Should I teach "Sight Words"?

One claim that I (Hansford) have often seen with the recent "Science of Reading" movement, is that we should not be teaching "sight words". Indeed, many such as Timothy Shanahan (2022) have also pointed out that the term "sight word" is a bit of a misnomer. As all words that students can read with automaticity are "sight words". You see, if we take a look at Dr. Linnea Ehri's Theory of Orthographic Mapping (Ehri, 2014), we learn that a sight word is defined as a word that has been stored in the reader's long-term memory. In order to store the word in their "sight word vocabulary', a reader must create a connection between the word's meaning, spelling and pronunciation. Once these connections have been made and stored in the reader's memory, any time they come across the word in print, regardless of the word's font, casing displayed horizontally or vertically, they should be able to recognize it almost instantaneously (Ehri, 2014).

That being said, it has been a common practice in reading programs, to teach either high frequency words, irregularly spelled words, or words that are both irregularly spelled and high frequency through memorization. While both systematic phonics programs and "balanced literacy/whole language" programs like LLI have used this type of instruction, it was especially common in whole language programs.

Whereas systematic phonics programs like Jolly Phonics and Wilson typically limited this practice to irregular spelled words like "one". Whole language programs often included long lists of high frequency words, such as the Dolch words list or the Fry words list. As I have pointed out many times, there is strong evidence that a systematic phonics program is more effective than a whole language program (NRP, 2000; Steubing, 2008; Hansford, 2024). However, there are

many differences between these two types of instruction and there is very little research examining the individual components. Systematic phonics programs include a scope and sequence for letter sound correlations, the use of decodables, less "sight word" instruction, and more explicit skill-based instruction. Conversely, whole language programs typically don't have a sophisticated scope and sequence, use less explicit instruction, rely on levelled texts, sight word lists, and cueing instruction.

I typically see two citations to support the claim that we should completely stop teaching "sight words". The first citation is Louisa Moats in her (2000) book Print to Speech. In this book Dr. Moats points out that over 50% of the English language is 100% decodable and that another 34% of words are mostly decodable. Dr. Moats appears to have come to this conclusion based on a 1966 study by Hanna, P.R., Hanna, J.S., Hodges, R.E., and Rudorf, E.H. Jr. The second citation I often see referenced is a brain imaging study by (Yoncheva, 2015). In this study the authors compared teaching students to memorize vs segment words. The authors found that when students were taught to segment words the area of the brain associated with proficient reading was activated and that when the students were taught to read words via memorization a different area of the brain was activated.

The above research discussed does tell us three important things:

1. Most words are decodable.
2. There is a plausible mechanism as to why teaching students to memorize words is not effective.

3. Programs that focus on phonics instruction are more effective than programs that focus on word memorization or cueing.

However, there are limitations to these findings. None of this research examines whether there are benefits to teaching highly irregular words. None of this research examines whether or not phonics instruction can be successfully combined with "sight word" instruction. Moreover, again many systematic phonics programs do include some instruction specific to irregularly spelled words or "tricky words". Moreover, there is some research specifically suggesting a benefit to the instruction of high frequency or irregularly spelled words. For example, (Fry, 1980) showed that the 100 most common words in the English language make up 50% of all written language), at least when we include all morphological variations of each word. Moreover, a 1988 meta-analysis of 48 studies by Diane M. Browder and Yan Ping Xin found that teaching students to memorize "sight words" had a statistically significant benefit for learning disabled readers. While this meta-analysis is very dated and has significant limitations, I am unaware of any more up to date or sophisticated meta-analysis on the topic. That said, Dr. Timothy Shanahan, (one of the lead writers for the National Reading Panel) reviewed the topic and found 8 experimental studies which showed a benefit to decoding and fluency outcomes, for the practice (2022).

So Where Does This Leave Us?

1. Teaching phonics systematically is superior to whole language approaches
2. There are too many differences between these approaches to explain with a great deal of confidence why systematic phonics is better

3. Teaching students to memorize words may be neurologically inefficient, compared to teaching students to decode words
4. Some words are not easily decodable
5. There are 100 words that make up 50% of the English language
6. Teaching students high frequency or irregularly spelled words might be a beneficial practice, if done alongside systematic phonics instruction
7. "Sight word" instruction should likely be a limited practice, but is likely still beneficial for students

Other Things to Consider…

Let us go on a bit of a tangent for a bit… If we are talking about individuals learning to read and spell, we must first stop to ask ourselves about the orthography of the language the instruction is occurring in. A languages' orthography refers to the set of conventions dictating the writing of the language. The approach to instruction should be based on the information we learn about its orthography. It is easier to teach individuals to read and spell in languages that are orthographically transparent. Spanish is an example of a language that is orthographically transparent because it is considered to be a phonetic language and there is a consistent relationship between the languages' sounds and letters.

Unfortunately, English on the other hand, is considered to be orthographically opaque. There are several reasons for this. First of all, English is considered to be a morphophonemic language, which means our spelling system is based on more than just the phonemes or sounds found in the

spoken word, it also depends on the meaning of the word. To make matters worse, the spelling of a word also takes into account its etymology, or the history of the word.

English is an Indo-European language that, like many other languages, borrowed the Roman alphabet (Kemmer, 2009). This common alphabet has meant that when English adds a word from another language, it can honor the world's heritage by keeping the spelling of the word. Given that over the centuries the English language has taken words from the various other Indo-European languages, the written language has adopted several of the different grapheme-phoneme relationships from those languages.

Another feature of English's orthographic opacity is the fact that our 'borrrowed' Roman alphabet only has 26 letters in it and depending on the dialect of English that is spoken there is between 40 - 44 phonemes (sounds) in the spoken language. Since there are more sounds in the language, it was necessary to create graphemes (letter representations of sounds), which are combinations of two or three letters used to represent one phoneme. Plus, as mentioned earlier, English has the tendency of keeping the spelling from the word's language or origin, so there became multiple different graphemes for a single phoneme. This means that the 26 letter alphabet represents up to 44 English phonemes by using over 200 different graphemes.

To complicate things further, there are countless dialects of the English language. The majority of the differences around pronunciation of words occurs around the articulation or pronunciation of the vowel sounds in the word. This means that if an individual does not speak Standard English, the way they pronounce the word may be inconsistent with the spelling of the word.

The final thing we will bring up in this discussion relates to morphology and it helps explain how the meaning of a word dictates its spelling. If you remember earlier we mentioned that the English language is morphophonemic, meaning that both morphemes and phonemes are important. Morphemes are the smallest units of speech that convey meaning. Every word contains at least one morpheme but not all morphemes can stand alone as a word. Unlike phonemes, morphemes can have various pronunciations depending on what it is combined with but the accepted spelling of the morpheme stays consistent. The important takeaway from this is that when it comes to spelling English words, the meaning of the word is more important than the spelling of the word. So if the word contains morphemes, it is more important for the spelling of the morpheme to stay consistent than spelling the word based on how it is pronounced.

However, the beauty is, that when we consider the phonology, morphology and etymology of a word, understanding how English words are spelled is much easier.

So How Should We Teach Irregular or High Frequency Words?

Amongst experts in the field, I do not see a strong consensus on how to teach irregular spelled words. Dr. Pete Bowers suggests we teach such words via morphology and etymology. (2020). Dr. Marnie Ginsberg (n.d.). suggests that we teach them via segmenting. Kathryn Grace (Really Great Reading, n.d.). suggests that they are taught via the heart word method, by putting a heart over the non-decodable part of the word. Dr. Timothy Shanahan seems to suggest that we teach them via memorization (at least that is my interpretation as to what he has written). Orton Gillingham programs have typically taught these words with orthographic rules. Personally, I

tend to teach these words with rote memorization games. However, I am unaware of any significant research comparing any of these methods. Therefore, when teachers ask me about it, I always say best practice is your personal preference. Ultimately, I think all of these approaches are just grappling with the same problem. *There are a small number of words that are spelled irregularly.* However, I think the important thing for teachers to remember is that students need to learn that graphemes can and often do represent multiple sounds. Moreover, students need to develop the cognitive flexibility to try different sounds with a grapheme, when one does not make sense. For example, the grapheme <ou> can often represent either the /oo/ sound or the /ow/ sound. Therefore students need to learn to try both sounds when confronted with an unfamiliar word that uses the grapheme.

The Good News:

While there are 100 words that make up 50% of the English language, the vast majority of these words are either completely decodable or mostly decodable. This means that students likely don't need any explicit instruction for the majority of high frequency words. To test this hypothesis, Kathryn Garforth and I went through the 100 Fry words and examined them for decodability. Of the 100 words 76 were easily decodable, 15 were mostly decodable, and only 11 were truly irregular words. While some of these 74 words might not be easily decodable to an emerging reader like "where", these words still follow fairly common spelling patterns. The <wh> makes the /w/ sound and the <ere> represents the /air/ sound. While not the simplest of grapheme phoneme correspondences, they are still quite common and in my experience easy to teach. That said, even the 11 words that we identified as irregular, tended to be still slightly decodable, therefore the necessity of items like "sight word" lists is likely quite debatable. In

example, we identified <be>, as not easily decodable, because the <e> grapheme does not typically make the long vowel sound, when unaccompanied by another vowel. However, the long “e” sound is still associated with the letter <e>.

Below, you will see the 100 Fry words. Words highlighted, are words that are “semi” decodable, meaning that a grapheme in the word is representing an uncommon phoneme (sound) and it is underlined. Words italicized, are words that either use multiple uncommon grapheme sound correlations or words that use a very unusual grapheme to represent a phoneme. Underlines are used to identify the uncommon grapheme phoneme correspondances.

- the
- of
- and
- a
- to
- in
- is
- you
- that
- it
- he
- was
- for
- on
- *are*
- as
- with
- his
- they
- I
- at
- be
- this
- *have*
- from
- or
- *one*
- had
- by
- word
- but
- not
- what
- all
- were
- we – similar pattern to no/go/so
- when
- your
- can
- *said*
- *there*
- use
- an
- each
- which
- she
- do
- how
- their
- if
- will

- up
- other
- about
- out
- many
- then
- them
- these
- so – see comment about go
- *some*
- her
- would
- make
- like
- him
- into
- time
- has
- look
- *two*
- more
- write
- go
- see
- number
- no
- way
- could
- *people*
- my
- than
- first
- water
- *been*- if they can decode <seen> they should be able to decode <been>
- called
- *who*
- oil
- sit
- now
- find
- long
- down
- day
- did
- get
- come
- made
- may
- part

To help with instruction for these words, we have created a powerpoint lesson for the 11 high frequency, irregular spelled words and several connected words. Each word is broken down according to its phonemes, morphemes, and etymology. We have also chosen to include some additional words that make sense to teach together because of their morphological and etymological relationships.This lesson is followed by a game, to help students develop automaticity for each word. You can find the link here:

https://www.teacherspayteachers.com/Product/Irregular-Spelled-Words-11835574

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