
- Looking for **words within words**, e.g. together :- to get her.
- **Common letter patterns**, e.g. sing, ring, wing.
- Limiting number of spellings to be learnt and allowing the child some involvement in their selection.
- Drawing the child’s attention to specific spelling errors, e.g. those words he has recently learnt or familiar letter strings. It is discouraging if all spelling mistakes are corrected. Ask the child to identify some of their errors.
- **Use of joined writing.**
- Discussion with the child how close his/her spelling attempts are to the required word. For example ‘cathc’ is close to ‘catch’.

Other ways to help include:

- **Use of labels and topic words with visuals in the classroom.**
- **Provide high frequency word lists and subject word lists with visuals on each table**
- **Use of either the ACE dictionary or simplified spelling dictionary.** The ACE dictionary provides a spelling aid and, in addition, improves phonological skills by focusing on syllable division and the significance of vowel sounds.
- **Use of speaking word processing packages**, e.g. Clicker 6, Communicate in Print, Read/Write Gold.
- **Use of spelling software such as Starspell and Wordshark.**
- **The CLASS generic spelling games pack** (available from CLASS – price on request.)
Getting Ideas and Planning Written Work

All children have individual learning styles. None of these suggestions will suit everyone. The important thing is to try and see which is successful for each individual. To help children with written work, teach and model the following:

- Plan work using mind maps, also known as cognitive maps, webs or spidergrams. (See section on Comprehension for more information about mind maps.)
- Children can also use writing frames or question and answer sheets
- Provide time indicators so that the children know how long should be spent on different parts of the assignment
- Use ‘Thought showers’ to encourage the child to think of all everything pertinent to a particular subject. Related points can be colour coded using a highlighter to assist paragraphing
- List key words/ideas in a logical order. Later on these can be grouped into meaningful paragraphs
- Encourage thinking about the questions Who…? What…? When…? Where…? and How…?
- Check that ideas are relevant to the subject
- Put ideas on index cards and place them in order. Once the correct sequence is established the cards can be numbered in case they get muddled
- Use writing frames with a logical first sentence for each paragraph. This will ensure that the written work answers the questions and makes it less likely that important points will be omitted.
Children may miss the main learning objective while struggling to keep up with writing tasks. By providing alternative methods of recording they can demonstrate their knowledge and understanding free from the stress involved in producing lengthy written work.

**Alternative methods of recording are:**

- Use of a Dictaphone
- Use pictures or cartoons with speech bubbles
- Graphs and tables
- Diagrams
- Use of a scribe
- Word processing
- Keyboard skills should be developed as a computer may enable children to work with greater speed and accuracy. There are specially adapted word processing programs that support those children who need help with planning, structuring sentences and choosing vocabulary. These are listed in the Computer Software section at the end of this section.

Provide short achievable tasks for class work and check the child is coping.
For non-readers, read back any written work they have dictated or recorded so that they can illustrate their work or use it as a basis for further activities.
Training in Essay Writing

Plan by
- Highlighting key words in question/title
- Understanding the different types of answer needed for:
  Describe… Compare… Contrast… Write an account… Write a report… etc
- Using thought shower or mind mapping techniques discussed in Planning Written Work section above
- Listing main points for each paragraph
- Discarding irrelevant material
- Setting out salient points in introduction
- Ensuring paragraphs follow logically
- Seeing that conclusion pulls essay together
- Proof reading: students need to be taught a routine for proof reading. It will help if they focus on one area at a time; for example first check for content and, especially in English, for the use of appropriate/interesting vocabulary, read again and then check the grammar and finally for spelling errors.

For further information on different teaching and learning styles and techniques see 'Barrier Busters' published by East Sussex, contact Communication, Learning and Autism Support Service, Tel: 01273 336887.
Organisation in the Classroom

Teachers need to understand the difficulties that children who are dyslexic experience in the classroom. In addition to problems with reading, writing and spelling they may have a limited auditory memory, poor organisational skills and low self-esteem. The following ideas may help the child who is dyslexic learn more effectively.

- Plans, lists, charts, memory aids and strategically placed visual timetables can help with organisation at home and at school
- Good use of a weekly planner or diary can ensure that homework is recorded and requirements for school, e.g. P.E. kit are listed
- Good communication with home is very important to help the organisational skills of the child, e.g. regularly checking homework diaries
- The child should be seated near the teacher and away from distractions
- Ensure the child has 'listened to' and 'heard' instructions by mentioning their name, questioning or alerting them to the fact that they may be asked to repeat instructions
- Ensure the child is facing the interactive whiteboard
- Writing on the interactive whiteboard needs to be clear and well spaced, read out loud and discussed. A buff-coloured background should be used
- Coloured markers are useful for key concepts, linking ideas, differentiating between instructions and information, etc.
- Copying from the board should be avoided. Provide the information on buff coloured paper, with symbols to support
- Mark sympathetically for content rather than presentation
- Everyday classroom equipment, e.g. scissors, need to be clearly labelled and easily accessible
- Personal possessions should be clearly marked
Study Skills

Due to difficulties with literacy and organisation, children with dyslexia will need training in study skills so they can access information and record work effectively.

All children have different learning styles and multi-sensory teaching at its best will cater for these differences.

For children with good aural skills allow them to listen attentively without the burden of taking notes. A written summary of the main points of your lesson may be needed for revision purposes before exams and tests. Alternatively ask permission to photocopy another child’s notes. A taped copy of the lesson would allow the child to listen at leisure.

For children who learn visually provide copies of diagrams and flow-chart. Encourage these children to record work using pictures, cartoons with speech bubbles, comic strips, diagrams, graphs and tables.

Children who benefit from the tactile approach need to be actively involved in the task. Those who learn best kinaesthetically need to make diagrams and drawings to reinforce aural input.

Role-play, debate and argument provide opportunities for those whose strength is oral presentation.
Memory Skills

Children with a poor auditory memory may find it difficult to cope with the amount of information they are required to retain, relating both to curriculum input and following instructions. Memory training and minimising the information that the children have to remember can help overcome this problem.

Teach children to develop memory skills by:

- Clearly establishing the purpose of the lesson and what has to be remembered
- Building on their existing knowledge
- Using multi-sensory teaching to facilitate their particular learning style
- Providing opportunities for them to practise and apply new knowledge
- Using memory tricks such as mnemonics and visual imaging ‘Picture this in your head….’
- Expanding memory by increasing amount of information the child has to remember slowly, gradually extend number of command carrying words when giving instructions
- Teacher repeating information, ensuring instructions are delivered in small steps
- Asking the child to repeat instructions
- Providing recorded information
- Showing children how to group information
- Providing prompts such as written headings
- Allowing extra time for absorbing and processing information (this has implications for children doing exams)
**Computer Skills**

**Keyboard Skills**  Children need good keyboard skills but the advantage of learning to touch type must be balanced against the length of time required to master this skill.

**Word Processing**  Some children with dyslexia find word processing liberates them from the frustrations involved in writing by hand and frees them to concentrate on content. Others may need to dictate their work so that they are released from the mechanical skills of writing or word processing. In either case proof reading is much simpler as additions, changes or deletions are easy to make on a computer and avoid the necessity of rewriting the whole text. Some word processing programs (see list of I. C. T. programs) help those who struggle with writing by providing word banks, writing frames, text prediction, mind maps or webs and a voice facility.

**Reading**  The elements of skimming (reading to get the overall meaning of the text) and scanning (reading to search for specific information) can be learnt through on-screen reading. By using the highlighting tool, children learn to focus on important information and ignore irrelevant parts of the text.

**Voice-activated software.** Voice activated software is considered to be more suitable for older children. There are various programs available, which enable students to dictate directly on to the computer screen. However many programs have proved difficult to set up and involve 'training' the computer to recognise the child’s voice. Background noise in classrooms has also proved problematical. Research is ongoing.
## ICT Programs to use with Children who have Dyslexia/Literacy Difficulties

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<tr>
<th>Program</th>
<th>Keystage</th>
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<tr>
<td><strong>Clicker 6/7</strong></td>
<td>✓</td>
<td><a href="http://www.cricksoft.com">www.cricksoft.com</a></td>
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<tr>
<td>• Built-in talking word processor and prediction tool</td>
<td>✓</td>
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<tr>
<td>• Write with pictures as well as text</td>
<td>✓</td>
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<tr>
<td>• Personalised alphabetical wordlists</td>
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<tr>
<td>• Easy point and click access to words, letters, pictures, sounds and the web</td>
<td>✓</td>
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<td><strong>Clicker 7</strong></td>
<td>✓</td>
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<tr>
<td>New features including more ‘child-friendly’ voices and Clicker Boards which are planning and mind-mapping tools.</td>
<td>✓</td>
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<tr>
<td><strong>WriteOnLine</strong></td>
<td>✓</td>
<td><a href="http://www.cricksoft.com">www.cricksoft.com</a></td>
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<tr>
<td>• Rapid point and click access to any number of words or phrases</td>
<td>✓</td>
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<tr>
<td>• Built in word predictor</td>
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<tr>
<td>• Includes latest speech software</td>
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<tr>
<td>• Includes mind mapping tool which then converts to linear format for planning, or wordbar for spelling support</td>
<td>✓</td>
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<tr>
<td>• On line access allows pupils to access from home</td>
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<tr>
<td>• Suitable for secondary children</td>
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**Penfriend**
A talking predictive typer. It works alongside your word processor (including Clicker) and tries to guess the word you are typing when you have entered the first letter, the second letter and so on. The whole word can then be clicked into your text.

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<th><a href="http://www.penfriend.biz">www.penfriend.biz</a></th>
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**Read & Write Gold**
Works from package you are using, e.g. Word
- Reads any text from screen (including pdf files)
- High quality voices
- Speaking Thesaurus
- Spellchecker
- Mind mapping tool
- Contextual word prediction
- Includes a number of higher order study applications

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<th><a href="http://www.texthelp.com">www.texthelp.com</a></th>
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<th>Read &amp; Write Gold</th>
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**Dragon Naturally Speaking**
Dragon speech recognition software is helping to enhance the educational process for students and teachers alike. It has been shown to improve core reading and writing skills for students of all abilities, including those with physical or language-based learning disabilities as well as English Language Learners. Dragon lets students dictate papers and assignments three times faster than typing — with up to 99% accuracy

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<th><a href="http://www.nuance.com">www.nuance.com</a></th>
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<tr>
<td><strong>Communicate: In Print 2</strong></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Communicate: In Print 2 is a desktop publishing program for creating symbol-supported resources for printing. It is an excellent tool for anyone wanting to make accessible materials for their school, home, business or community.</td>
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<tr>
<th><strong>Communicate: Symwriter</strong></th>
<th>✓</th>
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<th><a href="http://www.widgit.com">www.widgit.com</a></th>
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<tr>
<td>Communicate: SymWriter is a symbol-supported word processor that any writer, regardless of literacy levels, can use to author documents. Writers of any age or ability can use the Widgit Symbols to see the meaning of words as they type, supporting access to new or challenging vocabulary.</td>
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<th><strong>Communicate: Ideas</strong></th>
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<td>Communicate: Ideas combines the visual tool of mind mapping with the support of Widgit Symbols, giving users the power to organise different kinds of information, regardless of their difficulties with language and learning. Communicate: Ideas lets you brainstorm concepts, words and ideas on a page. You then simply drag and drop to link them together and get the flow of a conversation or document started.</td>
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**Communicate : Webwide**  
An online service which allows users to access widgit symbols on websites of their choice making it easier for them to access internet information.  
Webwide is an on-line service from Widgit’s own servers. The symbols and much of the processing takes place not on your machine, but on the server. This enables Widgit to continually add new symbols, vocabulary and features to the program which are then immediately available.

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**Virtual Reading Ruler**  
The Virtual Reading Ruler works just like an ordinary reading ruler, removing the screen glare and stabilising the print on any area of the page. Customised colour ways are available. At the same time it can mark the specific line or paragraph being read. It can be used with any application - including the internet - and moves with the mouse. Different line settings can create a wide variety of opaque blocks, "windows", or underlines, and the different size options ensure that differing on-screen needs are met (e.g full screen width for spreadsheets; half-screen for emails etc).

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**Inspiration9**  
For visual development and communication of ideas and plans. Mind-map on screen, using colours, pictures and text. One key stroke turns ideas into linear mode using Word. Designed for secondary and F.E./H.E. students.

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<td><strong>Kidspiration3</strong></td>
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<td>Using visual thinking methodologies, Kidspiration provides a cross-curricular visual workspace for KS2 learners. Pupils combine pictures, text, numbers and spoken words to develop vocabulary, word recognition, reading for comprehension, writing and critical thinking skills. Kidspiration works the way pupils think and learn and the way teachers teach. As pupils make visual connections, they build fundamental skills in reading, writing, maths and science. Kidspiration offers activities in all curriculum areas, so pupils use visual learning naturally and confidently.</td>
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### Progress With Quest
The programme introduces all the consonants in the alphabet, short vowels, blends, digraphs and high frequency words from the Letters and Sounds Programme to enable successful mastery of early literacy skills.
The programme is structured into 3 sections and takes students on a journey through history - Dinosaur Quest, Ice Age Quest and Stone Age Quest. On completion of all the tasks in each Quest there is a challenge to complete. Once achieved children are able to unlock the shield and move onto the next Quest.

| ✔  | ✔  | www.progresswithquest.com |

### Starspell 3
Easy to use and popular with pupils, Starspell simply corrects any mistake and the pupil tries again. Starspell has a comprehensive and progressive approach to spelling. Every word is *spoken*, and has a *sentence* in context. Adding your own lists is easy. Specially designed games and worksheets reinforce learning. For Windows XP up to Windows 7. The phonics section is especially useful for whole class use with the interactive whiteboard, but also for early spellers following a structured program of phonics development.

| ✔  | ✔  | ✔  | www.fishermarriott.com |
## Wordshark 5
Wordshark uses 55 specially designed games to teach and to reinforce reading and spelling using 9,000 pre-recorded words grouped in specially selected word lists. You can also add your own words. The numerous permutations of games and word lists create both variety and motivation.
Wordshark includes a high quality phonics approach to reading based on 'Letters and Sounds'. Different games include blending sounds into words for reading and also segmenting into sounds and syllables for spelling. All common letter patterns and auditory patterns are covered, also spelling rules, homophones, alphabet and dictionary skills.

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## Nessy
Fun, educational software to help pupils with reading and spelling, both at school and at home.
Number of different games to motivate pupils and practise key skills.

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## Powered by Clicker
A range of resources designed to work with Clicker 5 or 6, including:
- Clicker Phonics
- Read and Write About
- Clicker MFL
- Trackers
- Planet Wobble

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| **Rapid** | ✔ | ✔ | www.pearsonschoolsandf
| Rapid Reading contains reading books for one-to-one reading, speech recognition software for independent practice, benchmark assessment books and teaching guides. It is designed for use by SEN and struggling readers at KS2. | | ecolleges.co.uk |
| **Oxford Reading Tree Talking Stories** | ✔ | ✔ | www.oup.com/oxed/prim
| Animated versions of the O.R.T. stories. Different stages available. Stories read with human voices. Words highlight as story is read. User can click on individual words. | | ary/oxfordreadingtree/
| | | resources/ORTtalking/ |
**Intervention Programmes for Children with Dyslexia**

A wide range of programmes, designed to teach children with dyslexia, is available from many sources. They may be suitable for certain children and many are available for viewing through CLASS. Some of those available to look at are:

**ALPHA TO OMEGA** - published by Heinemann Education

**BEAT DYSLEXIA** - supplied by LDA.

**BLITZ** - published by Blitz.

**BULLSEYE** - contact CLASS for availability and prices

**CATCH UP PROJECT** - published by Oxford Brookes University

**LAUNCH INTO READING SUCCESS** - published by The Psychological Corporation

**PAT (Phonological Awareness Training)**
Educational Psychology Publishing, University College London

**PLR (Personalised Learning for Reading)** - created by CLASS

**THRASS** - published by Collins Educational

**TOE BY TOE** - Authors, Keda and Harry Cowling - Better Books
Speech, Language and Communication Needs

Speech, language and communication needs are a feature central to and common across many areas of special educational need, including dyslexia. In these cases, speech, language and communication needs are secondary to the primary condition; however they can impact hugely on the development of literacy skills, particularly the development of phonological awareness. Although children with underlying speech and language difficulties may appear to know their letter sounds, this may conceal a difficulty in manipulating and processing the sounds when reading. It is important to note that an early difficulty in articulating speech sounds may also affect phonological development and lead to subsequent problems with reading.

Indicators of a speech and language difficulty:

Phonological Difficulties (awareness, storage and use of sounds in words)
- Poorly established sound system (ability to link written letter to spoken sound)
- Difficulty with blending letter sounds
- Difficulty in processing and segmenting the sounds in words for spelling

Expressive Language Difficulties
- Difficulties with word order
- Difficulties with word retrieval
- Difficulties using correct grammar, e.g. tenses and plurals
- Difficulty organising and sequencing ideas in written work
- Restricted expressive vocabulary

Receptive Language Difficulties
- Difficulty processing meaning of text
- Difficulty processing and understanding instructions
- Difficulty understanding complex sentences (spoken or written)
- Restricted receptive vocabulary

**Ways to help:**

**Phonological Difficulties**
- Assess current level of phonological awareness and establish areas to teach
- Use actions, signs and picture cues to support learning of letter sounds
- Help children to blend sounds by:
  - modelling the blending and segmenting process
  - Providing visual prompts, e.g. letter cards, magnetic letters and writing
  - Teaching phonemic segmentation skills, e.g. syllable clapping, division into onset and rime and phoneme deletion exercises
  - Verbally rehearse the phoneme sequence for spelling

**Expressive Language Difficulties**
- For word finding difficulties teach strategies for word retrieval, e.g.
  - phonological cues (initial sound, rhyming word)
  - semantic cues (e.g. what category, what does it look like, what is it used for)
- Pre-teach new vocabulary in advance.
- Display words with pictures/symbols in the classroom to aid recall.
- Encourage oral rehearsal and peer discussion
- Teach narrative skills
- Allow time for child to process language and respond
For word order, grammar and sequencing difficulties
- Use picture sequencing cards
- Teach mind mapping skills
- Consider colour coding different parts of speech
- Model back correct response
- Extend language by modelling back

Receptive Language Difficulties
For difficulties with word meaning
- Repeat instructions, keep language simple
- Check for understanding
- Encourage children to ask if they do not understand
- Teach new vocabulary and concepts if necessary use
- Use real objects to touch, taste, smell, hear
- Use photos/pictures/symbols to support vocabulary

For difficulties understanding long complex sentences
- Teach good attention and listening behaviours
- Give instructions one at a time
- Speak in short sentences
- Give time to process verbal information

For difficulty remembering what has been said, such as information or instructions
- Use pictures, signs, symbols to reinforce speech in lessons
- Encourage children to visualise what they have to remember
- Encourage verbal rehearsal of instructions, i.e. children repeat what they have to do
- Play games, e.g. 'I went to market and bought...'

- For difficulty with comprehension
  - Avoid instructions and language that require inference, be explicit
  - Develop reading for meaning alongside reading accuracy
  - Provide co-operative activities for a group, these could be art or oral work as well as written tasks
  - Children draw pictures of a sequence of events and place in chronological order
  - Encourage prediction for both story listening and reading
  - Explain idioms and metaphors

**A Communication Friendly Classroom**

Above all, it is important that the classroom environment is supportive of children with speech, language and communication needs. A communication friendly environment enables children to develop their social, emotional and academic potential by reducing or removing barriers to communication. Surroundings that eliminate or minimise barriers to the sending and receiving of information, successfully enable children to develop their academic, social and emotional potential.

A communication friendly classroom enables better access to the curriculum for all children, including children with dyslexia.
Mathematics In The Classroom

Children may have problems with:
- Short term memory
- Organisation skills
- Fine motor control
- Spoken and written language
- Concentration
- Self-esteem and consequent lack of confidence
- Writing (oral skills may be better)
- Presenting work
- Handwriting
- Working quickly so tasks remain unfinished

The child will respond positively to:
- The same structured sequential, multi-sensory teaching methods that are applied to reading and spelling
- Clearly defined, achievable targets which are used to guide a small steps learning programme
- Principles previously outlined, that is:
  - Positive reinforcement
  - Clarity of exposition by the teacher
  - Use of games to consolidate learning
  - Help with organisation skills
  - Provision of notes and exercises to obviate unnecessary copying from the board
  - Need for concrete experiences and verbalisation before introducing abstract concepts
Problems Affecting Dyslexics

- Children who are dyslexic appear to have poor short-term memory. This means they may:
  - Be unable to recall facts such as number bonds and tables
  - Forget which symbol they should be using
  - Forget which process they are using

- Difficulties with organisation and planning lead to:
  - General untidiness and poor presentation of work; this is particularly important in computation work where numbers have to be ’lined up’ correctly for operations involving place value

- Difficulty identifying mathematical problems. This difficulty can be compounded if the problem is presented in written form and the child has to read as well as identify the task

- Sequencing difficulties lead to problems with number reversals and number order and consequent misunderstanding regarding place value and decimal points

- A particular learning style might not suit every child. It may be necessary to adapt teaching style and strategies to the needs of the child

- Language difficulties can cause confusion with mathematical terminology

- Problems seeing patterns and relationships
How To Help

- Use National Numeracy Strategy Vocabulary Book to introduce and explain the language of numeracy
- Discuss symbols such as + - x = aloud so the child is familiar with the language and is confident about the processes. It may be necessary to highlight the symbol to draw attention to the function.
- A visual representation in the form of the symbol encircled by all the synonyms will help children understand the process. Thus an addition sign would be in the centre of a circle with words like 'add', 'plus', 'total', 'sum of', 'and', 'more than', 'increase' and 'addition' round the edge
- **Tables** present a particular problem for children with short-term memory. To utilise visual strengths use squared paper to provide a graphical representation of tables. Children can colour in tables using a 10x10 number square. This will show the pattern created by each table. Those more receptive to auditory input can use tables tapes. If necessary, provide tables squares up to 10x10 including the naught times table. There are 121 facts to be learnt, reduce these by using some of the following strategies:
  - Learn the naught, one and 10 times table
  - Learn the five and ten times table as these are easy to remember
  - The nine times table can be taught through patterns. If children learn the commutative property unknown facts are halved
  - Utilise the child’s existing knowledge. For example if the sum is 9x8, the child may know 10x8 is 80 so 9x8 is 80-8
  - Dienes blocks or Cuisenaire rods provide a visual way of 'building up' tables.
• Children with organisational problems have difficulty with planning and setting out work. At the early stages of computation, children should be encouraged to use mental counting strategies. As they progress to larger numbers and more sophisticated mental methods they will record some of the intermediate steps using informal pencil and paper notes. This will lead to the use of more formal methods of recording calculations. The strong emphasis on mental calculation, rather than the formal layout of sums, during the early years will allow children who are dyslexic to build up basic skills in number without the burden of setting out and writing each process.

• For some children written mathematical tasks will present two difficulties, reading the question and then identifying the problem. It is important to separate out the linguistic component and deal with it explicitly. Children need to understand mathematical symbols and terms before they can analyse and solve the problem. Present the question with the minimum amount of writing, if necessary provide taped questions or a reader. Discuss the problem with the children and ask them what the question is asking them to do. Decide which symbols are required, e.g. + or x. Read numbers aloud. When numbers are copied provide some means, such as a piece of card, to isolate those numbers. Ensure that copied numbers are checked carefully against the original.

• Children with sequencing problems often write numbers the wrong way round. A number line from 0 to 10 on the desk or classroom wall will provide a useful reference. The use of tactile numbers, so the children can feel and talk about direction and shape, will help others. Some children find it
helpful to know that the numerals 2, 3, 4, 5 (if the vertical line is drawn first), 6 and 7 always start in the top, left corner of a square

- **Children who order numbers wrongly** (eg. 39 instead of 93) need to have a thorough understanding of place value. Dienes apparatus with squares for 100s, rods for 10s and little cubes for units provide a concrete, visual experience of number. There are various games with number cards to reinforce this concept. Blank and written number lines are also very helpful. Children can be encouraged to say the number as they write it down. Provide practice at writing dictated numbers and arrow cards to reinforce place value

- **Some children who are dyslexic will work out their own strategies for doing calculations involving the four rules. Provided these are viable they should be encouraged to use the method that suits them best rather than conform to a set procedure**

- **Teaching has to meet the demands of different cognitive processes.** There are those children that prefer to follow formulae for solving problems; that is they are method orientated. There are those who adopt a more holistic approach; they take an overview of the problem and adjust their procedures until they find the answer. Dyslexics, with the additional difficulties involved with rote learning, short-term memory and sequencing, will find it difficult to learn basic facts and methods. They, therefore, need to access both learning styles

- **Dyslexics often have difficulty with language** and find it difficult to learn through the medium of verbal instruction. It is necessary to translate the procedure into a visual and concrete form, and allow the child to talk about what s/he is doing. Verbal labelling alongside the kinaesthetic and visual experience will give meaning to the mathematical language
and make the concept permanent. Much practice and over-learning ensures the language and procedure is understood and well established. It is helpful if new problems are solved in a physical way through manipulation. Verbal labelling is reinforced if language runs alongside the manipulating and visual process. In other words abstract terms have to be linked with concrete experiences. Numicon apparatus provides a visual representation of numbers and enables children to explore the relationship between numbers. Numicon is a strong, multi-sensory teaching tool which helps the transfer from visual, concrete experiences to abstract thought

- **Children who are dyslexic** often have problems seeing patterns and relationships. However patterns can be used to simplify problems and they provide a logical progression and take the child forward to new concepts and facts. For example there are various ways of working out 9+4 but, if the child learns that 9 is 1 less than 10, and then establishes the pattern for adding 10 and then deducts one, s/he has learnt to calculate a series of facts. From those facts the child can generalise to produce a rule, which will apply to any number, added to 9. Patterns provide structure and organisation, reduce the load on memory, and help understanding and the development of concepts

- **They lack confidence in estimating numbers.** Allow for plenty of practice starting with easy numbers. Explain the importance of estimation. Present, diagrammatically, the meaning of decimal place and significant figures

- **Fractions** can be very challenging because of the language associated with fractions: improper, vulgar, denominator etc. Once children have established the basic concept of a fraction and can do simple operations with $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{3}$ teach them to
use a calculator. Use concrete examples to demonstrate fractions, working with string or cutting apples etc. Establish basic rules, e.g. a ¼ means dividing by 4. Relate fractions to real life situations. Use computer games that demonstrate visually the process

- Some children find it hard to grasp the concept of percentages. Discuss the symbol and what it means; that is divide by 100. Provide lots of practice so the children can find percentages and convert back into numbers. Relate 50%, 25% and 75% to fractions. Use 100 square to relate decimals, fractions and percentages

- Dyslexics often have a poor concept of time. Use digital numbers when possible because, with modern technology, children are good with digital displays. Provide a chart showing months with the number of days in each month. Let the children manipulate the hands on cardboard clocks and provide practice at reading them. Use T.V. programme, time tables and cooking as a focus of interest. Use time lines

- Ratio, the associated language and its relation to fractions are another area of difficulty. Discuss abbreviations, language and symbols. Present information visually

- The term algebra and the use of symbols appear threatening. Tasks must be broken into very small steps. Use balances to demonstrate equivalence. Teach basic conventions, for example letters or letters and numbers close together means multiply.
**Glossary**

**Analogy**  Perception of similarity between two things. In spelling and reading using a known word to spell or read other words that have the same letter pattern, e.g. knowledge of 'night' may enable the child to spell/read 'fright' or 'sight'.

**Attribution**  The ability to attribute achievement to one’s own efforts. Characteristically dyslexics attribute success to luck rather than skill on their part. They need to be aware of the problem solving skills they apply to reading and writing and told when they are successful.

**Auditory Discrimination**  The detection of sounds in phonemes, syllables and words. Children with poor auditory discrimination will have difficulty distinguishing sounds, recognising rhyme, identifying syllables and blending phonemes to make words. They will have difficulty using phonics to read and spell. These skills will need to be explicitly taught.

**Auditory Memory**  The ability to recall a sequence of sounds. Children with poor auditory memory have difficulty building up words and learning sounds. Additional time and overlearning will be needed to help acquire these skills.

**Blending**  The joining of phonemes to make words, e.g. 'c-a-t' to make 'cat' or 'cr-a-sh' to read 'crash'.

**Cue**  'a source of information. In reading, children may use contextual, grammatical, graphic and phonological cues to work out unfamiliar words.
**Idioms** are words, phrases, or expressions that cannot be taken literally. In other words, when used in everyday language, they have a meaning other than the basic one you would find in the dictionary. Every language has its own idioms. Learning them makes understanding and using a language a lot easier and more fun!

For example, “break a leg” is a common idiom.

**Literal meaning:** I command you to break a bone in your leg and you should probably go to the doctor afterwards to get it fixed.

**Idiomatic meaning:** Do your best and do well. Often, actors tell each other to “break a leg” before they go out on stage to perform.

**Laterality** Refers to right or left dominance, for example the hand used for writing or cutting, the foot used for kicking a ball and eye preference. Some children do not have a dominant side, for example they may be right handed but kick with the left foot. This is called 'Cross Laterality'.

**Metalinguistic awareness** The ability to reflect on and talk about language.

**Metaphor** is when you compare two things without using 'like' or 'is' e.g. Her eyes are jewels sparkling in the sun.

**Miscue Analysis** A method of assessing reading by examining errors.

**Multi-Sensory Learning** This technique uses visual, auditory and kinaesthetic inputs, i.e. the combined use of sight, sound, speech and touch, to help children read and spell. The approach
is very structured with opportunities for reinforcement. The child learns to handle a small number of sounds and symbols before moving onto the next stage. He/she work from the known to the unknown by building on his/her existing knowledge.

**Onset** (As in onset and rime) The consonant or consonant cluster at the beginning of most words, e.g. 'dog' or 'string'.

**Phonological Awareness** An awareness of sounds in words. A child who has difficulties with phonological awareness may find it difficult to identify rhyme and make analogies, clap syllables, identify phonemes within words, segment words into onset and rhyme.

**Reading cues** These are the strategies children use to help them read unfamiliar words. Early readers may use pictures, sound the initial letter or remember repetitive text. Older readers may segment words into phonemes, use analogy, reread sentence to predict unknown word, apply the rules of grammar and read on to access full sentence meaning. The N.L Strategy demonstrates this by the searchlight model.

**Rime** In single syllable words the remainder of the word after the initial consonant or consonant cluster, e.g. fox, stop or fright.

**Segment** To break a word down into its component phonemes.

**Spatial Awareness** The ability to orientate oneself or objects in relation to others. A child with poor spatial awareness may reverse letters or numbers, confuse left and right and have problems following directions or reading maps.
**Visual Discrimination**  The ability to detect similarities and differences between visual patterns. A child with poor visual discrimination will confuse words that look similar, e.g. 'from' and 'form' and confuse similar looking letters e.g. b/d/p.

**Visual Memory**  The ability to recall a visual image. A child with a poor visual memory will find it difficult to learn sight words, find it difficult to copy from the board and may spell a word in several different ways in the same piece of work, e.g. 'like' spelt 'lik', 'lic', 'lick' or 'liak'.
Where to Contact the Communication, Learning and Autism Support Service

Communication, Learning and Autism Support Service
County Hall
Lewes
BN7 1UE

Tel: 01273 336887
E-mail: class@eastsussex.gov.uk