

An excerpt from **A Prototype for Teaching the English Alphabet Code**

by Professor Diane McGuinness – from the Reading Reform Foundation Newsletter -
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Lessons from the Past

We have a 5,000 year history on the development and design of writing systems which provides conclusive proof of the following:

1. No writing system, living or dead, was ever based on the whole word. All writing systems are sound-based systems, not meaning-based systems. This is true even though meaning and phonetic units can overlap, as they do in one-syllable words written in a syllabary writing system.
2. Humans are constitutionally incapable of memorizing more than about 2,000 word-symbol pairs. This is an ultimate limit, taking years of study. The Japanese have 1800 word symbols (kanji) in their basic writing system, and it takes children about 12 years to learn them. Mastering an additional 2,000 kanji is the mark of a highly educated person and can take up to a decade more of study. A good college dictionary contains 250,000 words. In short, no one can ever be a whole-word (sight word) reader.
3. It would have been impossible for early scholars to design a writing system without a thorough knowledge of the phonemes in their language. Phonemes play a major role in setting up the system. The ideas proposed by some reading researchers, that writing systems 'evolved' from word signs to syllable signs to phoneme signs because scholars were unaware of phonemes, and that children's awareness of speech sounds mimics this in development, are false.
4. Four (and only four) phonetic units have ever been used in the writing systems of the world. The choice of this unit is based on the phonetic and grammatical structure of a particular language. These are the syllable, the consonant-vowel unit (CV diphone), consonants alone, and phonemes (consonants+vowels).
5. No writing system ever mixes these phonetic units. A reading method that teaches more than one of these phonetic units is essentially teaching two or more writing systems simultaneously. This will cause enormous confusion, making it difficult to impossible for many children to learn to read.
6. A proper writing system has to be comprehensive in order to work. It should be possible to write every word, every name, and every potential new word with relative ease. Because of this, writing systems are designed rather quickly -- all of a piece.

7. Evidence from the schools that were established at the time a new writing system was designed provide important lessons about how the authors of the system thought it should be taught. The clearest example comes from Sumer at around 3,200 B.C., which I describe below.

This history, based on over 5000 years of evidence, shows that no whole-word method can possibly work, and no scholars ever thought that it could. No 'eclectic' or 'balanced' methods (multiple sound-units) will ever work either.

The Prototype

At this point, I want to begin assembling what I call 'The Prototype', the essentials of good reading instruction based on what we know from the past about how writing systems (in general) should be taught, and what we know from the present about how a particular writing system should be taught. In essence, the Prototype functions as a 'predictor'. If the elements that constitute the Prototype are correct, then the methods most similar to it ought to produce the best results in experimental research.

Five thousand years ago, the character and design of the lessons in Sumerian schools provided a basic formula for teaching any writing system, no matter which phonetic unit is involved.

1. The complete structure of the writing system is worked out (or thoroughly understood) before a method of instruction is developed.
2. Teach the specific sound units that are the basis for the code. Don't teach other sound units that have nothing to do with the code.
3. Link each sound to its arbitrary, abstract symbol. These symbols constitute the code.
4. Teach the elements of the system in order from simple to complex.
5. Make the students aware that a writing system is a code and that codes are reversible (decoding/encoding) by linking writing/spelling to reading (copy-recite).
6. Design lessons to ensure that spelling and reading are connected at every level of instruction via looking (visual memory), listening (auditory memory) and writing (kinaesthetic memory).

Professor Diane McGuinness is the author of:

1997. *Why Children Can't Read and What We Can Do About It*. London: Penguin Books

2004. *Early reading instruction – What Science Really Tells Us about How to Teach Reading*. Cambridge, Mass.: The MIT Press.