Florida Center for Reading Research
Visualizing and Verbalizing

What is Visualizing and Verbalizing?

Visualizing and Verbalizing for Language Comprehension and Thinking (V/V) is a supplemental/intervention program designed to instruct and improve reading comprehension, oral language comprehension and expression, written language expression, and critical thinking skills in individuals of all ages through the development of concept imagery. It was created by Nanci Bell of Lindamood-Bell Learning Processes. It is one of three reading programs developed and supported by Lindamood-Bell Learning Processes: the other two are LiPS and Seeing Stars. (See individual FCRR Reports on LiPS and Seeing Stars for further information).

This program is designed for use in a variety of settings. It can be utilized in whole class instruction, small group or one-on-one. The frequency and duration of lessons is dependent upon the instructional environment. Whole class and small group instruction should be provided 3-5 times a week with 30 minute lessons for 8-12 weeks. Daily, 60 minute sessions for 8-12 weeks are recommended for students requiring one-on-one instruction. Teachers, specialists, paraprofessionals, and volunteers may all be trained to provide instruction in this program. The manual includes specific objectives for each lesson with sample dialogue between Nanci Bell and a student. A teacher could utilize the language provided in the manual as guidance for the introduction and practice of each skill. All students are introduced to the program by the instructor setting the "climate," explaining the purpose for and process of visualizing and verbalizing. The scope and sequence is clearly delineated in the teacher's manual with all students progressing through all steps. The length of time spent on each step (Picture to Picture, Word Imaging, Sentence Imaging, Sentence by Sentence Imaging, Sentence by Sentence with Interpretation, and Multiple Sentence Imaging, Paragraph Imaging, and Paragraph by Paragraph Imaging) depends on the individual needs of the students.

V/V relies on teacher directed questions to assist students in forming images. Twelve structure words (e.g., what, size, color, shape, etc.), are used to provide a framework from which to create images and also elicit language to discuss what was imaged. Initially, the teacher shows the student a simple line drawing and elicits a description of the drawing in the context of the twelve structure words. The teacher confirms what the student says at each point and models the imaging process by replaying the complete image the student's words evoke in the mind. Then the teacher takes a turn using language to verbally describe a simple drawing to the student as the student creates the gestalt image in his or her mind. The level of difficulty increases as one moves through the program, from pictures to words, sentences to paragraphs.

The *V/V* program kit comes in a box the size of a game board and includes all materials necessary to provide instruction using this technique. The kit includes the teacher's manual, *V/V* Stories Book 1, colored pictures, overhead transparencies, small and large structure words, and colored squares. Additional story books, workbooks and multi-media materials are available for purchase to supplement and extend instruction. Due to the cumulative nature and precise terminology used in this program, all students start at the beginning. The pacing is determined by student performance. New skills in this program build upon previously learned skills; therefore it is necessary to teach each skill to the level of mastery.

How is Visualizing and Verbalizing aligned with Current Reading Research?

The *V/V* program was first published in 1986 with a revised edition available in 1991. It is a comprehension program and therefore does not address all five components of reading. In 2000, the National Reading Panel published its review of scientifically based reading research found to support reading instruction. Mental imagery, a key component of the *V/V* program, was identified as having "reliable effects on improving memory for text" (National Reading Panel, 2000, p. 4-42), especially when used to recall individual sentences or paragraphs. This program also closely aligns with Dr. Allan Paivio's Dual Coding Theory (DCT) which identifies two modes for processing information, imagery and language, in which individuals who utilize both simultaneously have better comprehension and use of cognitive processes.

Lindamood-Bell Learning Processes offers a two-day workshop in the implementation of *V/V*. A listing of the dates and locations of these workshops can be found in their catalog or on their website. The workshop is not a requirement when the program is purchased. The teacher's manual is written in clear and concise language to facilitate appropriate implementation.

Research Support for Visualizing and Verbalizing

A study of the V/V program (Lindamood et al, 1997) was conducted in a school in Long Beach, California with 2 classrooms of 4th graders. One class served as the control group and the other group received approximately 26 small group training sessions over a 3 month period. Although the students instructed with the V/V program experienced improvement in reading comprehension on the GORT-III that was significantly greater than that experienced by students in the control classroom, this study suffers from a confound between teacher and program effects. Since only one teacher taught the control students and one teacher taught the V/V students, differences in outcomes between groups may have been due to simple teacher differences, rather than instructional program differences.

In another study (Johnson-Glenberg, 2000) students from 3 schools in grades 3-5 were randomly assigned to one of two treatment groups, *V/V* or Reciprocal Teaching (RT). Both interventions were taught at all 3 schools by the two trainers. Eligible students were included according to the following criterion: identification by their classroom teachers as being good decoders, but poor comprehenders, WRAT (Jastak & Jastak, 1978) grade equivalent score greater than or equal to the grade of the student and a Gates-MacGinitie (MacGinitie & MacGinitie, 1989) comprehension percentile score below the mean. There were 59 students who fit this profile. The students were then divided into small groups of 3-5 students taking grade and condition into account. Intervention training lasted approximately 10 weeks with 4, 30 minute sessions a week. Both groups received about 28 sessions. Students from 2 other schools formed the quasi experimental control group and based on teacher report received reading comprehension instruction on summarizing (67%), predicting (33%), and visualization (17%).

There were no significant differences in reading comprehension between groups at pretest, but there was a significant difference in vocabulary, with the V/V group being lower. In the analysis of the post test scores, the vocabulary measure was included as a covariate when appropriate. Results indicated that students in the RT group scored significantly higher than the control group on word recognition, question

generation, explicit open-ended questions, implicit open-ended questions and visual open-ended questions. The RT group scored significantly higher than the *V/V* group on question generation, explicit open-ended questions, and listening recall-expository. The students in the *V/V* group scored significantly higher than the control group on word recognition, implicit open-ended questions, and visual open-ended questions. No significant differences were noted among the 3 groups on measures of Gates-MacGinitie comprehension, predictions, miscues, time, recall-proportion of main ideas, recall-details, DTLA-following directions (Baker & Leland, 1959), Working Memory-Linguistic Processing, WISC-Digit Span, Paper folding, and visual imagery-paired word. Thus, although the interventions produced a mixed pattern of improvements relative to the control group on some of the listening comprehension and strategy use questions, neither intervention produced significant improvements relative to the control on a standardized measure of reading comprehension.

As has been mentioned in other reports on the Lindamood- Bell programs, Sadoski and Willson (2006) conducted a six year study in one school district where with each passing year additional schools gradually implemented the three Lindamood-Bell Learning Processes (LBLP) programs. The study began in one school and by the end of the six years 31 schools were included. The state mandated reading comprehension test, Colorado Student Assessment Program (CSAP), served as the instrument to assess program effectiveness in pretest and posttest administrations for grades 3-5. Implementation included teacher training in the LBLP programs with on-site consultants to provide additional training and monitor the fidelity of program usage. Schools were used as the units of analyses in all analyses. Four covariates: school size, school minority student percentage, socio-economic status, and number of years in LBLP intervention were used in analyses. Grade by grade analysis using the CSAP indicated significantly greater performance for schools using the LBLP programs than the state average, once student demographic factors were accounted for. Another positive outcome of the results is that scores increased each year on the CSAP over grades 3-5, with the most growth seen in grades 3 and 4. Our conclusion from reviewing this study on the LBLP programs is that while it is consistent with the idea that the programs can be used effectively to help "close the gap" in reading skills for struggling readers; it is difficult to know which of several aspects of the total school intervention program were responsible for the improved performance of the students.

Strengths & Weaknesses
Strengths of *V/V*:
- Systematic and explicit instruction.
- Clear detailed lesson examples at each step of instruction.
- Accompanying materials are well organized.
- Can be utilized in whole or small group format.

Weaknesses of *V/V*:
- May be difficult to know when to move to the next step with students.

Which Florida districts have schools that implement V/V?
Lindamood-Bell Learning Processes currently has a contract with Hernando County (352-797-7001) to implement their programs based on their diagnostic, intervention and professional development protocol. Lindamood-Bell Learning

Processes also has Learning Centers where individuals may inquire for additional information.

Coral Gables 786-552-6470

Tampa 813-253-0453

Weston 954-349-1688

For More Information
http://www.lblp.com/programs/conceptimagery.shtml

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Important Note: FCRR Reports are prepared in response to requests from Florida school districts for review of specific reading programs. The reports are intended to be a source of information about programs that will help teachers, principals, and district personnel in their choice of materials that can be used by skilled teachers to provide effective instruction. Whether or not a program has been reviewed does **not** constitute endorsement or lack of endorsement by the FCRR. The programs for which reports are available do not constitute an "approved" or "required" list, since many potentially useful programs have not yet been reviewed. For an overview of the conditions under which these reports were prepared, please read the information found here: http://www.fcrr.org/FCRRReports/index.htm

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