HOW BEGINNING READING INSTRUCTION TEACHES WORD READING SKILL
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Written English, like all alphabetic languages, consists of letters that represent sounds. In the case of English, there are approximately 41-44 unique speech sounds, or phonemes[1], that can be represented by our 26 letters. Since there are more sounds than letters, some sounds, such as /sh/, are represented by two letters. The word *dog* has three phonemes /d/o/g/ and three letters. The word *shop*, on the other hand, has three phonemes /š/ /o/ p/ but four letters, with SH representing one sound.

Before children have full knowledge of letters and sounds, they may use the shape of letters or words as cues to read words. However, this is ineffective since words are not sufficiently distinctive for students to remember the thousands of words necessary to be able to read (think of *book, hook,* and *hood*). To more easily accomplish this feat, they need to develop two foundational skills. One is **phonemic segmentation**, or the ability to divide spoken words into a sequence of sounds (phonemes). The other is mastery of the **major grapheme[2]-phoneme (or letter-sound) relations** that comprise the writing system.

When children are taught **decoding skills,** they can apply this knowledge to written words by learning to convert the sequence of letters (graphemes) into blended sounds (phonemes) to pronounce unfamiliar words. Once the words are decoded a few times, their spellings are bonded to their pronunciations and are retained in memory, so that children read them automatically or "by sight." This process of storing words in memory is called **orthographic mapping** and acts like **glue,** bonding the spellings of words to their pronunciations. When the meanings of the words are activated, they also become bonded to the spellings. Once these processes are established in memory, students are able to look at written words and immediately recognize their pronunciations and meanings, which allows them to focus on the meaning of the text rather than on decoding the words. All words that are sufficiently practiced - not just high frequency words or irregularly spelled words - become sight words through this process and are then read from memory automatically.

As evidenced by research, a comprehensive, systematic phonics program is an important part of reading instruction since it teaches children essential foundational skills, including the ability to decode novel words and build a store of written words that can be read automatically, as well as the spelling of those words. The following instructional suggestions are based on research findings and therefore are strongly recommended to assist students in establishing their word recognition.

1. **Grapheme-Phoneme Relations**: Teach children the major grapheme-phoneme (GP), or sound-symbol, relationships. This should be guided by a scope and sequence chart that sequentially covers these relationships during the first year of reading instruction to maximize the instruction's effectiveness. Instruction can be facilitated by teaching GP relations using embedded picture mnemonics, for example, S drawn as a snake whose initial sound is /s/, or ɑ drawn as an apple whose initial sound is /æ/. Also sounds can be taught from letter names, for example, B contains /b/.

2. **Phoneme Segmentation**: Teach children how to break spoken words into their smallest sounds or phonemes. Instruction can be facilitated by teaching children to monitor their mouth positions and movements as they articulate the shift from one phoneme to the next in pronouncing words, or by teaching children to move tokens, like Bingo chips, to represent each phoneme as they say it. Once children learn GP relations, they should be taught to segment pronunciations of words into phonemes and represent each with a grapheme.

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[1] Phonemes are the smallest sounds in speech.

[2] Graphemes are one or more letters that represent each phoneme in the writing system.

3. **Decoding**: Once students have acquired GP relations, teach them to decode unfamiliar words by sounding out and blending letters to form meaningful words. This creates the connections that children need to retain words in memory so they can recognize them "on sight" and spell them correctly. Instruction can begin even if children know only a limited number of GP relations that they can apply to decode two- and three-letter words. To facilitate learning, students should be taught to sound out and blend letters without breaking the speech stream (e.g., *sssuuuunnn* rather than *ssss-uuuu-nnnn*). Students should practice decoding lists of regularly spelled words that contain many shared letters to a mastery criterion to ensure that letter-sound relationships in all the positions within words are processed and retained in memory. As students learn multi-letter spelling patterns such as –ed, -ing, -est, they can use morphemic units such as these to decode words.

4. **Spelling**: Children need to be able to analyze and **remember** the GP mappings in specific words. This process forms connections for spelling words accurately and for reading them automatically. Whereas complete GP connections can be formed for regularly spelled words, partial connections can help to retain irregularly spelled words in memory (e.g., S and D in *said*; all but the S in *island*).

5. **Pronouncing Words**: It is important for **beginning** readers to read text aloud to ensure individual words are pronounced correctly. This serves to activate grapheme-phoneme connections, allowing spellings of words to bond with their pronunciations in memory, a process that cannot be guaranteed when reading words silently. This is particularly important in the case of identifying words that have not been read before.

6. **Text Reading Practice**: To ensure that students are able to read connected text (i.e., books, websites, etc.), it is critical that they receive plenty of practice reading text at an appropriate level. When reading independently, this means students should be using material of relative ease. When children are reading material that is more challenging, extra support such as choral or echo reading is needed. Such approaches ensure that students' decoding remains accurate when encountering new words or when they are building reading stamina with longer texts. Both independent and scaffolded forms of reading are essential for activating and connecting word **meanings** to their spellings and pronunciations in memory. The process is particularly important for abstract words and words whose meanings are activated only when they are read in context (e.g., *was, said, held, with*).

7. **Use of Context to Confirm Words, not to Guess Words:** When reading words in text, beginning readers must acquire the habit of attending to their spellings, either to activate known words in memory or to decode unknown words. At the same time, they must monitor their comprehension to make sure the words they read make sense in that context. If they use context to guess the words and skip over spellings without processing letter-sound connections, unfamiliar words will not be secured as sight words in memory. Moreover, they may be misread, preventing students from developing the automaticity required for skilled reading.

In sum, the instructional suggestions presented here provide guidelines for the effective teaching of word recognition skill and its application in reading connected text. As such, they will aid children in their acquisition of the code and in their development as skilled readers.

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