

## Is Three-Cueing the Reason Kids Can't Read?

It seems like an incredibly loaded question to ask; however, many people blame a perceived reading crisis on the use of three-cueing instruction. In this article, I explore the research on three-cueing and try to answer the question: Is three-cueing harmful or beneficial to students? However, before I begin, we need to answer the question:

### What is three-cueing?

I must admit there is surprisingly little consensus on this topic. Colloquially, I most commonly see it understood as a method for “solving” unknown words by using three cues: **meaning** (what word would make sense here? What do you see in the picture that might make sense?), **structure** (what word fits with the syntax of the sentence), and **visual** (what letters or patterns do you recognize?) Many attribute this pedagogy to Reading Recovery. However, whether or not this pedagogy is supported by Reading Recovery is contentious; most Reading Recovery Council members that I have discussed this with avoid the term or deny using “three-cueing,” and there have been Reading Recovery authors who have argued adamantly that their method does not include “three-cueing” (Williams, 2019). However, other Reading Recovery-linked authors, such as Schwartz (2019) and Bommarito (2021), seem to support some version of the idea. That said, the concept of “three-cueing” can be more directly attributed to Kenneth Goodman (1967), who referred to the reading process as a “psycholinguistic guessing game.”

Perhaps part of the problem is that the term seems to mean different things to different people. Some claim that three-cueing refers more to the MSV assessment, which evaluates whether students are using meaning, syntax, and visual information to correct reading errors (Clay, 1982). However, I find this argument perhaps disingenuous; why would a test assess something not being taught? Others argue that MSV instruction is meant to teach students to cross-check “multiple sources of information” when confronted with a challenging word (Bommarito, 2024). I interpret this to mean that MSV is supposed to be a tool to cross-check for errors, not to decode words. Whether or not this is the common interpretation is another story. In my personal experience, I have seen three-cueing taught as an alternative strategy to decoding words; however, they may or may not have been the original intention of some of its original proponents.

### Are Three-Cueing and Balanced Literacy Synonymous?

Whole language instruction and Balanced Literacy instruction are sometimes simplified as instruction based on three-cueing. However, I would argue that while three-cueing is associated with Whole Language, it is an oversimplification to equate the philosophy of Whole Language/Balanced Literacy with three-cueing. Instead, I would argue that three-cueing is a popular pedagogy used by Whole Language/Balanced Literacy advocates. For example, a white paper by Michael Pressley and Alysia Roehrig (2001), often cited as the birth of the philosophy of Balanced Literacy, does not even use the term three-cueing or MSV. The closest reference the paper makes to the pedagogy is the term “context clues.” However, this term is only used once and is not defined. I would therefore argue that it is an intellectual stretch to claim that the central concept of Whole Language/Balanced Literacy pedagogy is three-cueing instruction. That said, the history of pedagogical theories is far from my specialty. If you're interested in a more in-depth article on the pedagogical theories associated with three-cueing, check out this phenomenal article by the Reading Ape: [LINK](#)



**Why is Three-Cueing Controversial?**

Many people find telling students to guess at words based on looking at pictures or other cues to be egregious because it seems to encourage students to read by not reading. Perhaps this is my own bias, but I remember being told to teach students to do this during my reading specialist course and thinking, "I'm not doing it." I was not resistant to the idea because I had any deep knowledge of the futility of the pedagogy, but rather it just seemed intuitively foolish.

Similarly, within the Science of Reading movement, many have suggested that three-cueing is a dichotomous choice to phonics instruction. Indeed, Emily Hanford, in her 2022 smash hit podcast "Sold a Story," seems to suggest that there is a reading crisis caused by the use of three-cueing over phonics. That said, I see no reason that three cueing and phonics instruction cannot happen at the same time. The real question though, in my opinion is: whether three-cueing instruction is harmful or beneficial?

**So What Does the Research Show?*****The Experimental Case Against Three-Cueing***

If you're familiar with this blog, you will likely know that I typically only examine experimental research on a topic. In other words, I want to know if scientific experiments have shown the teaching method to be beneficial, neutral, or harmful. Many claim that three-cueing is definitively harmful to students. However, truthfully, the research on this topic does seem particularly limited. While there are many theoretical papers, books, podcasts, and blogs criticizing the three-cueing method, the scientific evidence against it does seem more limited, in my opinion. The two primary scientific citations I see used against the three-cueing method are the NRP (2000) and Yoncheva (2015).

The NRP paper included a meta-analysis comparing systematic phonics instruction with Whole Language and whole word instruction. The NRP meta-analysis showed that systematic phonics was superior to Whole Language by an effect size of 0.31. The second study was conducted by Yuliya Yoncheva, Jessica Wise, and Bruce McCandliss. This study showed that when words were taught through a phonics approach, the part of the brain associated with proficient reading is activated. Conversely, when words are taught through memorization, a different part of the brain is activated.

Both of these studies are seminal. The NRP (2000) study shows that systematic phonics is superior to Whole Language instruction, and the Yoncheva (2015) study presents a possible neurological mechanism as to why phonics is superior. However, neither study proves that three-cueing is harmful. The NRP study cannot be used to examine the issue because, while Whole Language instruction sometimes includes three-cueing, it also includes many other components. Indeed, there are many differences between a Whole Language approach and a systematic phonics approach. Typically, a Whole Language program relies on leveled texts, whereas a systematic phonics program relies on decodable texts. While a systematic phonics program explicitly teaches phonics according to a scope and sequence, phonics is typically taught more implicitly and as needed within a Whole Language/Balanced Literacy approach. Personally, I would hypothesize that the meaningful difference between these approaches is the level of phonics instruction and not the texts or the three-cueing. Similarly,



the Yoncheva (2015) study cannot be used to examine the issue because it simply does not examine the topic of three-cueing at all.

More recently, I have seen some critics point to the large-scale, longitudinal RCT by Henry May, Aly Blakeney, Pragya Shrestha, Mia Mazal, and Nicole Kennedy (2023), which showed negative effect sizes over the long term for Reading Recovery instruction as evidence that three-cueing is harmful. However, again, this study was on Reading Recovery, not three-cueing, and Reading Recovery instruction includes many forms of instruction. The evidence here against three-cueing is, therefore, correlational and cannot be used to discredit three-cueing entirely. That said, it is a plausible argument that the reason some longitudinal Reading Recovery studies show negative effect sizes is because three-cueing only works for simplistic texts and does not work for more advanced texts. This might be especially applicable to cueing students to look at pictures, as more advanced texts tend not to have pictures. Moreover, if students become reliant on using three-cueing, they theoretically may be less likely to attempt decoding unfamiliar words. However, there is also debate, as to whether Reading Recovery uses three-cueing instruction, as discussed earlier and it may be dependent on the individual Reading Recovery teacher. It is important to remember that Reading Recovery is more of a training than a program.

### ***The Theoretical Case Against Three Cueing:***

The methodology of three-cueing also seems to be in direct contrast to the dominant theory of how reading fluency develops, known as “orthographic mapping.” This theory, developed by Linnea Ehri, hypothesizes that to build sight words, orthographic mapping (OM) is required. “Readers must form connections between spellings and pronunciations of specific words by applying knowledge of the general writing system. When readers see a new word and say or hear its pronunciation, its spelling becomes mapped onto its pronunciation and meaning. These connections serve to ‘glue’ spellings to pronunciations in memory” (Ehri, 2014). It is important to note that while orthographic mapping is the dominant theory within the scientific community, it remains a theory and not necessarily proven scientific fact.

Not only does three-cueing seem to violate the dominant theory of reading development, but it also does not align with what proficient readers do. Timothy Shanahan (2019) points out in his review of the topic that research shows young, inexperienced readers naturally look at pictures to guess unknown words (Ferreiro & Teberosky, 1982). However, several studies show that proficient readers look at all of the letters in a word and do not rely on strategic guessing (Stanovich, 2000; Greene, 2016; Rayner & Pollatsek, 1986; Lonigan et al., 2018). Shanahan summarizes this theoretical dichotomy by stating, “Instead of teaching kids to mimic what readers do when they make mistakes, we need to teach them to do what successful readers do” (Shanahan, 2019).

### ***The Experimental Case for Three Cueing:***

In a 2020 literature review by Donna Scanlon and Kimberly Anderson, the authors investigated using contextual information to solve unknown words. The authors “summarize six experimental studies that, together, included students in kindergarten through fourth grade and involved the implementation of the Interactive Strategies Approach in the primary grades and an extension of the approach with middle elementary students with reading difficulties.” They claimed that “the studies resulted in substantially improved reading outcomes among treatment versus business-as-usual groups” and therefore concluded “that



using both phonics- and context-based information facilitates the ability to build sight vocabulary.” However, I have some concerns with this literature review.

Firstly, There is no methods section in the paper and no details on how the systematic search was conducted. It therefore stands to reason that the studies chosen could have been cherry-picked for their results, rather than all relevant studies being included in the review. Indeed, the authors also state that the purpose of the paper was to promote the use of context clues and three-cueing, as can be seen in the following quotation: “Because one of our major goals in this article is to provide evidence in support of teaching students to use contextual information as an assist in word solving, we focus here on the strategic word-solving element of the ISA” (Scanlon & Anderson, 2020, p. 5).

That said, it should be noted that the authors' interpretation of context clues seemed to be closer to that of Bommarito (2024) than that of Goodman (1967). They essentially stated that cueing instruction should help students confirm the correct word, not serve as the primary strategy for identifying an unknown word, as seen in the following quotation: “For learners who were just beginning to learn to read, we employed patterned/predictable books and encouraged students to rely on the pattern, the picture, and the beginning letter of the word that changed from one page to the next, thus encouraging them to employ all of the sources of information to which they had access. As readers progressed, their attention was gradually shifted to more and more of the alphabetic and orthographic information in unknown words and to the use of context to direct and check their decoding attempts. A key message was that the strategies should be used in interactive and confirmatory ways. We did not want students to just decode the words, but rather to make sure that their attempt resulted in real words that fit the context. Just as importantly, we did not want students to guess at words, relying too heavily on context and not attending to the alphabetic information (a common tactic among readers who struggle), as that has the clear potential to interfere with the word-learning goal” (Scanlon & Anderson, 2020, p. 5).

#### **Studies Included in the Scanlon and Anderson Literature Review:**

##### ***Vellutino and Colleagues (1996):***

The first study is by Vellutino and colleagues (1996). This RCT compared providing 76 struggling readers with tutoring for 15 weeks to 76 students who did not receive tutoring. However, the tutored group was provided multiple types of instruction, and the literature review authors did not present evidence from this paper to suggest that a “cueing group” outperformed a non-cueing group.

##### ***Scanlon and Colleagues (2005):***

The second study was an RCT by Scanlon and colleagues (2005). In this study, there were two treatment groups. In one treatment group, students received instruction that was focused on reading texts and received instruction on phonics and cueing. In the second treatment group, instruction was primarily focused on developing phonological skills. In the text-focused group, students received 15 minutes of reading practice per session and 5 minutes of phonics and cueing instruction. In the phonics-focused group, students received 5 minutes of reading practice and 15 minutes of phonics instruction. Both groups included struggling grade 1 readers. Both groups received instruction in groups of three from October



to June. This study showed a difference in effect size, for the phonics group, when compared to the non-phonics group on a standardized test of .06, suggesting a negligible difference between the two groups.

***Scanlon, Gelzheiser, Vellutino, Schatschneider, and Sweeney (2008):***

This three-year-long kindergarten study compared professional development, small group interventions, and a combination of both small group interventions and professional development. This study included 28 teachers and 15 schools. However, this study did not compare using context clues versus not and is therefore not relevant to the research question.

***Anderson (2009):***

This dissertation RCT compared the impact of professional development focused on context clues versus the impact of professional development focused on phonics knowledge. The study included 23 reading intervention teachers and 52 first-grade students. Students in the phonics treatment group showed greater improvements in decoding outcomes, spelling outcomes, and the BAS reading assessment. Whereas students in the context clues group showed greater improvements in their knowledge of “strategic word-learning” on the Multi-Level Passage Assessment and a “word list assessment.” However, it should be noted that none of these reading assessments were norm-referenced, and sufficient statistical data was not included in the literature review to conclude the significance of any of these findings.

***Gelzheiser, Scanlon, Vellutino, Hallgren-Flynn, and Schatschneider (2011):***

Forty-eight grade 4 students were given one-on-one instruction for four months that included targeted phonics and cueing instruction for forty minutes a day. The original authors compared the group of students that received instruction to a business-as-usual group that would receive instruction. However, only pre-to-post effect sizes were included within the literature review, which generally results in dramatically inflated results. Moreover, as the authors did not compare providing three-cueing instruction to an alternative form of instruction such as phonics, this study cannot be used to determine the efficacy of three-cueing. Any resulting learning gains could have actually stemmed from the phonics and not the cueing instruction. It is therefore impossible to isolate the impact of context clues or three-cueing from this study.

***Gelzheiser, Scanlon, Vellutino, Deane, and Wang (2020):***

This study used the same design as the previous study and examined the impact of phonics and cueing instruction on 122 grade 3-4 students who received 50 40-minute intervention sessions. However, for the same reasons as the last study, this study cannot be used to examine the impact of cueing-based instruction.

**So What Can We Learn from the Scanlon and Anderson Literature Review?**

Unfortunately, not much. Most of these studies, looked at very small group, intense reading interventions, and did not calculate effect sizes, compared against a control group. Which means these studies only demonstrated that learning happened, they did not demonstrate if more learning happened, because of cueing based instruction. It would be even more difficult to know if these results could be extrapolated to a classroom setting, as most of these studies were not performed in classroom settings.





Only two of these studies were appropriate for analyzing whether or not three-cueing is effective (Scanlon & Colleagues, 2005) and (Anderson, 2009). The first study showed a negligible benefit (effect size difference of .06) and the second study showed mixed results, with the treatment group doing better or worse, depending on the assessment. Moreover, while in the (Scanlon & Colleagues, 2005) study, the three-cueing group did better, the three-cueing group also got more time spent on reading practice. So was the .06 benefit caused by the cueing or by the extra reading time? It seems impossible to know. In other words, the (Scanlon and Anderson, 2020) literature review provides no meaningful experimental evidence that three-cueing improves instructional outcomes. The review also does not suggest any negative outcomes; however, as the authors did not appear to conduct a systematic search, it is possible that they simply chose studies with positive outcomes and ignored studies with negative ones.

### **What About Just Using Context, for Cross Checking Meaning?**

There does seem to be some research to use context, to cross check the correct meaning of a word, when homonymns are used. In 2020, Nell Duke wrote an article on supporting young readers when they are stuck on a word. Duke points out that some words can only be understood, within context. Therefore students must use the meaning of a paragraph to make sense of some individual words. For example, “bat” can be a verb, an object, or an animal. However, it should be noted that she has specifically rejected the idea that her work lends support for “three cueing” instruction. I contacted Nell Duke about the article and asked her for a comment. She responded with the following, “readers rely on both semantic and orthographic information when they read. This is an area of great confusion in the field, and I think that it has to do with the term “cueing.” There’s “cueing” that refers to what “cues” or information children take from the text. For example, a reference in the text to hair accessories might lead someone to think it is bow with a long o. It is true that the text ‘cues’ readers with both semantic and orthographic information. But then people took it as what the teachers should cue/prompt the child to do, that’s where the problem is—prompting children to use semantic information for word identification is not going to be effective, especially long term.”

While her article points out that some words can only be correctly identified in their context, she also points out that overall context is a bad tool to identify words. Duke points out “First, most of the time, context does not lead to successful word identification. When some words in a passage were covered up, even graduate students were able to correctly guess the word only 36 percent of the time. Seeing even some of the letters in the words, however, really helped these students guess a word (72 percent correct) (Kucer, 2011).” Duke also points out that if students guess unknown words through context, opposed to sounding them out, they miss the opportunity to orthographically map those words. This said, Duke does argue that having students actively pay attention to the meaning of a sentence to confirm that they correctly identify the meaning of a word is effective. In other words, while using context should not be taught to help students identify words, students should be taught to use context to cross check that they have identified the correct word. In my discussions with Dr. Duke, she made clear that it was not only her position that using context should not be taught as a strategy for word identification, but that it was the position of many other serious researchers, who she had conferred with, including: Linnea Ehri, Barbara Foorman, Heidi Anne Mesmer, P. David Pearson, Timothy Rasinski, Timothy Shanahan, and Tanya Wright.



Duke also points out that her recommendations are also in line with a (IES, 2016) policy paper on the use of foundational skills instruction to support reading comprehension in Kindergarten to grade 3.

### **So Is Three Cueing Harmful or Beneficial?**

Based on the Scanlon and Anderson (2020) literature review of the topic, I am aware of only two experimental studies on three-cueing. One study showed a negligible benefit, while the other showed mixed results. Neither study demonstrated meaningful positive outcomes in favor of three-cueing instruction. On the other hand, there is correlational evidence suggesting that Whole Language instruction, which incorporates three-cueing, may be harmful to student learning outcomes (NRP, 2000; Steubing, 2008; May et al., 2023). Moreover, a reading model based on "strategic guessing" appears to contradict both theoretical and neuroscientific research on how reading development occurs (Ehri, 2014; Yoncheva, 2015; Stanovich, 2000).

While it is challenging to definitively prove that three-cueing instruction is harmful, it should be noted that the burden of proof always rests on those arguing the affirmative. This principle is fundamental in both science and philosophy, as it is typically more difficult to conclusively disprove a concept than to prove one. The burden of proof principle discourages making unsupported claims and relying on a lack of evidence to assert correctness. Therefore, given the absence of scientific research supporting three-cueing, the default assumption should be that it is not effective in improving reading outcomes.

In summary, there is little to no direct scientific evidence indicating that three-cueing is either beneficial or harmful due to its limited study. However, correlational, theoretical, and neuroscientific evidence suggests potential harm. At best, three-cueing may provide minimal benefits to students; at worst, it could negatively impact reading outcomes. Personally, I prefer instructional approaches with established efficacy and a lower potential for harm. That said, while I would not recommend three-cueing to others, I also recognize the lack of definitive research to outright criticize its use and would not personally tell another teacher that they are wrong for using it.

#### **Points to Remember:**

- There is no substantial scientific evidence supporting the effectiveness of three-cueing.
- There is correlational and theoretical evidence suggesting potential harm from three-cueing in student learning.
- Three-cueing does not align well with current research on reading development.
- The meaning of a sentence or a paragraph can be used to cross check a decoded word, so that a student has correctly identified the right word.

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