

Better Instruction for Struggling Readers in Manitoba

By Ron Teffaine, M.Ed. (2017)

In Manitoba, we still use the three cueing-systems model to help children acquire basic reading skills. It was first proposed in the 1960s and was a major part of Ken Goodman's Whole Language method. According to Dr. David Kilpatrick (2015), the three cueing-systems model, based on the psycholinguistic guessing game theory of reading, does not address the needs of struggling readers. It may actually be counterproductive with such students. It simply reinforces the kinds of habits that naturally occur among children who struggle in reading. Both Reading Recovery and Leveled Literacy Intervention, two prevalent remedial reading programs in Manitoba, use the three cueing systems model. Explore the reasons below summarized by Kilpatrick (2015) for why the three cueing-systems model is insufficient to help struggling readers.

- **Weak readers, not skilled readers, rely heavily on context.** This is likely due to their limited pool of familiar words as well as their poor phonic decoding skills. About 75% of students will learn to read no matter how unhelpful the instruction. But if weak readers are encouraged to use weak-reader-style strategies (i.e., contextual guessing and not focusing on the precise spelling patterns within words), they will fail to become proficient readers.
- **Guessing words from context is not as efficient as phonic decoding.** While contextual guessing facilitates the identification of unfamiliar words, in most cases it is less efficient than sounding out unknown words. Skilled readers can identify unfamiliar words with a high degree of accuracy by sounding them out, even irregular words. By contrast, even proficient readers are not skilled at correctly guessing words from context. The accuracy rate is only about 25%. On the other hand, when skilled readers sound out unfamiliar words, they have about an 80% to 90% accuracy rate.
- **Skilled word recognition does not require context.** The three cueing systems model claims that "semantic context" is the most prominent of the three cueing systems. However, literally hundreds of studies have demonstrated that skilled readers instantly and effortlessly recognize any one of the thousands of written words they know when those words are presented in isolation. For skilled readers, context is therefore not a primary factor in recognizing words. It is required to grasp the meaning of words with multiple meanings. Nevertheless, context is not required to recognize familiar words. Moreover, research indicates that when we see a word, the areas of the brain responsible for orthography (familiar spellings) and phonology (pronunciation) activate sooner than the areas responsible for the semantic system (meaning). Therefore, readers recognize a word's spelling and its pronunciation before recognizing its meaning.
- **Semantic errors are not a sign of better reading development than phonetic errors.** The three cueing systems approach relies heavily on "miscue analysis." It proposes that when a child misreads a word by substituting another word that is similar in meaning, this demonstrates a better use of context and signifies superior reading development than making a phonetic reading error. Yet, studies have consistently shown that poor readers are more likely to make semantic errors (i.e., words that fit the context but are not spelled like the word they are trying to read). As reading skills improve, the reading errors of weak readers become more phonetically oriented and less semantically oriented. This is precisely the opposite of what the three queuing systems approach proposes.
- **One of the three cues in the three-queuing model is not related to word reading.** In the model, one of the three cues used to identify words is syntactic information. Yet research has shown that syntactic skills do not distinguish good word-level readers from poor word-level readers. Syntax is essential for comprehension, not for word-reading development.

If you enter the typical Manitoba elementary classroom, you'll likely see the CAFE poster on the wall, ideas from a book called *The CAFE Book* written by Gail Boushey and Joan Moser, to remind students of the "important" reading strategies they need to apply to help them learn to read better. Unfortunately, most of the strategies derive from the ineffective Whole Language era, which was based on a constructivist philosophy that children learn to read in the same way that they learn oral language. They argued that learning to read was as natural as learning to speak. Nevertheless, subsequent scientific research proved that this assumption was untrue (Treiman, 2018). Learning to read is not natural; we need competent instruction to master it. It's akin to saying that you'll become a competent pianist simply by listening to lots of good piano music. In addition, John Hattie's meta-analytic review of the literature in 2008 found much larger effect sizes for Phonics ($d = 0.60$) than for Whole Language instruction ($d = 0.06$). Yet, many teachers in Manitoba still appear to be using a Whole Language approach, and too many students are still struggling to learn to read.

For many years, various professionals argued either for the use of phonics or the whole-word method, which is promoted in Whole Language. They called these arguments the "Reading Wars." To end this period, which reached a crescendo during the late 1990s, the U.S. Congress commissioned 14 of the nation's leading experts in reading, along with several subcommittees, to review the literature and make definitive recommendations about how best to teach reading. Their meta-analytic research results were released as the report of the National Reading Panel in 2000. They recommended five essential components necessary for effective reading instruction: (1) phonemic awareness, (2) phonics – especially synthetic phonics, (3) fluency, (4) vocabulary, and (5) comprehension. Using these suggestions, the new model that was promoted by the Department of Education was called "Balanced Literacy." It was supposed to calm the reading wars conflict by offering a compromise to both sides, while at the same time encouraging a scientific approach to improve reading achievement.

Unfortunately, this never happened as the government-appointed experts had hoped, according to Dr. Louisa Moates (2007). Whole Language advocates influenced publishers to use mostly their preferred strategies under the new banner of Balanced Literacy. Instead of explicit/systematic phonics instruction, teachers continued to use the old cueing-systems model with an emphasis on meaning found in the Balanced Literacy books that were produced. As a result, many teachers in Manitoba unwittingly continue to use mostly Whole Language strategies (e.g., using picture clues, re-reading, guessing based on context, asking someone, etc.) as part of "Balanced Literacy." There is no mention of phonetic rules on CAFE posters because they are either not taught as part of reading instruction or de-emphasized into sporadic embedded phonics.

What's worse, even the relatively new document from Manitoba Education & Training on how to support students with reading disabilities fails to mention explicit and systematic phonics instruction. Although it vaguely mentions direct instruction, it emphasizes meaning with a focus on strategy instruction for comprehension, as well as adaptations. It fails to mention the many programs that were developed to support students with dyslexia (e.g., *Orton-Gilligham*, *Slingerland*, *Wilson*, *LiPS*, *Alphabetic Phonics*, *Phonographix*, *SPELL-Links*, *Sonday System 1 & 2*, *SpellRead*, *S.P.I.R.E.*, *Spalding*, *Discovery Reading*, *Seeing Stars*, *Barton Reading/Spelling*, *All About Learning Press*, *Lexia CORE5 Reading*, *Patterns for Success in Reading/Spelling*, *Touch Phonics*, *Nessy Reading & Spelling*, etc.). In my opinion, the document is not very helpful for teachers who really want to know how to improve the reading/spelling skills of students with dyslexia. It seems to maintain the status quo of Whole Language instruction, with some mention of technological adaptations. Although the latter should be part of what older learning-disabled students need to learn and use, younger LD readers still need quality instruction

that suites their needs. The Manitoba Department of Education and Training needs to expand the concept of "appropriate education" for these students.

Instead of the old three-cueing systems model, Dr. Kilpatrick advocates for developing “**orthographic mapping**” in struggling readers, which facilitates the development of fluent word recognition skills. He states that the Phonics Approach to beginning reading instruction has consistently demonstrated superior outcomes in word-level reading and reading comprehension as compared to the Whole-Word and Whole Language approaches. Moreover, brain research by Dr. Stanislas Dehaene (2009) has shown why phonics makes more sense than the whole-word method. We do not learn words as whole images, we encode each letter that makes up a word in a sequential manner and retrieve it back after it is mastered as a whole unit using parallel processing. This is like playing a chord on the piano; all the notes are represented in the chord. Nevertheless, while phonics helps weak readers identify unfamiliar words, it does not by itself necessarily promote instant word recognition, nor does it close the gap between weak readers and their peers in a sizable proportion of cases. Even Orton-Gillingham based multisensory phonics methods, which are generally better for learning disabled readers than the three-cueing systems approach, display mixed results in research. They may help to establish better decoding skills but fail to show significant gains in rapid word recognition and reading fluency.

After examining interventions that produce marked gains in reading of 12 to 25 standard score points for struggling readers, Dr. Kilpatrick discovered three essential ingredients to effective reading interventions. Together, they facilitate “orthographic mapping” (i.e., the process by which readers turn unfamiliar written words into familiar and instantly recognizable sight words). Every successful intervention contained the following three elements: (1) they corrected the student’s phonological awareness difficulties (e.g., blending & segmenting) and taught phonemic awareness to the advanced level (e.g., manipulating phonemes within words, such as deleting, substituting, and occasionally reversing phonemes), which most remedial reading programs fail to do, (2) they provided phonic decoding instruction and/or reinforcement, and (3) they provided ample opportunities to apply these developing skills to reading connected text (i.e., authentic reading). This is not to say that meaning and comprehension are unimportant; dyslexic readers need instruction at all levels of language, but there has to be more explicit and systematic emphasis placed on phonological awareness and phonics so they can become independent readers. Also, a diagnosis of dyslexia requires average verbal ability, so comprehension is not their main concern. If they could learn to decode words independently and increase their word recognition fluency, they'd easily acquire reading comprehension skills.

To help prevent reading problems, efforts must begin early on at Tier 1 of a *Response to Intervention* model. For example, the National Reading Panel (2000) found that training kindergartners and first graders in phonemic awareness skills, along with explicit and systematic phonics instruction, substantially reduced the percentage of students who displayed reading difficulties. Subsequent reports in other parts of the world had similar findings. In addition, Ehri (2014) found that teaching sound-letter associations is easier for students when using embedded picture mnemonics (e.g., Itchy’s Alphabet and Letterland are two programs that use this). In addition, Dr. Kilpatrick’s *Equipped for Reading Success* program may be advantageous to teach phonological awareness skills up to the advanced level because it is based on all of the latest brain research on how to promote orthographic mapping.

For Tier 2 and 3 interventions, programs that have shown good results include the **Lindamood Phoneme Sequencing Program, aka LiPS** (<https://ganderpublishing.com/products/lips-kit>), **Phono-Graphix** (www.phono-graphix.com), **Discover Reading** (www.readingfoundation.com/educators/), and **Read-Write-Type** (www.talkingfingers.com). Nanci Bell (co-founder of the Lindamood-Bell Learning Centers) used the LiPS program for years, and although she was impressed by how well children learned

to decode unfamiliar words, she was disappointed that it did not produce the expected fluency gains. So, using the Dual-Coding Theory that suggests visualization of print is another important aspect of learning to read, with a hunch that teaching the visual aspects may promote better whole word reading fluency, she developed the **Seeing Stars** program. This is something Dr. Kilpatrick did not thoroughly investigate in his book. Instead, he commented that *orthographic knowledge* does not predict better reading outcomes, according to the results of one study. It is unclear however whether orthographic knowledge is the same as stimulating orthographic processing in working memory, as the Seeing Stars program does. Although Nanci Bell claims that *Seeing Stars* produces more fluent word recognition than does the LiPS program, Dr. Kilpatrick's review of two studies using the *Seeing Stars* program found that the data does not support her claims for better outcomes. Clearly, more research is needed. I believe that better experimental samples are needed, perhaps looking at purer subtypes of reading disabilities. For example, is her program better for students with surface dyslexia as compared to phonological dyslexia? At any rate, the *Seeing Stars* program includes the following treatment components that make it somewhat unique: (a) advanced sound/symbol imagery manipulated in working memory using a variety of techniques such as air-writing, identifying letters in different positions within words, spelling words backward, and extensive practice, to boost phonological/orthographic processing, (b) phonetic decoding, and (c) extensive sight word training to the point of automaticity.

So, how well are we doing in Manitoba with helping students learn to read? According to a national Canadian survey conducted by O'Grady & Houme in 2013, Manitoba has the lowest reading achievement in all of Canada (overall English reading score = 469 vs. the national English average of 510). As a result, the current government in Manitoba has made reading instruction a priority. How are we to proceed?

In my school division, some regular classroom teachers have incorporated the **Cracking the Phonics Code** program developed by a resourceful teacher-consultant, a simplified version of the Orton-Gillingham Method. Although this is a step in the right direction, her program is not scientifically validated or evidence-based. For Tier 2, students who struggle may be placed into **Reading Recovery**. While this program may help some students who come from disadvantaged homes, it was not designed to help students with learning disabilities. Moreover, it is designed for only grade 1 students. Why do we continue to rely so much on this program? One reason is that the province's Early Literacy Grant website includes only Reading Recovery as a completed example for administrators. The easiest choice for principals is to simply download their form and get going. So, the government helps to perpetuate a program that has limited applicability. We also have reading teachers in the division, another good idea, but many of them have learned what they know from the Reading Recovery model. Some schools have tried to incorporate the **Barton Reading & Spelling** and **Seeing Stars** programs, as part of pull-out remediation, but they have been taught by either EAs or Reading Teachers who have not received any formal training in these programs and may only use parts of them. A few schools have tried the **Fast ForWord** computer program, but the research evidence is not very strong at this point. Moreover, the computer program does not teach phonics, only phonemic awareness with whole-word memorization and comprehension. The problem seems to be that we do not have enough Tier 2 evidence-based programs available for struggling readers, delivered by well-trained competent teachers. A few resource teachers in our school division may have tried other Tier 2 remedial programs, but as yet there are no formal reports of their efficacy. Most recently, our school division hired a Reading Clinician to improve reading instruction in the primary grades, and she has been trying to blend Balanced Literacy methods with other systematic multisensory programs (e.g., Barton Reading & Spelling, Touch Phonics) to help teachers expand their instruction.

Some clinicians (i.e., school psychologists, speech-language pathologists, reading clinicians) in the last couple of years have started early screening efforts at the end of kindergarten to determine which students are significantly struggling with foundational skills such as phonological awareness (e.g., rhyming, segmenting, blending, phonological memory, etc.), orthographic awareness (i.e., ability to recall letters, letter combinations, and whole words in visual/orthographic working memory), rapid naming, letter identification, vocabulary, and so on, to assist with planning efforts for grade 1. In my opinion, this should become a standard practice in Manitoba schools. Children need to be grouped according to their profile or pattern of instructional needs. Then, they should be given reading instruction in grade 1 that more closely fits their needs to ensure that time is not wasted, and that needless failure and discouragement are avoided. We need a variety of good evidence-based reading programs that include a range of components that are vital for all students, including those with processing problems, and better PD for teachers that includes strategies for children with learning disabilities, if we ever hope to differentiate instruction effectively and raise our overall literacy levels in Manitoba. When I go into classrooms, I'd like to see some phonics rules under the *Accuracy* column of the CAFE poster, not just whole-language strategies. Moreover, beginning readers and those that struggle would benefit from "decodable books" (e.g., www.readinga-z.com/phonics/lessons/) that contain many words with the phonetic element directly taught to them. This would facilitate generalization to real text and is preferable to predictable books that emphasize similar phrases and grammar according to the Balanced Literacy (aka Whole Language) method. And, during Daily 5, children could be doing some multisensory phonics games/activities as part of what they do to improve their reading and spelling skills. Teachers could also teach phonics, along with a variety of multisensory strategies and picture-phoneme mnemonics to help children more accurately encode/decode words. And, instead of Word Walls, they could try Sound Walls to emphasize phoneme-grapheme associations (e.g., [Sound Walls vs. Word Walls](#)). I have seen some regular classroom teachers for example teach multisensory strategies to all students in grade 1 (e.g., segmenting words into phonemes by tapping out each phoneme, air-writing words, identifying letters in different parts of imagined words, etc.), and some have tried mnemonic aids such as *Letterland* and Dr. Virginia Berninger's *Talking Letters* program. It is possible for all early-years teachers to expand their repertoires to give all children a better chance at literacy success. They do need PD support from their school divisions however, and schools need to make better literacy instruction a priority. The greater hope eventually is that universities will better prepare early years teachers with more knowledge about learning disabilities, as well as recommended evidence-based strategies and programs that can meet the needs of all children in Manitoba.

References

- Bell, Nanci (2013). *Seeing Stars: Symbol Imagery for Phonological and Orthographic Processing in Reading and Spelling* (2nd Ed.). Avila Beach, California: Gander Publishing.
- Boushey, G. & Moser, J. (2009). *The CAFE Book: Engaging all students in daily literacy assessment and instruction*. Stenhouse Publishers.
- Dehaene, S. (2009). *Reading in the Brain: The New Science of How We Read*. New York: Penguin Books.
- Ehri, L. C. (2014). Orthographic Mapping in the Acquisition of Sight Word Reading, Spelling Memory, and Vocabulary Learning. *Scientific Studies of Reading*, 18:5–21.

- Hattie, J. (2008). *Visible learning: a synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Kilpatrick, D. A. (2015). *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*. Hoboken, New Jersey: John Wiley & Sons.
- Kim, J.S. (2008). Research and the reading wars. In Hess, F.M. & McDonnell, L.M. (Eds.), *When research matters: how scholarship influences education policy* (pp. 89-111). Cambridge, MA: Harvard Educational Press.
- Manitoba Education & Advanced Learning (2015). *Supporting inclusive schools: addressing the needs of students with learning disabilities*. Winnipeg, MB: School Programs Division.
- Moates, L (2007). *Whole-Language High Jinks: How to Tell When “Scientifically-Based Reading Instruction” Isn’t*. Thomas B. Fordham Institute.
- National Reading Panel (2000). *Report of the National Reading Panel. Teaching Children to Read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: National Academies Press.
- O’Grady, K. & Houme, K. (2013). *Report on the Pan-Canadian Assessment of Science, Reading, and Mathematics*. Toronto: ON: Council of Ministers of Education.
- Trieman, R. (2018). What Research Tells Us About Reading Instruction. *Psychological Science in the Public Interest*, 19 (1): 1-4.