

Research: The Word Identification Strategy

Study 1

Overview

The Word Identification Strategy is comprised of a set of steps students use to decode multisyllabic words, like the words they find in secondary science and social studies textbooks. Twelve students with LD in grades 7, 8, and 9 participated in this study. At the beginning of the study, their reading scores on a standardized test ranged from the third to seventh grades. The study employed a multiple-baseline across-subjects design. All participants were taught the strategy.

Results

During baseline (before instruction), on a test of oral decoding, the students made as many as 21 errors as they were reading 400-word passages written at their ability level and 37 errors as they were reading passages written at their grade level. After instruction in the strategy, all students reached the mastery requirement of 6 or fewer errors in a 400-word passage within 5 practice trials when reading ability-level passages and within 9 trials when reading grade-level passages. At the end of the study, they made an average of 5 errors as they were reading 400-word passages taken from subject-area textbooks for their grade level.

During baseline, the students' average comprehension scores were 83% on ability level passages and 39% on grade-level passages. After instruction, their average comprehension scores were 88% on ability level passages and 58% on grade-level passages.

Maintenance tests taken as many as five weeks after instruction had ended showed that the students maintained their use of the strategy and continued to commit fewer oral reading errors than they had before instruction.

Conclusions

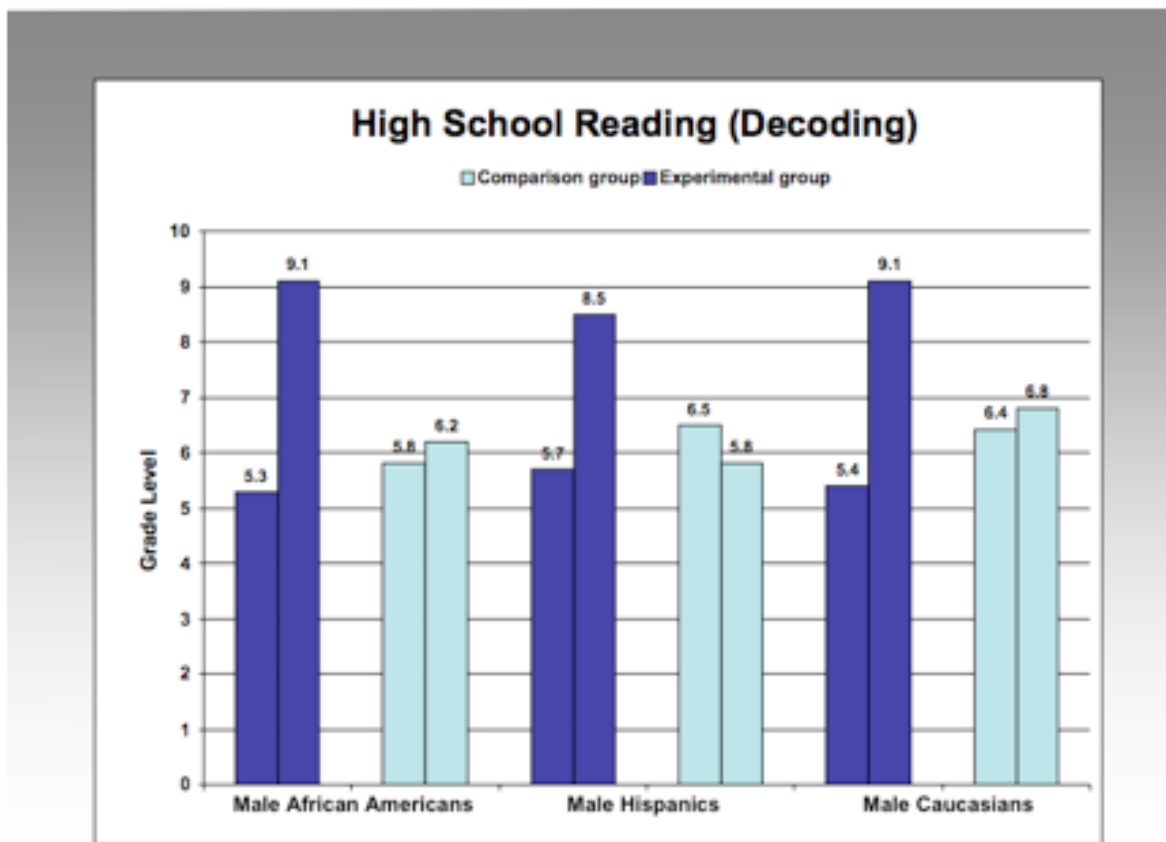
After instruction in the Word Identification Strategy, students made substantially fewer decoding errors when reading a passage written at their ability and grade levels than they did before instruction. On average, their comprehension scores increased. However, some students did not realize substantial comprehension score increases.

Reference

Lenz, B.K. and Hughes, C.A. (1990). A Word Identification Strategy for learning disabled adolescents. *Journal of Learning Disabilities*, 23(3), 149-158, 163.

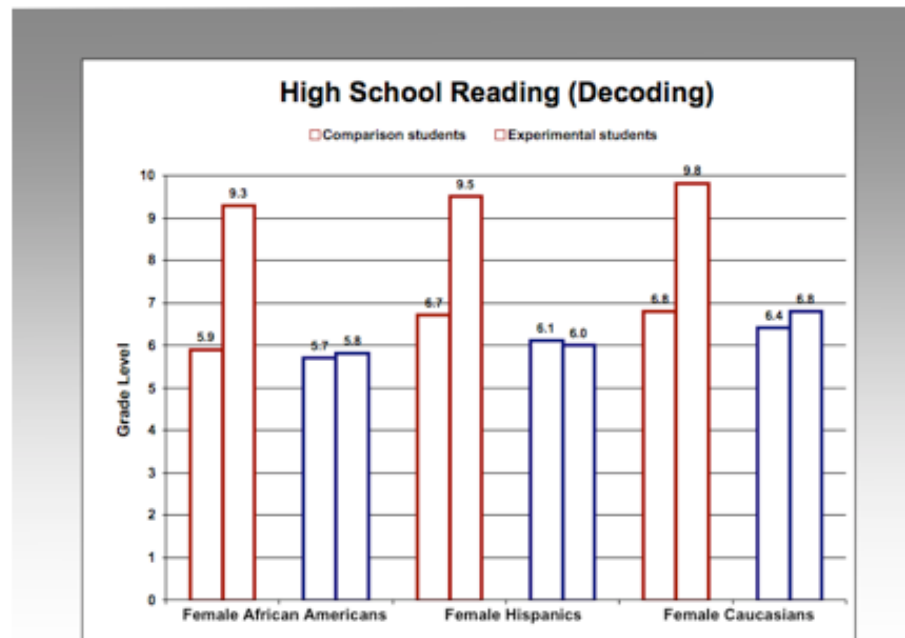
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Figure 1: Mean grade-level decoding scores for male students



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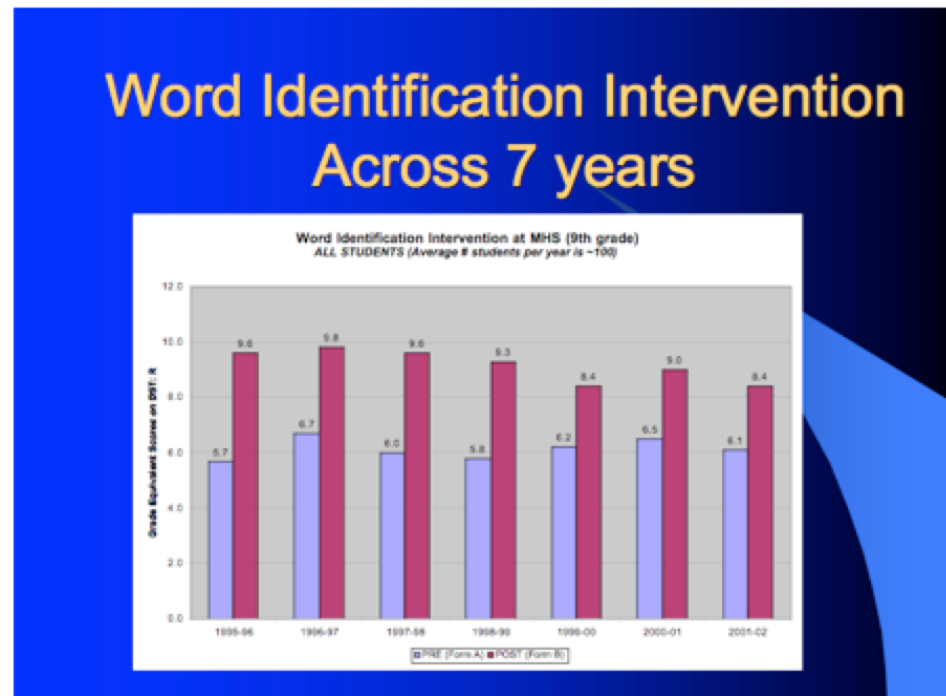
Figure 2: Mean grade-level decoding scores for female students



ANCOVA results indicated that there was a significant difference between the posttest raw decoding scores of the experimental and comparison groups [$F(1,121) = 31.078$, $p < .001$, $\eta^2 = .692$] when the pretest scores served as the covariate. (This represents a large effect size). In addition, there was a significant difference between the posttest scores of students with LD in the experimental group and the posttest scores of comparison students who were matched with the students with LD in the experimental group on the basis of their pretest scores [$F(1, 19) = 29.673$, $MSE = 43.93$, $p < .001$, $\eta^2 = .610$]. (This also represents a large effect size.) However, the most significant finding was that, at the end of the study, the students in the experimental group were decoding, on average, at the ninth-grade level, their actual grade level. The experimental students with LD were decoding at the high eighth-grade level (8.8), very close to their actual grade level. The results for all subgroups of students representing all the minorities, mirrored the results for the whole groups. Furthermore, the authors reported that the same kind of results have been achieved by the school decoding program for eight years running. (See Figure 3 where the blue bars represent pretest scores and the maroon bars represent posttest scores.)

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Figure 3: Pretest and posttest grade-level decoding results across school years



Conclusions

Instruction in the Word Identification Strategy, when implemented with small groups of students in an intensive way, can result in "closing the gap" for them with regard to being able to decode multisyllabic words at their grade level. Substantial increases were achieved with all subgroups of students including students with reading disabilities. Comparison students did not make gains in decoding.

Reference

Woodruff, S., Schumaker, J. B., & Deshler, D. D. (2002). *The effects of an intensive reading intervention on the decoding skills of high school students with reading deficits*. (Research Report No. 15). Lawrence, KS: University of Kansas Center for Research on Learning.