**Welcome to the conference**

"Reading – from the simple to the difficult…"

**About me:**

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**Outline:**

- The simple view of reading: types of reader.
- Reading difficulty: dyslexia.
- How we identify dyslexia.
- Reading as a process – how do we read?

**Simple view of reading:**

Dyslexia is a learning difference characterised by widely-acknowledged strengths in: holistic (big picture) thinking; spatial skills; 3-D visualisation; lateral thinking; and problem solving skills.

Dyslexia is evident when accurate and fluent reading and/or spelling develops very incompletely or with great difficulty.

Difficulties persist at the ‘word level’ (i.e. the reading and spelling of individual words) despite appropriate educational opportunities and well-founded intervention.

**SpLD - Dyslexia:**
Dyslexia can occur across pupils of all abilities. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Co-occurring difficulties may be seen in aspects of language, motor coordination, mental calculation, concentration and personal organisation, but these are not by themselves markers of dyslexia.

**SpLD - Dyslexia:**

1. Phonological skills
2. Verbal memory
3. Verbal processing speed

**Acknowledged strengths +**

Difficulty with the three main ‘markers’:

1) Phonological skills
2) Verbal memory
3) Verbal processing speed

AND co-occurring difficulties.

**Dyslexia - summary:**

**Phonological Awareness**
- Phoneme deletion
- Blending words
- Reading non-words

**Non-words are novel, phonetically regular words that can only be read by ‘sounding out’ – ‘Alien words’**
Phonological awareness:

Verbal memory:
- Repeating lists of digits (digit span)
- Repeating non-words

Information processing account:

The limit of working memory
"The Magical Number: 7±2"
(Miller, 1956)
Verbal processing speed
• RAN tasks (Rapid Automatised Naming)
• Rapid retrieval of verbal information such as letters and digits (Denckla and Rudel, 1974)

Verbal processing:

Spoonerisms:

Motor-co-ordination: e.g. difficulty pronouncing long words, clumsiness, gross or fine motor skills (including eye ‘tracking’).
Concentration: e.g. inability to focus, poor attention span, easily distracted.

Co-occurring difficulties:

Meares-Irlen Syndrome
(Olive Meares – Helen Irlen)

Pattern-induced visual stress
Scotopic Sensitivity

Visual stress: common terms
From the Rose Report (2009):

Visual stress is a term used to describe the experience of eye strain, difficulty in focusing, headaches, and illusions of colour or movement in written text...

From "Intervention for Dyslexia", executive summary, Singleton, 2009

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...

From the Rose Report (2009):

Visual stress has sometimes been referred to as 'visual dyslexia', but there is no evidence supporting a causal link between visual stress and dyslexia."
Key points at this stage:

- **Visual Stress is not dyslexia.**
- There is no evidence of a causal link between them.
- Those assessing for dyslexia should always refer to vision professionals, to rule out possible visual difficulties (e.g. refractive error, oculomotor issues, visual sensory issues).
- Dyslexia assessors need to be aware of visual issues, but not diagnose them!

**Visual stress: key points**

Further reading from the dyslexia sector:

- [https://www.sasc.org.uk/](https://www.sasc.org.uk/)

**Simple view of reading:**

Two routes depending on regularity + familiarity (or frequency) of words

(Coltheart, Curtis, Atkins & Haller, 1993)

**Dual route reading model:**
Are you ready to put this to the test?

Dual route reading model:

**Pneumonoultramicroscopicsilicovolcanoconiosis**

19 syllables – I think!

Dual route reading model:

**Supercalifragilisticexpialidocious**

14 syllables – God bless you Mary Poppins!

Language, eyes and ears:

Thank you for listening: