



Effects of a Theoretically Based Large-Scale Reading Intervention in a Multicultural Urban School District



Seeing Stars for
Phonemic Awareness,
Reading, and Spelling (SI)

Visualizing and
Verbalizing for Language
Comprehension and
Thinking (V/V)

Lindamood Phoneme
Sequencing® Program for
Reading, Spelling, and
Speech (LiPS®)

PROFILE:

Number of Schools*:

- 13-22 Lindamood-Bell
- 291-684 Comparison
- *Sample size varied depending on analysis

Grades: 3rd-5th

Programs Implemented:

- Seeing Stars®
- Lindamood Phoneme Sequencing®
- Visualizing and Verbalizing®

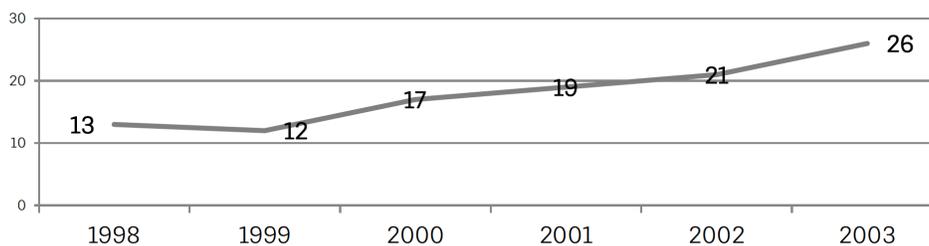
Outcome Measures:

- Colorado Student Assessment Program (reading)

BACKGROUND:

Pueblo City Schools in Pueblo, Colorado, serve a large percentage of students who are at-risk of reading failure. From the 1998/99 to the 2002/03 school years, Pueblo implemented Lindamood-Bell instruction to address the specific needs of this student population. Students received Seeing Stars, Visualizing and Verbalizing, and Lindamood Phoneme Sequencing instruction to develop symbol imagery, concept imagery, and phonemic awareness. This study investigated the constructs of Dual Coding Theory using the Seeing Stars and Visualizing and Verbalizing programs. Instruction was delivered by Pueblo teachers who received professional development in the programs. Student gains were measured with the state reading test and the results were compared to gains made by students from other, similar schools in Colorado who did not receive Lindamood-Bell instruction. Schools were comparable as a result of controlling for school size, free and reduced-price lunch, and minority populations. Third-grade results for Title I schools are provided below.

Percentage Point Difference



RESULTS:

The line in the chart above shows the percentage point difference (in percent proficient and advanced on the state reading test) between Pueblo (Lindamood-Bell) schools and comparison schools. By 2003, schools partnering with Lindamood-Bell were 26 percentage points above the average of the comparison schools. The independent evaluators who conducted this research determined that the main effect of Lindamood-Bell instruction was statistically significant ($p < .0001$). In their published article they state that “[Pueblo] Title I schools outperformed the average of the remaining comparable Title I schools in the state in an increasingly positive way during the years 1998-2003.” The results of this study support the Dual Coding Theory model of cognition and illustrate that Lindamood-Bell instruction in the Seeing Stars, Visualizing and Verbalizing, and Lindamood Phoneme Sequencing programs leads to improved reading, which is essential to achieving success with school curricula.

LOCATION:

College of Education and Human Development, Texas A&M University, 4225 TAMU