



Contemporary Approaches to Intervention:
Visualizing and Verbalizing

Special thanks to Jenna Hart and Johanna Kreisbuch

Background: Visualizing and Verbalizing is a reading comprehension program based on concept imagery, the ability to develop an imaged gestalt from language. The program targets creating this mental image for those who have difficulty visualizing language. The theoretical basis of Visualizing and Verbalizing originates from Dual Coding Theory, which was developed in 1971 by Allan Paivio. The premise of Dual Coding Theory is that forming mental images promotes higher order thinking skills. Mark Sadoski further described Dual Coding Theory by stating that cognition is an interplay of two systems: a verbal system specialized for language and a non-verbal system specialized for images. Visualizing and Verbalizing was developed on the premise that many people are lacking in their non-verbal systems. By working on concept imagery, the program aims to improve reading comprehension, oral language comprehension and expression, written language expression and critical thinking.

Population: Visualizing and Verbalizing is intended to benefit people of all ages and levels who are having literacy difficulties. It is most often used with people with Autism, Dyslexia, ADHD, Hyperlexia, Learning Disabilities, and Learning Difficulties.

Description: Visualizing and Verbalizing can be used in a variety of settings: whole class instruction, small group or one-on-one. Additionally, duration of intervention depends on the instructional environment. It is suggested that whole class and small group instruction be provided 3-5 times a week with 30-minute sessions. However, for one-on-one intervention, daily 60-minute sessions are recommended. Instruction for all types of environments will take place across 8-12 weeks.

Visualizing and Verbalizing is a multi-step program. The steps are listed below:

- Picture by Picture
- Word Imaging
- Sentence Imaging
- Sentence by Sentence Imaging
- Sentence by Sentence with Interpretation
- Multiple Sentence Imaging
- Paragraph Imaging
- Paragraph by Paragraph Imaging

During the first step, the professional shows a client a given image and asks them to express what they picture. This step addresses two concerns. First of all, the professional uses key structure words (what, color, shape, number, mood, where, etc.) to ask target questions. These words help to teach the client how to build an imaged gestalt. Additionally a verbal model is given and serves as an example of how to accurately verbalize from a given image. In word imaging, a student visualizes and verbalizes their own generated image. By the sentence by sentence step, the client is working on both sequencing and summarizing. As therapy progresses, each step gets more complex.

Materials and Training:

Anyone (teachers, volunteers, speech language pathologists, other professionals, etc.) can be trained to provide instruction of Visualizing and Verbalizing. Those professionals or volunteers seeking training have two options: a two-day workshop taught by professionals and/or available materials to purchase. Materials include a teacher's manual, storybooks, colored pictures, overhead transparencies, small and large structure words, colored squares for

sequencing and stories for behavioral management. In the manuals the teacher is provided with specific objectives and lesson plans for each step of the program.

Cost: The teacher’s manual is \$80 and the complete kit is \$455. A two-day workshop costs \$679/person.

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Multisensory approach using oral skills, motor skills and visual cues ● Improves reading comprehension by bringing imagery to a conscious level so it can be used as a sensory tool in comprehension ● Materials are easy to use and be easily translated and applied in any language ● Broad target population ● Evidence based practice 	<ul style="list-style-type: none"> ● Difficult to know when to progress to the next step in the process ● Intensive and time consuming ● Steps are broad ● Not available digitally

Empirical Evidence: Several Level 1 (controlled and randomized) and 2 (controlled) studies have proven the effectiveness of Visualizing and Verbalizing in improving reading comprehension, word recognition, implicit open-ended questions and visual open-ended questions in children ranging from grades 3-5 (Johnson-Glenberg, 2000; Lindamood, Bell & Lindamood, 1997; Sadoski & Wilson, 2006). The students with information regarding demographic of the participants indicated they were children considered to be typically developing with good decoding skills but poor decoding skills.

For more information and training:

See workshops for Visualizing and Verbalizing on the Lindamood-Bell Learning Processes website.

Sources:

Bell, N. 1986. *Visualizing and Verbalizing for Language Comprehension and Thinking*. Paso Robles, California: Academy of Reading Publications.

Florida Center for Reading Research. (2006). *Florida Center for Reading Research: Visualizing and Verbalizing*. Tallahassee, FL: Arndt, E.J.

Johnson-Glenberg, M.C. (2000). Training reading comprehension in adequate decoders/poor comprehenders: Verbal versus visual strategies. *Journal of Educational Psychology*, 92(4), 772-782.

Lindamood, P., Bell, N., & Lindamood, P. (1997). Sensory-cognitive factors in the controversy over reading instruction. *Journal of Developmental and Learning Disorders*, 1(1), 143-182.

Sadoski, M., & Willson, V. L. (2006). Effects of a theoretically based large-scale reading intervention in a multicultural urban school district. *American Educational Research Journal*, 43, 135-152.