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Phonics: what does the research tell us?

Dr Sharon McMurray MBE

Principal Lecturer in Education
Stranmillis University College, Belfast



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Phonics must involve more than phoneme-to-grapheme correspondence and reading must involve more than phonics. There is evidence spanning 35 years.



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Transparent orthographies

- **Goulandris, N. (Ed) (2003)** Dyslexia in different languages
- **Frith, 2014** <https://youtu.be/uWebAzGfRcs>

Orthographic knowledge

- **Goswami, U. (1986)** Analogies and learning to read
- **Stanovich, K. (1988), Reitsma, P. (1989), Breznitz, Z. (2006)** Children with dyslexia have difficulty with automatic word recognition due to difficulties establishing unitised orthographic patterns
- **Bowers, P.G and Wolf, M. (1993)** Triple deficit hypothesis in phonological, naming speed and orthographic skills

Visual word recognition

- **John Stein's** research on visual learning
- **Cornelissen, P.L. & Singleton, C. (Eds) (2007)** Visual Factors in Reading

Working memory

- **Gathercole & Alloway (2008); Alloway (2011); Alloway & Alloway (2015)** (Books on working memory)



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Phonics teaching at orthographic levels is essential for children who have orthographic processing difficulties and/or working memory difficulties



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There is now robust research evidence of the importance of teaching phonics at orthographic levels as well as alphabetic level not only for reading but also spelling.

- **McMurray (2004)** Ph.D research ($p=0.0001$; effect size 1.19)
- **McMurray et al (2015)** SEN Literacy Research in 60 primary schools in N. Ireland
- **McMurray (ongoing)** Analysis of spelling errors in independent writing samples of children with dyslexic-type difficulties

- **Phonics at 3 orthographic levels Involves:**
 1. **onset and rime patterns** (such as best, west, test, rest)
 2. **syllables** (such as in/ter/est/ing)
 3. **irregular words** (such as the, eye, are, yacht, queue)

- Phonics at alphabetic level involves:
 - **letter (grapheme) to sound (phoneme)** correspondence which breaks words into the smallest units of sound, e.g. the word 'stand' has 5 phonemes (sounds) s/t/a/n/d.



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A significant minority of children cannot learn to read and spell when the primary or sole approach to teaching phonics is systematic synthetic phonics (SSP)

This is because although synthetic phonics is an excellent strategy, when used as the primary method for teaching reading, SSP can severely impede or prevent the development of orthographic knowledge for a significant minority of children

The whole language approach to teaching reading also failed a significant minority of children because gains made were not sustained.

We now know that SSP, unlike the whole language approach, can be learned so well that it can have a negative impact on literacy development which unfortunately is sustained.

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Phonics teaching must include phonics at orthographic levels



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- Some children are insensitive to orthographic patterns and cannot pick this knowledge up from their reading experience. Orthographic phonics at onset and rime level must be explicitly taught.
- Children who do not have orthographic processing difficulties acquire this orthographic knowledge implicitly from their reading experience.
- Orthographic knowledge is essential for spelling development, sight word recognition and reading fluency.
- Orthographic knowledge involves knowing if a word looks right.
- Orthographic processing difficulties cannot be picked up preschool, in reception or year 1 because children have limited experience of print.



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Evidence from samples of independent writing written by children with dyslexic-type literacy difficulties

Examination of over 300 samples of independent writing written by 7-9 year old children prior to the pandemic.



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- This research provides extensive evidence that SSP alone prevents the development of orthographic knowledge preventing reading fluency and causing spelling difficulties.
- For children with dyslexia SSP is a significant contributor to reading failure because of the focus on taking each sound in turn, all through the word, which embeds the difficulties children with dyslexia have establishing unitised orthographic patterns.
- The DfE 2021 core criteria prohibits the teaching of onset and rime and leaves the DfE vulnerable to claims for compensation from children who experience failure because they have been denied access to alternative teaching approaches that can meet their needs.
- Furthermore, SSP to date has created a fog that makes it difficult to identify children who are truly dyslexic.
- The DfE advise teachers to give credit if children spell a word with letters that represent the phonemes but the wrong letters are selected. This is not progress, it is a warning signal that the child is not picking up orthographic knowledge from their reading experience and should be treated as a signal that there has been neglect in teaching orthographic onset and rime patterns at an early enough stage.

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Reading research 2000-2002

Simultaneous interconnected processing and memory capacity model



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2000-2002 The HRP Research and development project was conducted in a school for children with moderate learning difficulties (MLD) (n=200, 4-11 year olds)

18 children with MLD and severe literacy difficulties aged between 7-11 years

Findings:

- There is no logographic stage in learning to read. Children do not recognise a word by its overall shape.
- Children require activities to develop their awareness of the sequence of letters in a word.
- This visual recognition of the sequence of letters in a word, linked to the word's meaning and usage, precedes the development of phoneme-to-grapheme correspondence.
- Phoneme-to-grapheme correspondence can only develop when children have some sight words in memory which they can anchor this alphabetic knowledge to.

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2021 Phonics programmes core criteria



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1. This criteria discriminates against children who have working memory difficulties

Teach children to read printed words by identifying and blending (synthesising) individual phonemes, from left to right all through the word

2. This criteria discriminates against children who have orthographic processing difficulties

The focus should be on phonemes [footnote 2] , and not on 'consonant clusters' (/s+/p+/l/ not /spl/) or 'onset and rime' (/c+/a+/t/ not c-at, m-at, b-at).

3. This criteria demonstrates misunderstanding of what sight word recognition involves

It should not include lists of high frequency words or any other words for children to learn as **whole shapes** 'by sight'.

Parents seeking evidence for their claim for compensation for their child's lack of progress need look no further than the core criteria for phonics programmes published on the 1st April 2021.

<https://www.gov.uk/government/publications/phonics-teaching-materials-core-criteria-and-self-assessment/validation-of-systematic-synthetic-phonics-programmes-supporting-documentation>

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More of the same will not meet the needs of children who are failing



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The 2021 core criteria states that *children who are at risk of falling behind need extra practice to consolidate and master the content of the programme. Programmes should provide guidance on how to support these children so that they keep up with their peers. Options for support could include 1 to 1 tutoring. They should not suggest or provide a different SSP programme for these children.*

This statement and points 1 and 2 on the previous slide may constitute evidence of active discrimination against children who cannot learn in this way because they have specific learning difficulties.

It must also be recognized that there are now children experiencing difficulties that may not be arising from specific processing difficulties, but arise from the SSP narrow focus which neglects other essential components of literacy development. This means that children cannot access the full range of strategies because, not only have they not been taught, but teachers have been told to actively discourage their use and to repeat the SSP method.

To mitigate against potential claims for *discrimination* or *indirect discrimination* the DfE needs to review its current position.

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