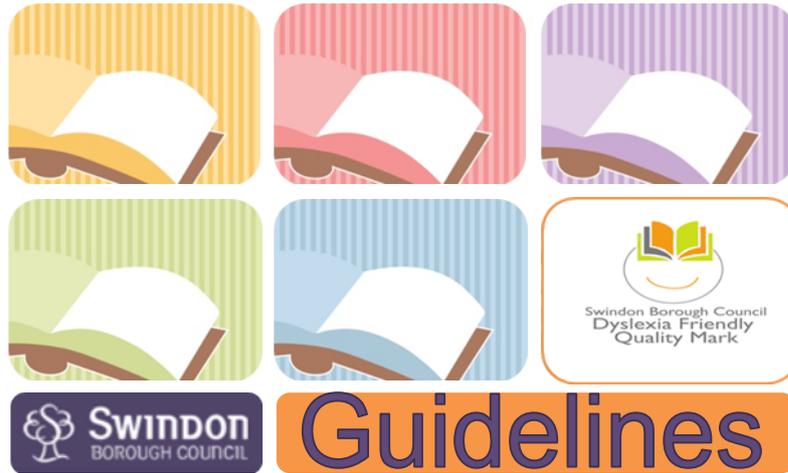


# Dyslexia Friendly Schools



### Section 3

Supporting Children:

B) Reading

## General Advice for Supporting Reading.

Check the reading age of all reading material.

Get into the habit of checking the readability of all material.

Provide reading books that have a high interest level but appropriate reading age: for example, a range of 'audio books' designed for dyslexic readers are available at:

[www.youngcalibre.org.uk](http://www.youngcalibre.org.uk)

Use Buddy Readers (peers or adults).

Encourage "paired reading".

Use dyslexia friendly fonts and worksheets.

Write clearly on the whiteboard and set it to a pastel background.

Use a different colour for each line: this helps pupils with tracking difficulties keep their place.

Experiment with plastic coloured overlays (to alleviate possible symptoms of visual stress).

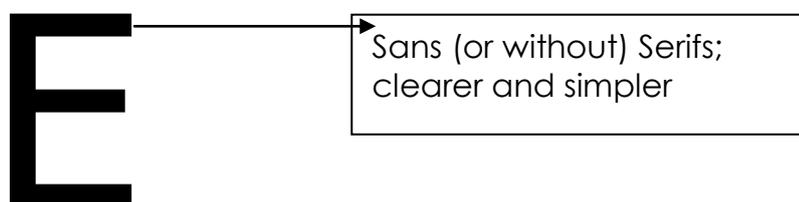
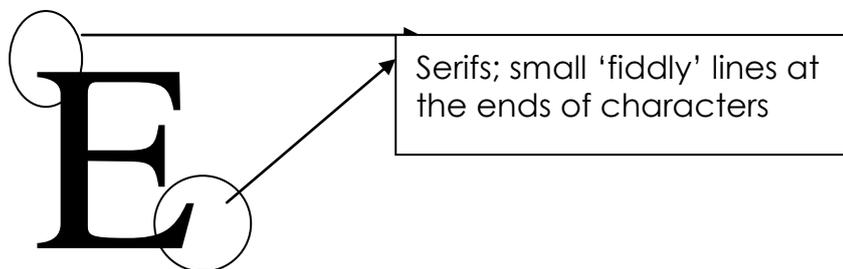
## Dyslexia Friendly Worksheets.

Use cream or buff paper to avoid glare.

Avoid cluttering the page.

Ensure clipart or other images support the text, not distract from it.

Use a DF font that avoids 'serifs':



- Times New Roman, commonly used, is not particularly easy to read for people with dyslexia.
- Others are even more difficult!
- **Comic sans is very friendly, and works well for children.**
- Century Gothic also works well and, like Comic Sans, avoids the confusion between **ɑ** and a.
- Tahoma is a simple font yet looks more professional than Comic Sans. It could be used for newsletters or school correspondence (remember, parents may experience dyslexia, too!)
- Swindon Borough Council officially uses Arial as another simple font.

Use a suitable size; 14 pt is ideal for most children but some children may require larger.

## Text.

Less is more!

Pare down the text to short, punchy points

Use 1.5 or double line spacing.

Do not fully justify text: the elongated spaces between words that often result make text difficult to read.

Split up the text into meaningful chunks, using headings and subheadings

Clarify instructions in dyslexia friendly terms

- State = write down
- Describe = write about
- Calculate = work out

Use **colour** to highlight key points, rather than italics or underlining

Use simple, literal sentences: words with double-meanings can be particularly confusing

Avoid metaphors and colloquialisms for important information

Single out and explain key vocabulary. Point out spelling patterns and link to technical vocabulary and glossaries

Supporting Reading  
using ICT:

## Symbolised Word processors.

Pupils and students can be helped to read by symbolising text. Words are illustrated with pictures (symbols) above or below.

In the case of pupils and students with very low reading skills it may be appropriate to symbolise all or most words for them.

With pupils and students with some reading skills only the more complicated or subject specific words may be symbolised.

Examples:

- Clicker (Crick): Restricted number of symbols.
- Communicate in Print (Widgit) Comprehension symbol set.
- Communicate SymWriter (Widgit) Comprehension symbol set.

Both Clicker and Communicate: SymWriter are grid programs. Clicker can be set up so it can use the symbol set from either Widgit program.

### Text readers

Supporting Reading  
using ICT:

## Text Readers

Programs to support writing often have a text reading facility but in some programs the text has to be copied and pasted into the program.

The more sophisticated programs will read text when it is clicked.

- Clicker (Copy + Paste)
- Communicate in Print (Copy + Paste)
- Communicate SymWriter (Copy + Paste)
- Textease Publisher (Textease) (Copy + Paste)
- Write OnLine (Crick) (Copy + Paste)

(Write Online is a web-based programme that has a text reading facility)

Other programs that will read text (as the pupil or student types) include:

- Write Outloud (Don Johnston) (Copy + Paste)
- Text Help Read and Write (TextHelp) (highlight + click on icon)
- ClaroRead (Claro Software) (highlight + click on icon)

Free downloads are also available from the Internet:

- Wordtalk (works in Microsoft Word)
- ReadPlease (Copy + Paste)
- SayzMe (Copy + Paste)

Supporting Reading  
using ICT:

**Talking Books**

Examples include:

- Planet Wobble, Find Out and Read About (Crick)
- Rapid reading scheme (Heinemann)
- Oxford Reading Tree, Naughty Stories, Ridiculous Rhymes (Sherston)
- Storycraft (BBC)
- The Children's Directory (Dorling Kindersley). This is interactive with pictures, sounds and animation.
- Reading pens: The Reading pen (iANSYST) scans and reads text from a built in speaker and can give definitions if needed.

Supporting Reading  
using ICT:

**Phonological  
Awareness.**

Examples of software that works on phoneme sequencing, discrimination and segmentation are:

- Earobics (Level 1 and 2) (Earobics).
- Phonomena (Mind Weavers).

## Visual Difficulties during Reading.

If visual difficulties are apparent, there are several courses of action:

- Check with the pupil or parents whether their eyes have been tested recently.
- If there is a history of difficulties, also check whether the pupil's eyes have been examined by an **Orthoptist** (These assess for visual difficulties concerning the movement and focusing of the eyes).
- Explore whether the pupil can read more easily when work is presented on different coloured paper or when using coloured acetates.
- Present text on buff coloured paper, or on a preferred coloured paper for those known to be experiencing visual difficulties.
- If a pupil seems to benefit from these aids, plan to administer the Wilkins Intuitive Overlay Testing Pack (see resources section).
- This could be followed with the Wilkins Rate of Reading Test to formally assess the benefits (These tests are open to optometrists, orthoptists, psychologists and teachers etc. If this is performed, make the information readily available to others).
- If visual difficulties seem pronounced, a referral to the orthoptists at the Great Western Hospital may be warranted (more information on identifying possible visual difficulties is contained within section 2, part A "Recognising Dyslexia").

## Visual Difficulties: Making a Referral to the Orthoptist.

Any pupil can be referred, preferably over the age of **7 years and 6 months**.

The Orthoptists reside at the Dunlop Test Clinic within Great Western Hospital; it is important that any referral letter makes direct reference to this.

The Dunlop Test checks whether a reference eye has been established, typically around the age above. Until this time, the brain will try to interpret information from both eyes rather than allowing the reference eye to override when visual information is conflicting. Lack of a reference eye is thought to impact on difficulties such as letter reversals in reading.

Referrals can be made by the:

- Family Doctor.
- School Doctor or Nurse.
- Educational Psychologist.
- SpLD team (countersigned by an EP).

If the SENCo would like information on the test outcome, it is advisable to refer via education professionals, school Doctor or school Nurse.

## Supporting Comprehension Difficulties.

In the simple view of reading <sup>1</sup>, pupils need to recognise words (by shapes or by sounding them out) and then put these words together in verbal memory to form meaningful sentences.

Pupils who struggle with comprehension are likely to be those with a poor verbal memory or limited vocabulary, but they may also be confused by:

- Words with multiple meanings, homophones and homographs (“there was a tear in her dress and a tear in her eye”).
- Metaphors, similes and idioms.
- Even puns, jokes and riddles.

Therefore, interpretation of text or making inferences will also present challenges. Fortunately, pupils’ comprehension skills can be improved with direct teaching of simple techniques. These include:

- Asking pertinent questions when reading (e.g. true or false, same or different?)
- Familiarising the reader with the text.
- Ordering the events in a text.
- Reading aloud, or reciting key passages.
- Increasing fluency (with increasing comprehension as a result).
- Word play.

The following suggestions utilise these ideas for better comprehension.

Pupils answer text-based questions generated by:

- Discussion (in pairs and groups).
- Teachers.
- Written tasks.
- Cloze exercises.

## Supporting Comprehension: Questioning.

Supporting  
Comprehension:  
**Reciprocal  
Teaching.**

In this method, a teacher models, scaffolds and shapes the four steps below, withdrawing support as necessary until the pupil takes over the teacher role.

- Summarising (and paraphrasing the main ideas of the text).
- Questioning (asking a few open questions that 'sum up' these ideas).
- Clarifying (ironing out misconceptions and inaccuracies; breakdowns in comprehension).
- Predicting (hypothesising and asking, "What will happen next?" questions).

Reciprocal teaching works well for a variety of texts but needs to be repeated and practised frequently. For best results, 12 to 20 sessions over a period of 3 to 8 weeks are necessary for most pupils.

Supporting  
Comprehension:  
**Survey,  
Question, Read,  
Recite, Review  
(SQ3R).**

This is suitable for older pupils and could form the basis of revision for GCSE examinations. A simplified version may still work well for younger pupils.

**Survey:** the material is looked over as an advance-organiser. Pupils skim the text, perhaps to pick out key ideas or vocabulary. This may include predictions.

**Question:** the pupil sets a few questions. Headings, for example, could be turned into open questions that are considered as the passage unfolds.

**Read:** the content is read slowly and carefully, with thought given to the open questions formulated above. It is also important to make connections with prior knowledge.

**Recite:** during this step the pupil answers the self-posed questions, perhaps aloud. If relevant questions have been asked, the material should become more meaningful.

**Review:** finally, a review is based around very difficult-to-answer questions, for a full understanding. This may necessitate re-reading of the text.

Supporting  
Comprehension:  
**Reading Aloud.**

Some Psychologists believe the cause of literacy difficulty results from an 'indistinct' inner voice when reading or spelling. By reading aloud and listening carefully, the pupil 'internalises' their own voice slowly over time. Comprehension may be improved as a result.

As the pupil becomes more proficient at reading, encourage them to read aloud to:

- Parents.
- TAs.
- Adult volunteers.

## Improving Fluency.

Given that a reading speed above 90 words per minute may be necessary for efficient comprehension and dyslexic readers develop fluency much later than typical peers, strategies that address fluency directly could improve comprehension. For example:

- Reading and re-reading of text (to increase familiarity).
- Paired reading (unfamiliar words are read by the partner).
- Structured reading interventions (they often contain exercises to increase reading speed, as well as embedding the above habits).
- Passionate interest reading (more time is spent 'practising' exciting material).

## Word Playing to Strengths.

The holistic, big picture and creative thinking strengths are discussed in the section on learning styles. Use this attribute to 'play' with words in multi-sensory ways.

When studying a play, act it out. This is multi-sensory by its very nature, and facilitates comprehension (for most pupils) compared to solely reading text.

When reading a novel, ask the pupil to illustrate the story in a storyboard or draw pictures of characters (using actual and inferred information from the text).

Draw timelines in History to understand the sequence of events. This can be annotated as desired.

Discuss turns of phrase, jokes, puns, interesting vocabulary and how it is used. Encourage the pupils to use them in their own work.

Exploit interests again. Most pupils report text easier to understand when it is something that they really enjoy. Consider exciting materials to teach key concepts.

## Time Constraints.

Pupils who struggle to understand text will need more time. They may re-read the same sentence over again, for example, and will certainly be disadvantaged if text has to be understood quickly.

- Think about allocated times for classwork tasks.
- Examination performance also requires consideration. Arrange an assessment for Access Arrangements, which will include a timed test of reading and comprehension (See section 2, part D, "Access Arrangements").

# Readability, Sentence Length, Facilitating Comprehension, Legibility, Interest and Motivation of the Reader

## Readability.

Ensure readable text by addressing the following:

## Readability: Sentence Length.

50% of readers will get lost if a sentence exceeds 14 words <sup>2</sup>  
80% will get lost if it exceeds 20 <sup>2</sup>

## Readability: Facilitating Comprehension.

Consider carefully the use of:

- Problematic vocabulary
  - Long, complex words
  - Abstract adverbs (usually, utterly)
  - Names
  - Idioms or metaphors (his face fell)
  - Words with multiple meanings
- Complex structures (passives, multiple phrases, inversions)
- Alterations to time sequences (e.g. flashbacks)
- The need for inference

## Readability: Legibility.

Think about:

- Print size
- Font type
- An uncluttered layout
- Relevant pictorial support can aid readability (see "Dyslexia Friendly Worksheets" for more guidance)

## Readability: Interest and Motivation of the Reader.

- Pupils may persevere with high interest materials
- Barrington Stoke, for example, publish high interest books for teenagers with controlled reading levels. Available at:

[www.barringtonstoke.co.uk](http://www.barringtonstoke.co.uk)

Although intended for adult texts, the National Institute of Adult Continuing Education 'Readability' project has produced a user-friendly guide. It can be downloaded free from:

<http://www.niace.org.uk/development-research/readability>

- Listen to the pupil read the text aloud
  - 95% accuracy represents a minimum to establish comprehension
  - 95% is equivalent to "less than 1 in 20 words wrong"
  - Verbal questioning will determine a pupil's understanding of the text.
- The five-finger method
  - Open the book towards the middle
  - Ask the pupil to read, holding up a finger of one hand for each unfamiliar word
  - If the pupil runs out of fingers before the end of the page, the book is probably too difficult
- Cloze procedure
  - Blank out every 5th word
  - Ask the pupil to read
  - Check comprehension by questioning
  - If comprehension is poor, the book is probably too difficult

The following three methods only take into account a relatively small number of the 'readability' factors explained above.

The reading age so calculated represents a 'floor level' for that text. A reader with that reading age may only be able to achieve a 50% level of comprehension.

## Informal Methods for Gauging Reading Levels.

## Finding Reading Levels.

# Finding Reading Levels, SMOG Index, Fog Index, Fry Readability Graph

Used with caution, they provide a quick way of gauging the reading age of a text.

Finding Reading Levels:

## SMOG Index.

Simplified Measure of Gobbledegook, (McLaughlin, 1967)

- Select thirty consecutive sentences.
- Count the number of words which contain three or more syllables.
- Find the square root of this number. (If the total is 95 the nearest perfect square is 100, round up rather than down).
- Add 8 to achieve the readability age.

Check the readability of electronic worksheets by using the free SMOG calculator, available at:

<http://www.niace.org.uk/misc/SMOG-calculator/smogcalc.php#>

Finding Reading Levels:

## FOG Index.

Named after its inventor, Robert Gunning Fog, the FOG index is more suitable for Key Stages 3/4.

- Use a piece of text of approximately 150 words.
- Calculate the average number of words per sentence (A).
- Count the number of words with 3 or more syllables and express them as a percentage of 150 words (B).
- Add A+B together and divide by 2.5.

FOG Readability from Inclusive Technology will automatically calculate the reading level of texts. Available at:

[www.inclusive.co.uk](http://www.inclusive.co.uk)

Finding Reading Levels:

## FRY Readability Graph.

Useful across the age range, details can be found at:

[www.timetabler.com/reading.html](http://www.timetabler.com/reading.html).

- 1 Gough, P.B., Tunmer, W.E., (1986). Decoding, reading and reading disability. *Remedial and Special Education*, 7, pp.6-10.
- 2 SNIP, (2001). *Scottish Council research into books for dyslexic teenagers*.