Section 2
Identifying Children:

A) Recognising Dyslexia
What is Dyslexia?, Phonological Awareness

The definition being adopted by the local authority follows from the Rose Report, “Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties”, DCSF, 2009.

- **Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling.**

- Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed.

- **Dyslexia occurs across the range of intellectual abilities.**

- It is best thought of as a continuum, not a distinct category, and there are no clear cut-off points.

- Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia.

- A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well founded intervention.

**Phonological Awareness** is the awareness of how letters or letter groups (graphemes) relate to sounds (phonemes).

Through early reading and schooling, pupils develop their knowledge of grapheme to phoneme correspondences necessary for sounding out unfamiliar words. A pupil with poor phonological awareness would be uncertain that the word *cat*, for example, contained three phonemes.

Phonological awareness may not be necessary for fluent reading but it is certainly essential for early reading, and for ‘decoding’ new words. Pupils with poor phonological awareness are also likely to find spelling challenging.
Verbal Memory, Verbal Processing Speed

Increasing a pupil’s knowledge of word sounds and how those sounds relate to letters underpins many phonic reading interventions.

**Verbal memory** (in the Rose Report) is often known as *phonological short-term memory* and is that part of memory called upon to remember verbal information such as strings of digits in a telephone number, or strings of items in a shopping list.

Poor verbal memory may impact upon a pupil’s ability to recall new spellings, written or spoken vocabulary. Instructions will also be difficult to follow and planning of work may be affected.

**Verbal Processing Speed** when reading, relates to the efficiency in which a pupil processes or retrieves phonological information from long-term memory; for example, the sounds associated with individual letters, letter pairs or even ‘chunks’ of words. The speed with which this is performed will obviously determine reading fluency.

A pupil with slow verbal processing speed may read slowly and hesitantly, or stop using phonological cues altogether (reading with a visual, whole-word strategy).

Rapid Naming tests, in which pupils name letters, colours or objects as quickly as possible, are traditionally used to measure verbal processing speed. They may be particularly useful with younger readers in identifying early problems.
Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia.

The Rose Review acknowledges that other difficulties seem to co-occur with dyslexia, within the areas of:

- Language: e.g. understanding or following instructions.
- Motor-co-ordination: e.g. difficulty pronouncing long words, clumsiness, gross or fine motor skills (including eye ‘tracking’).
- Mental calculation: e.g. difficulty with multi-step maths problems, times tables.
- Concentration: e.g. inability to focus, poor attention span, easily distracted.
- Personal organisation: e.g. poor concept of time, remembering homework.
- Personal factors: e.g. poor self-esteem, lack of independence.

While these may not be ‘markers’ of dyslexia, they obviously help determine whether dyslexia may be a likely cause of the pupil’s difficulties. In some cases, formal identification of dyslexia may be beneficial with a greater understanding of the pupil’s difficulties as a result.

More important, however, is consideration of the above to address the pupil’s needs, personalise their learning and intervene.

The current focus of thinking around dyslexia places it firmly in the phonological domain. However, it is widely acknowledged that many children have subtle visual difficulties that may hinder acquisition of literacy skills.

These difficulties are clarified as follows by Chris Singleton in his report, “Intervention for Dyslexia, Executive Summary” (May 2009).
Dyslexia is sometimes confused with visual stress, especially where the erroneous term ‘visual dyslexia’ is used. Visual stress is the subjective experience of unpleasant visual symptoms when reading and can be a cause of special educational needs. The theory of visual stress that has the most empirical support is that the condition results from a general over-excitation of the visual cortex due to hyper-sensitivity to contrast or pattern glare. This theory does not presuppose any neurological link between dyslexia and visual stress. However, recent studies indicate that visual stress is more prevalent in people with dyslexia than in the rest of the population, which is probably because visual sensitivity is heightened as a result of the dyslexic’s poor reading strategies, thus exacerbating visual stress reactions.

Because of the adverse reaction to reading, visual stress prevents individuals reading for sustained periods, hinders fluency and comprehension and may put certain pupils off reading altogether.

The symptoms of visual stress can often be alleviated with coloured overlays but it is important to note that coloured overlays are not a cure for the difficulties caused by dyslexia. However, the increased prevalence of visual stress within the dyslexic population makes the use of overlays worth considering.

Finally, some pupils may experience visual difficulties as a result of their eyes working inefficiently together. Such issues may be alleviated by exercises prescribed by an Orthoptist.

Look for the following:

- Poor attainments in literacy.
- Poor performances on visual tasks (in lessons, tests and standardised assessments).
- Pupil reports visual distortions of text; text moves, blurs or shifts.
- Tracking issues; pupils may lose their place in text often, skip lines or questions when working.
- Persistent problems with reversals of letters and numbers.
- Beneficial effects of using buff or coloured paper.
- An improved reading efficiency or speed with an overlay.
Recognising Typical Indicators of Dyslexia, Recognising Indicators of Dyslexia by Considering Strengths

How visual stress affects reading, writing, spelling and maths is further outlined in the tables at the end of this section.

Staff working with pupils on a daily basis are in an ideal position to recognise common indicators of dyslexia. These are the ‘early warning signs’ as a pupil carries out classwork tasks.

It is unlikely that a pupil will experience every single difficulty and observing any combination in a pupil does not necessarily make them dyslexic. It is more useful to look for patterns of difficulties and how they can be supported. Many useful strategies are contained within the “Supporting” section.

**Strength-based learning** is the keystone of dyslexia-friendly, inclusive teaching. While all pupils are individuals, many believe those with dyslexia share typical strengths brought about by a shared thinking style.

Therefore, an equally useful way of recognising dyslexia is by looking for this way of thinking and working.

**Strengths** may include:

- ‘Big picture’ thinking, holistic way of working:
  - Solves some problems easily
  - Can see the way forward
  - Good lateral and strategic thinking

- Verbal skills:
  - Expressive
  - Poetic
  - Verbally able

- ‘Out of the box’, creative thinking:
  - Imaginative
  - Good ideas and suggestions
  - Artistic flair
• Visual thinking style, good visualisation leading to skill in:
  o Sport
  o Design and construction
  o Computing
  o Business

• Keen senses

• Sociable
# Recognising Indicators of Dyslexia within Reading

## Area of reading concern: Typical indicators:

### Phonological awareness
- Lack of awareness of which sound goes with which symbol
- Difficulties with auditory discrimination of sounds
- Difficulties with phoneme manipulation, blending and segmenting
- Difficulties with speech production, spoonerisms
- Poor word attack skills, so:
  - Relies on context or picture clues
  - Reads with a visual, whole word strategy (may have good comprehension as a result)
  - Guesses at words or ends of sentences
  - Trawls through visual memory when confronted by an unfamiliar word, rather than trying to decode it

### Verbal memory
- Difficulty holding a series of information in the head. Problems with:
  - The order of phonemes in a word
  - Sounding out
  - Blending
  - New words
  - Remembering lists and instructions
- Poor comprehension, “word by word” reading
- Poor recall of plot, characters etc.
- New information is difficult to acquire
- Cannot follow lesson, opts out
- Short attention span

### Verbal processing speed
- Slow, hesitant reading
- Slow response to instructions
- Needs more thinking time

### Visual difficulties (including visual stress)
- Sensitivity to white, reflective surfaces
- Pupil may report blurring, shifting or moving of text
Recognising Indicators of Dyslexia within Reading

- Confusions between similar letters and numbers
  - B for d, p for d
  - P for q
  - 2 for 5
  - Symbols: + for x

- Slow, hesitant reading
- Breaks down words laboriously
- Poor comprehension, “word by word” reading
- Poor visual discrimination for words, misses detail such as word endings, substitutes similar-looking words for unknowns, smile for simile
- Difficulties with letter sequences, reading blot for bolt
- Later letters in a word may interfere with earlier ones,
- Spatial problems on a page
- Tracking issues: missing out words and lines, loses place in text, uses finger to follow text
- Rubs eyes frequently, eyes water, eye strain
- Complains of headaches

<table>
<thead>
<tr>
<th>Motor processing issues</th>
<th>Sequencing issues</th>
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<tbody>
<tr>
<td>- Difficulties with speech production when reading out loud</td>
<td>- Ordering phonemes in words</td>
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<td>- Puts book to one side or other when reading (difficulty crossing midline)</td>
<td>- Learning the alphabet</td>
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<tr>
<td>- Stammering (speech is a motor function)</td>
<td>- Sequencing ideas (in spoken and written language), stepfoots for footsteps</td>
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<td>- Spoonerisms</td>
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Recognising Indicators of Dyslexia within Writing and Spelling

<table>
<thead>
<tr>
<th>Area of writing / spelling concern:</th>
<th>Typical indicators:</th>
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| **Phonological awareness**         | • Poor spelling in general  
• Sounds in a word are misheard or mis-sequenced, *asertlutly* for absolutely, *hospital* for hospital  
• Bizarre spellings in the extreme, *dedshen* for destination, *bod* for brown  
• Cannot guess at new spellings |
| **Verbal memory**                  | • Poor spelling  
• New spellings are difficult to acquire  
• Planning work is challenging  
• Sequencing or re-ordering ideas is problematic  
• Inability to follow a dictation  
• Cannot follow lesson, opts out  
• Short attention span |
| **Verbal processing speed**        | • Low volume of written work  
• Needs more thinking time  
• Needs more planning time  
• Poor at expressing ideas for writing tasks |
| **Visual difficulties (including visual stress)** | • Sensitivity to white, reflective surfaces  
• Confusions between similar letters and numbers  
  
  $B$ for $d$, $p$ for $d$  
  $P$ for $q$  
  $2$ for $5$  
  Symbols: $+$ for $x$  
• Slow, hesitant spelling and writing  
• Low volume of written work  
• Poor visual discrimination for words, misses detail such as word endings  
• Rubs eyes often, complains of headaches etc. |
| **Motor processing issues**        | • Difficulties with handwriting:  
  
  o Poorly formed letters or immature handwriting  
  o Very large or very small writing  
  o Very slow writing speed  
  o Mixture of scripts or cases |
Recognising Indicators of Dyslexia within Writing and Spelling

- Older pupil does not write cursively
- Untidy writing
- Irregular slope
- Problems keeping to lines
- Poor placement of writing (varies in position on the page)

- Perseveration, when patterns of letters are repeated unintentionally e.g.
  - Rememember for remember
  - Machinne for machine

- Telescoping, when patterns of letters are left out, e.g.
  - Rember for remember
  - Beging for beginning

- Pupils experiencing these difficulties may complain that, “their hand does not do what their brain tells it to!”
- Excessive handgrip: hand tires after short period of time, complains of hand cramps etc.
- Low volume of written work
- Unintentionally writes one word for another or omits letters from familiar words: the for they, becuse for because
- Puts paper to one side or other, or at an unusual angle (difficulty crossing midline)

<table>
<thead>
<tr>
<th>Sequencing issues</th>
<th>Planning problems</th>
<th>Crossing out, scribbling</th>
<th>Evidence of re-ordering sentences</th>
</tr>
</thead>
</table>

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<tr>
<th>Other</th>
<th>Restricting written expression by:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>o Simple sentences that do not reflect verbal ability</td>
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<td></td>
<td>o Repeating parts of the same sentence over and over</td>
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<td>o Using ‘safe’ vocabulary; altering sentence to avoid difficult words</td>
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### Recognising Indicators of Dyslexia within Maths

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<thead>
<tr>
<th>Area of maths concern:</th>
<th>Typical indicators:</th>
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| Reading and language  | • Maths vocabulary can be confusing, particularly words with other meanings e.g. *average*, *mean*, *breadth*, *take away*, *degree*  
  • Word-retrieval difficulties  
  • Poor comprehension and understanding of problem |
| Verbal memory         | • Difficulty with:  
  o Mental arithmetic  
  o Lists of instructions  
  o Steps of a problem  
  o Remembering number facts, number bonds and times tables  
  o Telling the time  
  o Maps and directions  
  o Using formulae  
  • Takes little part in lesson, opts out  
  • Short attention span |
| Verbal processing speed| • Slow recall of number facts  
  • Slow recall of specific vocabulary and meanings  
  • Needs more thinking time  
  • Following and using formulae is difficult |
| Visual difficulties (including visual stress) | • General (see reading)  
  • Confusions between similar letters and numbers  
  
  2 for 5  
  Symbols: + for x, < or >  
  • Directionality of maths problems can be difficult for those with visual stress  
  • Losing place in text book, copying wrong question or different parts of a question by mistake |
| Motor processing issues| • Difficulties with handwriting maths problems:  
  o Poorly formed letters and numbers  
  o Very slow working speed |
<table>
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<tr>
<th>Recognising Indicators of Dyslexia within Maths</th>
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<tbody>
<tr>
<td>• <strong>Untidy work that is difficult to follow</strong></td>
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<tr>
<td>• <strong>Notes are useless</strong></td>
</tr>
<tr>
<td>• <strong>Perseveration (repeating patterns) of numbers unintentionally:</strong></td>
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<tr>
<td>• 123 + 456 becomes 123 + 123 + 123 + 456</td>
</tr>
<tr>
<td>• <strong>Telescoping (omitting numbers unintentionally)</strong></td>
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<tr>
<td>• 123 + 456 becomes 13 + 46</td>
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**Sequencing issues**

- **Difficulty with:**
  - Sequences of instructions
  - Following formal maths procedures, e.g. long multiplication
  - Days of week, months, seasons
  - Ordering time using language: before, after, first, last
  - Number sequences
  - Times tables
  - Crossing out, scribbling, work is poorly ordered

**Time**

- Poor awareness of time
- Confusion with alternative ways of recording time, e.g. **ten to nine** is 8:50pm or 20:50, quarter past, quarter to
- Ordering time: before, after, first, last
Recognising Indicators of Dyslexia using other Considerations

<table>
<thead>
<tr>
<th>Area of other concern</th>
<th>Typical indicators:</th>
</tr>
</thead>
</table>
| **Puzzling Pupil**    | • Underachieving in many subjects but verbally very able and expressive  
                        • Inconsistent performance, good and bad days |
| **Verbal memory**     | • Forgets work from one lesson to the next  
                        • Seems to benefit from pre-tutoring and over-learning  
                        • Takes little part in lesson, opts out  
                        • Short attention span |
| **Verbal processing speed** | • Slow to complete class work despite having lots of ideas in the first instance |
| **Motor processing issues** | • Difficulties with balance e.g. riding a bike  
                                • Difficulties with co-ordination  
                                o Trouble with shoe-laces, zips and buttons  
                                o Difficulty using knife and fork, scissors etc.  
                                o Poor at catching a ball  
                                o Slow at getting dressed for/after PE |
| **Left and Right**    | • Left and right confusions  
                        • Mixed left/right preference |
| **Behaviour**         | • Talk rather than chalk!  
                        • Typical avoidance behaviour, opts out, wanders around room, sharpens pencil etc.  
                        • The ‘need to move’: restlessness or fidgeting |
| **Time**              | • Punctuality may be an issue  
                        • Poor awareness regarding the passing of time |