# Science of Reading Advocates are Teaching Children to Guess at Words:

Andy Johnson, Ph.D. Minnesota State University andrew.johnson@mnsu.edu

#### **Podcast**

https://rss.com/podcasts/drandy/827545/

Tim Shanahan, Louisa Moats, Linnea Ehri, Wilson Reading Systems, Orton-Gillingham profiteers, SOR advocates, the International Dyslexia Association, and other plucky little phonics-first penguins are advocating that meaning-based reading teachers teach children to read by guessing guess at words. This of course is nonsense.

# A Simple View of Reading

Their skills-first approach to reading instruction is based on the phonological processing model. Sometimes called the simple view of reading, this model defines reading as a combination of decoding (sounding out words) and listening comprehension. Essentially, you sound out words (decode), then you make a guess, and then you listen to the speech in the head

Here's where the guessing comes in: If you come to a word you don't recognize, students are taught to put all sounds to all the letters in the word. They then put all the sounds together. Finally, they guess what the word is based on the sounds. This nothing more than a grapheme-phoneme word-guessing game. The phonics penguins are teaching children to guess as words. We've got to put a stop to this horrible, horrible travesty of reading instruction.

# **Hyper-Phoneticized Children**

You can see this grapheme-phoneme work guessing game take place by listening to children read who have been hyper-phoneticized. These are the ones who have been hit over the head, day after day, with systematic sound-and-guess instruction to the detriment of any of the other types of reading instruction. They get so much sound-and-guess instruction that they come to believe that reading is sounding out words and guessing – NOT creating meaning. During reading, their sole focus is on sounding and guessing individual words.

You can see this sound-and-guess behavior with struggling readers during oral reading. The hyper-phoneticized child will come to an unrecognized word and begin moving down the line, putting a sound to each letter, putting sounds together, and then making a guess based on the letter sounds. This is the grapheme-phoneme word-guessing.

The typical scenario goes something like this. The child who is reading, stops at an unrecognized word.

The teacher will say, "sound it out" as if the child had never thought of that.

"A - n - i - m - a - l" .... Then they'll make a guess. "Animal?"

Then the teacher will confirm or disconfirm the guess. "That's right."

This grapheme-phoneme word-guessing game will take 6 to 10 seconds. Then the child will continue reading until they come across another unrecognized word and the grapheme-phoneme word-guessing game will start again. And during this word-guessing process, the child is expected to engage in two cognition operations simultaneously: creating mean, and grapheme-phoneme word-guessing.

# Sounding, Guessing, and STM

But sounding and guessing takes a lot of time and uses a lot of space in short term memory (STM). Putting sounds to all the letters, putting the sounds together to make words, and then making a grapheme-phoneme guess while trying to process the meaning of the sentence takes up a lot of cognitive space. STM is very limited. It can only hold about 7 entities for about 15 seconds. So instead of creating meaning, the child focuses on what sound-guesser instruction has taught them to do: they focus on individual letters and sounds.

### The Science of Reading

The SOR uses the phonological processing model and the lens through which reading reality is viewed. When used in research, the view influences the questions that are asked, the types of data collected, how the data are interpreted, and the conclusions reached. Because of all the data excluded, this perspective is based far more on conjecture than actual science, but SOR advocates still insist on using the term "scientifically" based reading instruction when in reality, it should be conjecture-based reading instruction. Instead of the science of reading, they should call it the conjecture of reading. Science isn't science if it discounts data that does not aligned with a predetermined belief system.

# **Real Reading Teachers vs. Sound-Guessing Teachers**

Real reading teaching do not teach children to guess at words like the sounder-guessers do. Real teachers teach children to create meaning with print. Below are described some differences between real reading teachers and sound-guessing teachers:

- 1. Real reading teachers teach phonics in a systematic fashion. Yes, they do. Systematic instruction is different from standardized, one-size-fits-all instruction. Systematic means they teach letter-sound skills as students are ready for them in meaningful contexts to the greatest extent possible. Also, they use direct and explicit instruction, and they use some system to keep track of what is taught and when students master each letter sound. They know students have mastered the skill when they are able to use it in an authentic reading context.
- 2. Sound-guessing teachers are given a list of letter sounds and patterns. They start at one end of the list and march all students through the same list, in the same order whether they are ready for the skill or not. Advanced readers are moved through the list a little faster. Struggling readers move through the list a little slow in order to help them catch up.

- 3. Real reading teachers create activities to develop all three cuing systems so the child doesn't have to guess at words. Instead, the child can use three types of information to recognize words and create meaning. This is what real reading teachers do. If the child is able to use semantic information, syntactic information, and grapho-phonological information, that child is better able to recognize words and doesn't have to guess at words. Instead, the child uses metacognition to see if the unrecognized word makes sense.
- 4. Sound-guessing teachers teach children to use only one source of information to recognize words: grapho-phonological information. This leads to sounding-and-guessing.
- 5. Real reading teachers immerse children in real, authentic reading and writing experiences as soon as possible. The purpose here is to read and write for pleasure. Children do a lot of this. This enables them to practice their systematic instruction in authentic reading and writing contexts.
- 6. Sound-guessing teachers believe that children need to be made ready before they are able to read. They are given a lot of fake books to read with a controlled vocabulary that sounds nothing like the language around them: Dan the man sat on a fan. Look, look. Dan sat on a can. The can belonged to a man named, Stan. Sound-guessing teachers believe that children need to be made ready to write as well. They ask students to write words on worksheets.

# Not An Approach

You have to admire those plucky little phonics penguins who are so incredibly adamant in their opposition to anything other than sounder-outer word-guessing instruction. Here's a bit of penguin-ery I recently came across. The writer was very adamant in stating that the "cueing approach" to reading instruction doesn't work. The "cueing approach" to reading instruction, she said, has been debunked. It doesn't work. The cueing approach doesn't work.

Four bits of clarification need be made here:

**1.** There is no such thing as a cueing approach or a three-cueing method. The three-cueing systems is not an approach to teaching reading. It's also not a method. Nor is it a technique, ... it's not even a strategy.

The 3 cueing systems in reading refers to three systems the brain uses to recognize words during that act of reading. As we encounter text, we use three cueing systems to recognize words: phonological, semantic, and syntactic. These systems work together to enable us to quickly and efficiently recognize the words on the page ... so that we don't have to guess.

2. Grapheme-phoneme word-guessing is not very efficient. Reading programs that use only a phonics-based approach develop the least efficient cueing system while ignoring the development of the two more efficient cueing systems. This actually makes it harder for children to learn to read. You are asking them to create meaning with print using only one third of their word recognition brain and then guess at words. All students benefit most from reading instruction that develop all three cueing systems simultaneously.

**3. Word recognition and word identification are not the same.** This is the basis of much confusion. Let me clarify again – recognizing words is different from identifying words. The three cueing systems work together to recognize words – not identify words.

Recognizing words is when we encounter a word in print and we automatically know what it is. We recognize it instantly. We don't have to process the individual letters and put them together in short term memory to form words. We don't have to make guesses.

Identifying a word is when we encounter a word in print, and we don't recognize it. The word is in the dictionary in our head or our lexicon – but we don't immediately know what it is. We don't recognize it. So, we have to consciously employ a strategy to identify it. We have to intentionally decide to use some sort of plan or tactic to figure out what in the heck that word is. There are four word identification strategies:

- Word parts or analogy looking for familiar parts within the word. Sometimes this is known as large unit phonics.
  - Morphemic analysis looking for familiar prefixes, suffixes, affixes, and roots.
  - Context clues looking to see what makes sense within the sentence.
- Letter clues sounding out the letters and putting the letter sounds together to create words.
- **4.** We teach the strategy to develop the skill. All four strategies should be explicitly taught using very direct and very explicit instruction. We teach the strategy to develop the skill. We teach and practice these four strategies, and eventually these cognitive operations are internalized, and automaticity is achieved. A strategy in the cognitive sense, is something we consciously employ. A skill occurs automatically.

#### The Final Word

If you've read this far, you may be a little confused. The point I was trying to make is that balanced literacy practitioners and whole language teachers do not teach children to guess at words any more the SOR advocates or phonic-first practitioners do. Yet there are some who continue to insist that we do.

In 1967 Ken Goodman published an article in *Reading Research Quarterly* with the title – *Reading: A Psycholinguistic Guessing Game*. Eventually, some angry, aliterate penguins came along. They would read just the title of this article. They obviously never read the article or any other of Ken Goodman's work. From this title, they selected two words to project onto like a Rorschach inkblot test: reading and guessing. The Rorschach response from this herd of angry, aliterate penguins for the last 55 years has been that whole language teachers teach children to guess at words. It's been 55 years!

You'd think that in 55 years since the publication of this article that these penguins might take the time to actually read it. When I say read, I don't mean just sound out the words, but actually read the article. Use the text to create meaning. Check for understanding along the way. If this was done, penguins would soon be disabused of the whole-language-guessing-at-words notion. But then they'd have to find something else to be upset about ...

I would invite the angry penguins who think Goodman is the reading anti-Christ, to actually read his work. What exactly is it with which you disagree with? Not what you think he wrote. Not what somebody else said he wrote – But what he actual wrote. What exactly did he get wrong?

Now, nobody agrees 100 percent with anybody. And everybody's thinking evolves over time as more information is encountered. What he wrote in 1967 might be a little different then his later work 30 plus year later. (He died on March 12, 2020 at the age of 92, 33 years after this article was published). But Ken Goodman got a lot of things right ...

www.teaching-reading.com