

Lindamood-Bell: Evidence-Based Reading Intervention For All

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Reading is a fundamental part of our daily lives yet 25% of children in early education struggle with reading in America (The IRIS Center). That is why Lindamood-Bell's instruction aims to expand struggling readers' potential to succeed with intense individualized teaching. Lindamood-Bell is an incredibly designed evidence-based curriculum founded by Patricia Lindamood and Nanci Bell. The curriculum focuses on students' fluency, comprehension, phonemic awareness, and decoding skills which are all core elements of reading. Because of its comprehensive approach that excels in strengthening literacy skills, the Lindamood-Bell curriculum is effective for teaching reading to students of all ages with diverse learning needs.

Lindamood-Bell's "multi-sensory approach" refers to their instruction that combines sight, sound, and touch. *Visualizing Verbalizing* is a section of their curriculum that strongly suggests that students air-write words, because it helps them visualize the letters in front of them. As students air-write they are also encouraged to say the letters out loud (Donnelly, Huber, Yeatman). This exercise is necessary because it solidifies letter formation and the sound that letters make. Another task that students may receive is to read a passage and stop after each sentence to describe what they are visualizing. As they are visualizing, they are also touching a piece of colored felt as a "visual anchor" (Schmidt 26). Afterwards, students give a summary of the text while touching the colored felt that corresponded with the specific sentence (Schmidt). The repetition of air-writing and visualizing strengthens working memory and comprehension skills.

Students who received Lindamood-Bell's comprehensive instruction had enhanced decoding skills and reading proficiency. A meta-analysis conducted by the *International*

Multi-Disciplinary Journal of Education found that students had a “substantial reduction in reading errors and increased precision in word recognition.” Not only was there growth in that area, but students also made gains in their decoding abilities. Students could now decipher multisyllabic words and the meaning of them. People with dyslexia, in particular, have a hard time learning how to decode longer words at a fast pace. That is the reason why people may overhear dyslexic students stumble over their words and take long pauses to “sound out” the words on the page. Unfortunately “sounding it out” does not help because that does not take into consideration silent letters, and the many rules of the English language. Dyslexic readers also go back and re-read sections to try and better understand what the text meant. Lindamood-Bell gives these students the opportunity to learn a multitude of strategies to use when these types of situations occur. Truly knowing how to decipher complex words, and comprehend texts, leads to better fluency.

Symbol Imagery and Concept Imagery are two important components of reading that often go unnoticed. These two are closely related to one another, yet do not serve the same exact purpose. According to a seminar done by Lindamood-Bell, “Symbol Imagery is the imagery for sounds and symbols within words for decoding.” Symbol Imagery is a form of sensory input that contributes to phonological and orthographic processing which is needed for reading and spelling. If a student exhibits poor Symbol Imagery and has trouble with: word recognition, retaining sight words, reading fluency, spelling, poor self-correction, then they may be dyslexic. Similarly, “Concept Imagery is an imagined whole for oral or written language comprehension.” Essentially, it is being able to picture an image in your brain. A student with weak Concept Imagery may have difficulty with: written or oral comprehension, critical thinking, following directions, problem solving, interpreting social situations, (“Evidence-Based Solutions”).

Lindamood-Bell's *Seeing Stars* and *Visualizing Verbalizing* programs focuses on improving Symbol Imagery and Concept Imagery with students who do not perform well in those areas.

There is direct evidence that dyslexic students progressed in the areas of symbol imagery, word attack, and word recognition while having intense instruction. Paul Worthington, the speaker who conducted The Lindamood-Bell webinar, referenced a study that they did with Stanford University. This study used the *Seeing Stars* program to address the “remediation effects for students identified as dyslexic.” The dyslexic students started at a 25th percentile or below in Symbol Imagery, Work Attack, and Word Recognition. After intervention 70% of all students moved up to at least the 25th-50th percentile or the 50th-75th percentile in all three areas. This evidence clearly depicts that intense tailored instruction leads to improved reading abilities (“Evidence-Based Solutions”).

Students who demonstrate literacy problems may have poor Orthographic Processing and or poor Phonemic Awareness. The definition of Orthographic Processing is: “the ability to mentally recognize, create, store, and retrieve the visual representation of written words” (“Orthographic Processing”). The University of Oregon states Phonemic Awareness as, “the ability to hear and manipulate the sounds in spoken words and the understanding that spoken words and syllables are made up of sequences of speech sounds.” The *Seeing Stars* program works on the building blocks of literacy to help students enhance their Phonological and Orthographic processing. The program starts off very simple with learning the letters of the alphabet, vowels and consonants, and prefixes and suffixes. The program then intensifies to sight words and multisyllabic words. One way of helping students with their orthography (spelling) of multisyllabic words is chunk-line-spelling. An example of chunk-line-spelling is the word,

community, written as com/mun/i/ty. Students chunk the word into syllables, learn what sounds they make (phonemes), and learn the complex rules of the English language.

There is a stigma that only children should obtain literacy intervention, but that is not true. Adults greatly benefit from literacy intervention, too. A facility that helped low-literacy adults find employment, used the Lindamood-Bell *LiPS* program with 244 students over the course of three years. The successful completion of this program was documented when a student attended at least 80 hours of instruction or improved one grade level. The students had pre and post literacy assessments in seven areas of reading. The post mean test scores were higher than the pre mean test scores in all seven areas. Some of these areas included reading comprehension, vocabulary, spelling, and word attack. There was also an improvement in self reports about the adults' reading abilities before and after they received intervention. As a matter of fact, 47.14% of them stated that they enjoyed reading and writing as a recreational activity. The theory of why this intervention was so successful was because of the small groups, how comprehensive the program was, and the use of assistive technology (Shaw, D. M., & Disney, L. J.).

Intense, repetitive, evidence-based instruction is what makes students who receive the Lindamood-Bell curriculum experience transformative results. There was a study done where both people with diagnosed learning disabilities and without, received schoolwide Lindamood-Bell reading intervention. Students in both categories were put into small groups and received daily intervention for two years. The students who were lacking decoding and fluency skills used the *Seeing Stars* program. Whereas, students who had poor reading comprehension used the *Visualizing Verbalizing* program. The results of general education students compared to special education students were shocking. General education students had an average fluency

growth of 56 words, and the special education students had an increase of 54 words. The general education students increased 31 points in their English during state testing. Similarly, special education students increased 29 points. The evidence indicates that special education students can make great gains with their reading abilities if the proper curriculum is provided. This study proves that reading intervention is for everyone, not just students with diagnosed learning disabilities (Schmidt).

Comprehension is one, if not the most important factor of reading. Reading comprehension is a necessity for all areas in life from school, to work, to interacting with friends. If a student lacks reading comprehension abilities, one can infer that many areas of school and life are challenging. Lindamood-Bell's *Visualizing Verbalizing* program has been proven to increase students comprehension from the 23rd percentile, to the 45th percentile, with an average of 100 hours of instruction ("Evidence-Based Solutions"). This curriculum was designed specifically to cater to individuals with poor comprehension. It guides students to think in pictures while reading, in other words, Concept Imagery. Lindamood-Bell states on their website that if students have a good foundation of Concept Imagery, then their listening vocabulary, oral vocabulary, memory, and writing improve. An article published by the *International Multi-disciplinary Journal of Education* wrote it best: "This comprehensive approach to reading comprehension not only enhanced student's ability to extract explicit and implicit meaning from written material, but also fostered critical thinking, and analytical skills essential for higher-level cognitive development."

The intervention's thorough approach to addressing the root causes of reading difficulties played a pivotal role in sustained academic growth. Students who received Lindamood-Bell instruction during elementary school consistently enhanced their reading skills throughout

middle and high school. This means that the Lindamood-Bell is not a short-term plan to help struggling readers, quite the opposite. The tailored instruction provided students with a toolbox of strategies to use in a variety of situations. What makes this program so beneficial is that it is extremely adaptable for diverse learners and their own individualized needs. This transformative curriculum sets up students for success with their educational journeys, academic performance, and the workplace experiences to come (Tomarong, Lhezly, et al).

By now it should be evident that Lindamood-Bell is incredible for providing reading support for all learners and all ages. It is important to make this curriculum widely accessible in schools because that is when most students “fall through the cracks.” In order to see an increase of reading proficiency nationwide, there needs to be early intervention. What makes Lindamood-Bell so special is that it is evidence-based, intensive, can be tailored to any student, and uses a multi-sensory approach. All of these characteristics combined allows students to thrive in the classroom setting and beyond. The reason why this curriculum might not be in schools as much as it should be, is because of cost. Hopefully, schools can soon start to realize that everyone deserves the right to read and it is worth investing in this comprehensive curriculum.

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