

## Codebreakers

A system for teaching encoding and decoding skills at all ages. Although the theoretical background has a lot of new vocabulary and shifts in emphasis from older phonics schemes, the system is essentially simple in its assumptions and in its practice with children.

A new reader/ writer needs to know that —

- ◆ Written English is a “picture-sound” *code* for the words we speak – in other words the alphabetic shapes are a code for the sounds we speak.
- ◆ Sounds (the phonemes we speak in sequences as words) may be represented by one, two or more letters or “picture-sounds”.
- ◆ There is **overlap** in the code - any given “picture-sound” or **grapheme** may represent more than one phoneme. So the grapheme a – often assumed to be fairly stable, that is representing just one or two sounds - may represent /a/ (cat); /o/ (swan, wasp); /ar/ (father); /or/ (ball); /ay/ (baby). (This does not include any of the large number of other phonemes represented by graphemes which include the letter ‘a’ – ea; ai; a-e; etc.)
- ◆ There is also **variation** in the code - any given phoneme may be represented by more than one grapheme. So the phoneme /or/ can be represented by the graphemes: or (port); aw (claw); ore (more); oor (door); oar (roar); ough (caught); ough (bought); a (call, water); al (walk); ar (warm, quarter); our (four); au (autumn).

There is some irony in the fact that the world’s foremost language is also its phonetically most complex, and does not have a spelling system worth the name. There are trends in English spelling, but no rules.

### Key Skills

There are three essential skills which are central to the mastery of the code —

- ◆ **Segmenting** — being able to take a word apart aurally – cat → /c/ /a/ /t/ and say each phoneme in isolation. Need to be able to discriminate between words and sounds – all words have one at least one sound. What sounds can you hear in cat? /c/—/a/—/t/. First a /c/ sound, then an /a/ sound, then a /t/ sound. How *many* sounds can you hear in cat? Match to fingers - /c/ one finger - /a/ second finger - /t/ third finger. Hold up (1<sup>st</sup>) (2<sup>nd</sup>) (3<sup>rd</sup>) finger etc - What sound comes here?
- ◆ **Blending** — being able to rejoin phonemes in sequence to form syllables and words /c/ + /a/ + /t/ → cat. This aspect often proves much more challenging for children than breaking a word down. They need constant and encouraging modeling of how this is done – and that if you know /c/ + /a/ + /t/ → cat, then by analogy, you can work out that /m/ + /a/ + /t/ → mat.
- ◆ **Phonemic manipulation** — being able to break up and recombine phonemes in different sequences. /n/ + /e/ + /t/ → net; /t/ + /e/ + /n/ → ten; /e/ + /n/ + /t/ → ent

These skills make up the majority of the instruction in the scheme. Codebreakers is a programme for teaching the (English) Phoneme to Grapheme Correspondences (PGCs). It begins with the commonest PGCs (s a t p i n), and moves through a sequence of the next most common PGCs. From the outset, the scheme uses **whole words** in a **narrative context**. We felt that setting a narrative context would help children to locate what they were learning within a friendly framework. There are no ‘made up’ words and every main teaching session has some kind of storyline (the assessment sessions and revision session are slightly different).

Although the scheme does move from the relatively simple (one letter representing a ‘straightforward’ sound) to the more complex (a phoneme with many variations for the coding – such as /or/) the very nature of the English code means that children have to deal with overlap and variation almost immediately. Children are not taught all picture-sounds before they move into higher order features of the code, but build words (units of meaning) in every session.

Note: Children are not taught letter names during the course of Codebreakers - they have nothing to do with the *code* and only create another layer for translation for the child.

However, there are also other skills underpinning the skills needed for tackling the code.

- ◆ **Matching Sound to Letter** – ability to visually and aurally match graphemes and phonemes.
- ◆ **Sequencing** – ability to identify first second third/ first next last in *pictures, objects, events*; ability to identify first second third/ first next last in *sounds*. An absolutely vital skill, not only in maths, but in writing and reading the alphabetic code.
- ◆ **Discriminating & repeating phonemes** – children need to be able to *hear* the sounds (to discriminate). Some sounds are only very subtly different from others - /f/ and /th/ are only separated by the placing of the teeth and tongue; /n/ and /ng/ distinguished by the position of tongue, but the actual sound discrimination quite subtle; /th/ and /tthh/ only distinguished by voice. Some sounds are problematic and some children struggle to identify certain sounds (‘fink’ for ‘think’ is common – regional variations). Once children can hear the sound, they also need to be able to clearly articulate it themselves. Those children who can’t articulate the sounds clearly (including those receiving speech therapy) may need extra support to master this underpinning skill.

### **Encoding and Decoding**

The ability to scribe a letter shape to represent a sound – when I typed the E grapheme just now, I encoded the sound /e/ as in (hen). If children have just one of the ways of representing a sound then they can have a stab at the word – we would all be able to guess what they meant if they wrote ‘I wont to fli mi kit’.

The study of phonics has traditionally been assumed to be a way of helping children to tackle words they can’t read. In truth, this is possibly less useful than encoding. When faced with a written text, the way it is written has been fixed – the reader has to know, or work out, each PGC to read each word (or draw on strategies other than phonics). There is little room for error – one unknown sound can block an entire word for a young reader, and a blocked word can block a sentence and beyond.