What Science and Experience Tells Us About Reading and Reading Instruction

- Learning to speak is a natural process but learning to read is not.
- A competent reader should be able to read and understand what he or she can talk about and understand.
- To be a reader in the full sense is dependent upon two main processes:
 i) the ability to *decode the words* [What ARE the words?]
 ii) the *language comprehension* to understand the words that have been decoded [What do the words MEAN?]
 This can be illustrated by the 'Simple View of Reading' diagram:
 - http://www.phonicsinternational.com/The Simple View of Reading model.pdf
- Scientific evidence from the past half-century confirms that the most effective approach for teachers to teach
 reading (and spelling) includes direct instruction in the 'Five Pillars of Literacy':
 http://www.nichd.nih.gov/research/supported/Pages/nrp.aspx/
- 1) **Phonemic awareness** (awareness of the 44 smallest sounds, or phonemes, identifiable in English speech most effectively taught alongside print)
- 2) **Phonics** (includes teaching the letters and letter formation of the 'alphabet', and systematically teaching knowledge of the 'alphabetic code', that is, the 170+ letters and letter groups which represent the 44 sounds, alongside the phonics skills of blending all-through-the-word for decoding/reading; and segmenting all-through-the-spoken-word, then allotting letters and letter groups, for encoding/spelling)
- 3) **Vocabulary** (new words explicitly taught to enrich spoken language)
- 4) **Fluency** (ample reading practice and repeated reading)
- 5) **Comprehension** (including specific techniques for comprehension of literature)

Parents can provide the best support for their children by routinely engaging them in high-quality conversations and by sharing experiences of a wide range of books (read to the children and talk about the nature of the books and their contents).

• All readers need to know and understand the 'alphabetic principle' but English writing consists of the most complex alphabetic code in the world and so it is best taught explicitly and systematically: http://alphabeticcodecharts.com/One side ACC with IPA symbols.pdf

'It cannot be left to chance, or for children to ferret out, on their own, how the alphabetic code works.' (*Independent Review of the Teaching of Early Reading*, Sir Jim Rose, March 2006): http://webarchive.nationalarchives.gov.uk/20130401151715/http://education.gov.uk/publications/eorderingdownload/0201-2006pdf-en-01.pdf

• Teachers need to know and understand the **Systematic Synthetic Phonics Teaching Principles**: http://www.rrf.org.uk/pdf/Final-03 The Synthetic Phonics Teaching Principles%2011-2-10.pdf

Plan the teaching based on a **Teaching and Learning Cycle**: http://www.phonicsinternational.com/Reflecting%20on%20the%20Teaching%20and%20Learning%20Cycle.pdf

- Teachers should be aware of the dangers of teaching children to read using multi-cueing reading strategies which
 amount to guessing words from cues such as picture cues, word shape, first letters and context. Teaching learners
 to guess words can lead to bad reading habits that can be damaging in the long-term. (Note: 'Context' is required,
 however, to ascertain meaning of words and, on occasions, to indicate the correct pronunciation of words such as
 'read' and 'wind'.)
- Even learners who have difficulty learning to read require the same teaching as described above but they may need more 'little and often' and intensive practice of phonics and/or language comprehension. Teachers can use the Simple View of Reading (link above) and specific assessments as appropriate to identify the language needs and the phonics needs of individual learners: http://www.phonicsinternational.com/Triangle_sub_core_skills.pdf
- The aim is for foundational skills, including knowledge of the main letter/s-sound correspondences, to be largely mastered in the first two to three years for most learners. Initially it is desirable to provide cumulative and decodable texts consisting of code already introduced to increase reading fluency and to build confidence. This is followed by the use of increasingly more complex texts to further increase vocabulary, comprehension skills and knowledge and understanding of the world. Phonics continues for building up 'code' spelling word banks.
- Alongside teaching children to read well, teachers and parents can encourage and inspire them to love reading and to appreciate literature:
 https://www.gov.uk/government/news/new-action-plan-to-inspire-thousands-more-pupils-to-read

Summary of main features of phonics reading and spelling/writing instruction

Simple View of Reading – official model in England:



USA: Five Pillars of Literacy

- 1. Phonemic awareness
- 2. Phonics
- 3. Vocabulary enrichment
- 4. Fluency (repeat reading)
- 5. Comprehension

A high-quality phonics programme includes the 'big five'.

The Alphabetic Principle:

- The Alphabet Poster
- The Alphabetic Code Chart

Display: (main walls, breakout areas, phonics folders)

- Permanent (Alphabet, Alphabetic Code Chart)
- Cumulative (Code Frieze, Tricky Words, Spelling Word Banks, planned grammar, punctuation)
- Incidental (code as required, unusual code, unplanned grammar, punctuation)

Change of perception of phonics from 'baby stuff' to 'adult stuff':

- Adults use phonics for reading and spelling.
- Use 'code' language not infant language (These letters *are code for* the sound /ai/...).
- 'Two- pronged systematic and incidental phonics teaching' addresses differentiation, phonics in the wider curriculum, and caters for all ages and needs.

The Systematic Synthetic Phonics Teaching Principles:

- Alphabetic Code KNOWLEDGE
- Phonics SKILLS (and sub-skills)

No multi-cueing reading strategies for guessing words.

Apply and extend phonics knowledge and skills to cumulative, paper-based resources per learner.

The three core phonics skills and their sub-skills:



The Phonics (Hand) Routines:

Print-to-sound for reading (point)
Sound-to-print for spelling (tally)
Handwriting: correct grip and letter formation on lines









The Teaching and Learning Cycle (always complete):



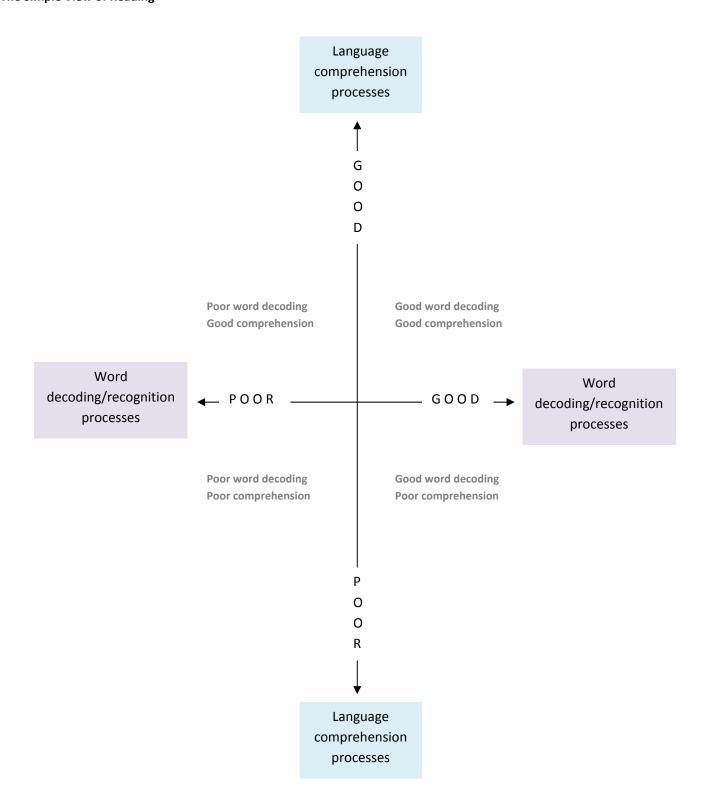
Time:

- Allow enough time don't underestimate.
- Complete the full 'Teaching and Learning Cycle' per learner.
- Use time efficiently.
- Provide sufficient time for learners to practise and 'little and often' for slower-to-learn pupils.
- Avoid 'extraneous' or time-consuming games.

The maths of the phonics:

- Provide ample shorter and longer words for individuals to blend, segment and write.
- For 'revisit and review', consider the quantity of letter/s-sound correspondences, and words/sentences, repeated to build fluency.
- Quantify what 'little and often' means in your setting.

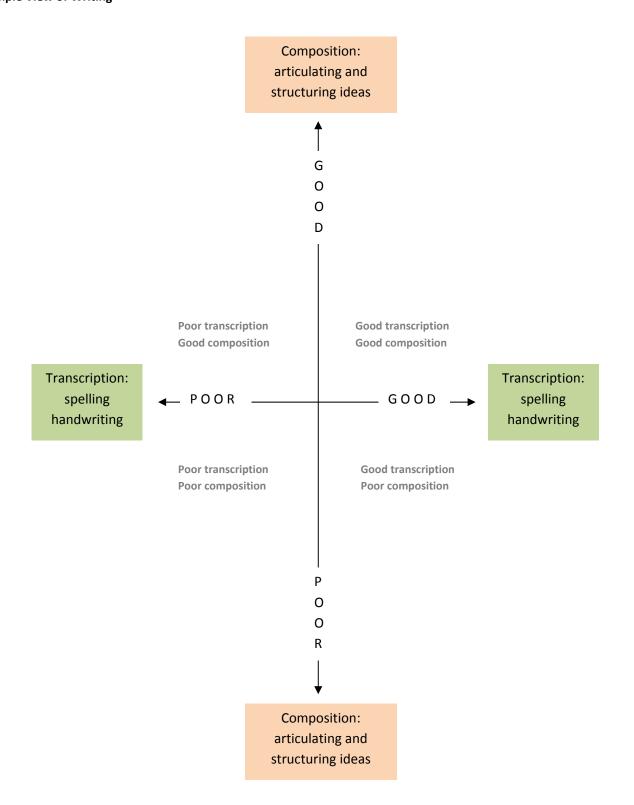
The Simple View of Reading



Simple View of Reading model: Original concept - Gough and Tunmer (1986), recommended by Jim Rose (Final Report, March 2006)

Adopted by UK government (2006) as a useful conceptual framework: reading = decoding x compehension R = D x C

Use for training; and a broad analysis of pupils' profiles for next steps planning and monitoring over time. Colour-code and date entries. For pupils with English as an additional or new language, plot for English and for the first language.



Simple View of Writing model: Adaptation of the SVoR model (Gough and Tunmer 1986) by Debbie Hepplewhite – for training, analysis and planning. Note: *Spelling* includes: knowledge of the alphabetic code (spelling alternatives) and encoding skill, high-frequency tricky words, spelling word banks, etymology (word origins), morphology (word structures), some spelling rules. 'Teach pupils to plan, revise and evaluate their writing – knowledge which is not required for reading' (DfE National Curriculum for English, Key Stages 1 and 2 – Draft, 2012).

Systematic Synthetic Phonics:

Teach alphabetic code knowledge

Teach the three core skills and their sub-skills

Apply to cumulative words and extend to sentences and texts

www.phonicsinternational.com

CORE SKILL 3

HANDWRITING:

*Form 26 upper case letters (capitals) and 26 lower case letters correctly on writing lines with tripod pencil grip
*Write graphemes (letters and letter groups) in response to speech sounds (phonemes)
*Also, write upper or lower case letter shapes in response to letter names
*Understand the difference between letter names and sounds and when to use names or sounds (letter names used for alphabet work and relaying a precise spelling, letter name by letter name to another person)
*Understand the difference between the

'alphabetic code' and 'the alphabet' and

what each is used for

CORE SKILL 1

Decode for READING:

PRINT-TO-SOUND

- i) Scan all-through-the-printed-word to recognise any letter groups
- ii) Say the sounds for the graphemes and blend to 'discern' and say the target word (use cumulative words, sentences and texts)
- iii) Modify the pronunciation of the target word if necessary



Sub-skills of CORE SKILL 1

*Without print: Attune the learner's 'ear' to phonemes (phonemic awareness) by adult saying the sounds (phonemes) all-through-a-spoken-word followed by saying the whole spoken word to train the learner to 'discern' the intended word from its constituent sounds

*With print: Train the learner to recognise letters and letter groups and to 'say the sounds' in automatic response (typically with flash cards, grapheme tiles and say the sounds posters)

Incidental Phonics Teaching:

Teach any letter/s-sound correspondence to any learner at any time – as required supported by main Alphabetic Code Charts

www.alphabeticcodecharts.com

Debbie Hepplewhite's Model of the three phonics core skills and their *sub*-skills

Sub-skills of CORE SKILL 3

- *Recognise correct orientation of letter shapes and link to sounds at first
- *Understand the notion of capital and lower case letter shapes and be able to match the pairs
- *Understand that both capitals and lower case matched pairs are code for the same sounds
- *Know the relative sizes of letters and their correct positions on writing lines *Know the starting points and directionality of forming letters and practise with multi-sensory activities whilst saying the correct sounds (ranging from air-writing and arty activities to forming letters correctly
- *Learn about the alphabet and alphabetical order (through chanting or singing an alphabet song at first)
- *Know letter names for the letters
 *Hold a normal thickness pencil

correctly with the tripod grip

with pencils on paper)

Alphabetic Code KNOWLEDGE

Systematically teach the 44+ phonemes and the many letter/s-sound correspondences

of a 'simple' then 'complex'
(extended) alphabetic code

Two-pronged approach

Introduce the letter/s-sound correspondences systematically but introduce any code at any time, incidentally, as required

Know that alphabetic code is reversible, from print-to-sound for decoding (reading) and from sound-to-print for encoding (spelling)

Sub-skills of CORE SKILL 2

- *Attune the learner's 'ear' to phonemes (phonemic awareness) by adult saying a whole spoken word slowly, followed by the adult saying the sounds all-throughthe-spoken-word (use any spoken words, they do not have to be 'cumulative' for this practice)
- *The adult 'says the sound' as close as possible to phonemes in real speech (consider volume and pitch, avoid 'uh' on the end of consonant sounds) followed by the learner: pointing to the letter or letter group; or selecting grapheme tiles; or air-writing the letter or letter group; or writing the grapheme on a whiteboard or, better still, writing on paper

CORE SKILL 2

Encode for SPELLING:

SOUND-TO-PRINT

- i) Orally segment (identify the sounds) all-through-the-spoken-word from a cumulative word bank
- ii) Identify and select correct graphemes as code for the identified sounds
- iii) Write letter shapes when able
- iv) Sound out and blend to check spelling (over time, build up knowledge of spelling word banks)

Guidance for phonics routines:

www.phonicsinternational.com/new free resources.html

Phonics Routines

Teach the knowledge of the alphabetic code (the letter/s-sound correspondences) and the three core skills and their sub-skills

1. Decoding (blending or synthesising) Sub-skill without print: If Irl Iol Igl

frog

Ss

Aa

Adult says the separate sounds "/f/ /r/ /o/ /q/".

Learners 'discern' or 'hear' the whole word 'frog' and then say the whole word "frog".

Sub-skill with print:

Point to pre-printed graphemes that have been taught to date:

"See the graphemes [letters or letter groups] and say the sounds."

Core skill for decoding:

- · Glance at (scan) the printed word from left to right to 'recognise' any letter groups.
- . Use the index finger to point directly under each grapheme whilst saying the sounds as close to real speech as possible from left to right of the printed word.
- . Say the whole word whilst running the index finger left to right beneath the whole printed word.
- . Modify the pronunciation of the blended sounds into the real word's pronunciation if necessary.

2. Encoding (oral segmenting, spelling-with-editing) Sub-skill without print:

Say the whole word "soap" very slowly and naturally so that the separate sounds become evident [oral segmenting].

Repeat the separate sounds as close to real speech sounds as possible "/s/ /oa/ /p/".

Do not repeat the whole spoken word after that I

Sub-skill with print:

Listen to sounds as close as possible to real speech sounds.

- I. "Hear the sounds, point to the graphemes."
- 2. "Hear the sounds, select the graphemes."
- 3. "Hear the sounds, write the graphemes."

Core skill for encoding:

- . Use the left hand, palm facing, to tally the sounds identified all-through-the-spoken-word onto thumb and fingers.
- · Write a 'sound dash' for every sound identified which also act as 'writing lines'.
- · Select grapheme tiles, magnetic letters or write graphemes, to spell the word.
- . Sound out and blend the selected graphemes to check the spelling.

s oa p

3. Handwriting (linking graphemes to sounds)

Hold the pencil correctly with the tripod grip.



as in chick

"Froggy legs [thumb and index finger] grip the pencil at the end of the painted part [not on the sloping cone part] with the log under [the middle finger]".

Sub-skill:

Establishing 'directionality' of writing letter shapes whilst saying the sounds.



Finger-tracing: Use the index finger of the writing hand to trace pre-printed letter shapes.

Pencil-tracing: Trace pre-printed grey or dotted letter shapes with a pencil. Copying: Copy letter shapes with finger or pencil.

Core skill for handwriting:

- · Correct tripod pencil grip
- · Correct posture sitting at a desk
- . Slightly slanted paper, use free hand to hold steady . Write under the letters and words - avoid hooking hand and wrist around
- . Say the sounds whilst writing graphemes as part of the spelling process
- · Write on writing lines frequently as appropriate

www.phonicsinternational.com

www.debbiehepplewhitehandwriting.com









Reflecting on the Teaching and Learning Cycle:

Are parents informed about the SVoR and the Teaching & Learning Cycle?

Teacher-led:
'Revisit and review'
alphabetic code quick-fire/interactive

How little and often is quick-fire 'Revisit and Review'? Is it systematic and incidental several times a day?

Pupil-practice:
'Independent reading'
with cumulative,
decodable books

How supportive and informative is the main phonics visual display wall?

Teacher-led:
 'Introduce'
 focus letter/s-sound
 correspondence and
 model three core skills

How well organised is the teacher-led introduction?
Is it supported by an Alphabetic
Code Chart?

Does the school have cumulative, decodable reading books?

Is intervention in line with the main phonics teaching?

Do learners practise their own skills?

Do learners practise and extend their core skills with cumulative, plain sentences and texts?

Pupil-practice:

'Apply and extend'

new learning at sentence

and text level

Pupil-practice:
'Learn' focus code and
apply at word level

Are learners engaged with their own assessment?

Do they have their own hard-copy resources in phonics folders and/or books?

How is spelling instruction continued throughout the school? Do activities raise awareness about spelling word banks?

Simple View of Schools' Phonics Provision

Phonics Programme X Practice = Phonics Provision

The school's core SSP programme is 'Letters and Sounds' but this does not include any actual resources. Teachers use familiar resources from the main commercial SSP programmes to provide:

-some phonics display material on classroom walls (frieze, tricky words)

-the 'revisit and review' part of the lesson (flash cards, IWB) often using the menmonic system of a commercial SSP programme

-introduction of the new or focus letter/s-sound correspondence

Pupil-practice commonly consists of children sitting on the carpet with mini whiteboards doing sound-to-print spelling activities for very short periods of time. This may be the whole class or groups. Little or no paper-based work, no evidence of work for class or individuals.

At least some teachers promote multi-cueing guessing strategies.

Phonics lessons are invariably '20 minutes' at best - as this has become the standard time associated with L & S phonics provision.

'Letters and Sounds' (DfES 2007)

Teachers use 'Letters and Sounds' but have 'adapted it' for 'their' children. They have bought, made and acquired various teaching and learning resources to provide a 'variety of fun games and activities' to deliver phonics lessons in ways considered to be 'child-friendly'.

Games often stuck at code and word level - not substantial texts. Phonics content has little or no progression in type and challenge of activities provided from Reception to Year One.

Slower-to-learn children may be very disadvantaged from too many varied and time-consuming games which are 'extraneous' (Sir Jim Rose warned us about 'extraneous' activities). There are likely to be a lot of Year Two 'strugglers' as the phonics games are not fit-for-purpose.

Teachers think some children are not 'developmentally ready' - this becomes self-fulfilling. They think phonics does not 'suit' all children - intervention may be Reading Recovery with its multi-cueing reading strategies (or less-expensive equivalent) - or computer games such as Nessy. Little or no paper-based practice or record of activities.

Teachers are perplexed about poor or inconsistent Year One Phonics Check results - but children do not get enough blending practice.

Teachers disagree with the Year One Phonics Check and don't understand why their 'better readers' do not score better in the check.

SSP = Systematic Synthetic Phonics

The school invests in a content-rich, fit-for-purpose SSP programme delivered largely according to the author's guidance. SSP authors recommend far longer than '20 minutes' time allocation for phonics lessons.

Headteacher and all staff fully trained and equally committed - teachers work in full partnership with parents and carers.

Phonics coordinator has non-contact time to support all staff with CPD.

Rigorous application of the Teaching and Learning Cycle' using cumulative code, words, sentences, texts and reading books - ample time allowed.

Any special needs intervention uses same SSP phonics programme and guidance and extra 'little and often' practice is guaranteed. Extension activities are provided for quicker learners as required.

*No multi-cueing guessing strategies are taught or encouraged.
Children provided with cumulative, decodable home reading books.

Teachers' professional knowledge and mindset along with high-quality SSP provision, in a language and literature-rich environment, ensure that all children learn to read and write.

Fullyresourced Core SSP Programme

The school initially invests in a content-rich SSP programme and training but the headteacher may be 'too busy' to attend the main training event for the programme.

Poor adherence to the programme - possibly because the headteacher lacks determination and commitment and no-one leads the way, or the phonics coordinator has insufficient non-contact time to lead or support.

This results in inconsistency of phonics routines and lack of continuity from person to person and/or from one year to the next, for example:

- -teachers 'adapt' the programme for their children but this usually means they choose not to follow the author's guidance
- -teachers stick with what they are used to change takes effort
- -over time, the programme becomes unappreciated and diluted
- new staff may introduce conflicting phonics practices
- new headteacher and/or some staff not on board with the programme
 visiting inspector or advisor instructs school to do things differently:
 e.g. multiple grouping but this may not be the programme's design

At least some teachers promote multi-cueing guessing strategies or the school generally believes in multi-cueing strategies.

NOTE: Research and practice show us that multi-cueing reading strategies ('guessing' words from word-shape, pictures, initial letters and context) cause long-term bad reading habits which can be very damaging.

Weak Phonics Practice