

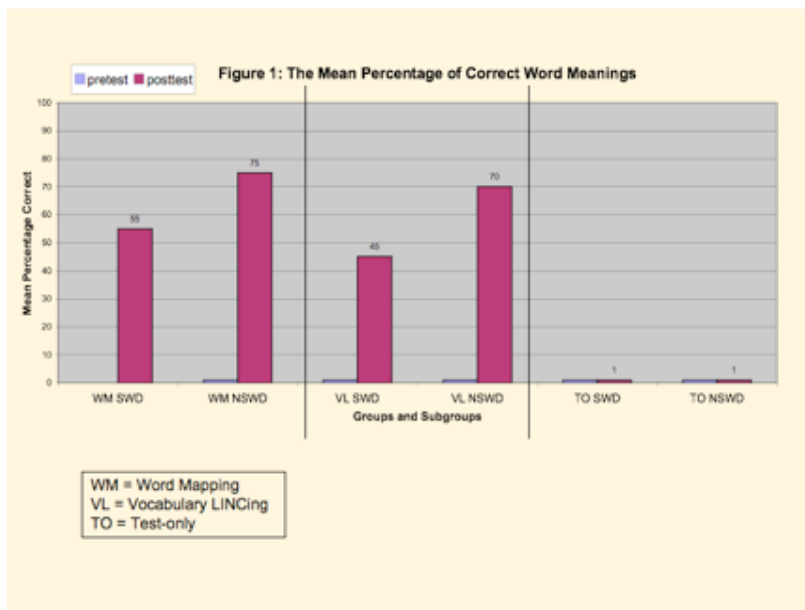
Research: The LINCing Routine

Overview

The LINCing Routine is a set of procedures teachers use to teach students the LINC Vocabulary Strategy. Students use the strategy to learn the meaning of a new word. The effects of teaching the LINC Vocabulary Strategy were compared to the effects of teaching the Word Mapping Strategy in this study. The Word Mapping Strategy is a strategy students use to predict the meaning of new words. The study included a total of 230 ninth graders in nine intact general education English classes. Students with disabilities (SWDs) and without disabilities (NSWDs) were enrolled in each of the classes. Three classes participated in each of three groups: the group receiving instruction in the LINC Vocabulary (VL) Strategy (n = 6 SWDs, 73 NSWDs), the group receiving instruction in the Word Mapping (WM) Strategy (n = 10 SWDs, 69 NSWDs), and a comparison test-only (TO) group (n = 8 SWDs, 64 NSWDs). Classes were randomly selected into the two experimental groups. The third group of classes served as a normative comparison. A pretest-posttest control-group design was combined with a pretest-posttest comparison-group design.

Results

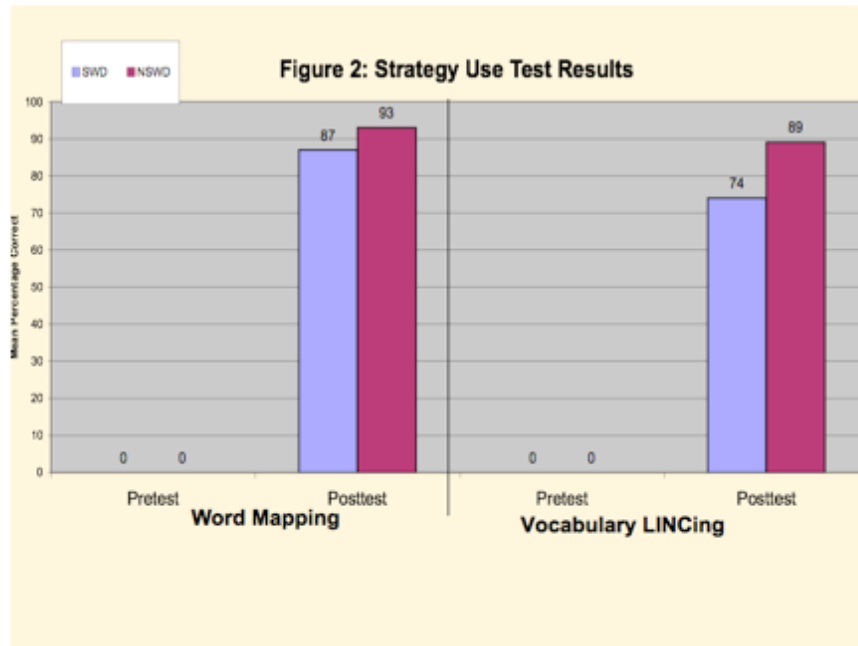
Figure 1 displays the mean percentage of 20 words that students in both experimental groups (i.e., the VL and WM groups) learned during the strategy instruction as determined by a written test that required students to write the meaning of the words. The mean scores of VL students are depicted with the bars in the center of the figure. With regard to changes from pretest to posttest for the VL group, the three-way interaction of time x subgroup x group was found to be significant, Wilks' $\Lambda = .964$, $F(2,224) = 4.138$, $p = .017$, partial $\eta^2 = .036$ (a small effect size). When the file was split on subgroup, the time x group interaction was significant for the SWDs, $F(2,21) = 12.90$, $p < .001$, partial $\eta^2 = .563$ (a large effect size), and for the NSWDs, $F(2,203) = 367.388$, $p < .001$, partial $\eta^2 = .780$ (also a large effect size). The paired-sample t-tests revealed that significant differences were found between the pretest and posttest scores for the SWDs in the VL group, $t(5) = -5.391$, $p = .003$, $d = 1.074$ (a large effect size), and for the NSWDs in the VL group, $t(72) = -26.879$, $p < .001$, $d = .089$ (a medium effect size). No differences were found for the TO subgroups.



No differences were found between the posttest scores of the VL and WM groups on this measure. However, large significant differences were found between the posttest scores of the VL subgroups and the TO subgroups [SWDs: $F(1,20) = 12.589$, $p < .01$, partial $\eta^2 = .386$ (a moderate effect size); NSWDs: $F(1,202) = 543.479$, $p < .001$, partial $\eta^2 = .730$ (a large effect size).

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Figure 2 displays the mean percentage of points students earned on a test of strategy use, with the mean scores for VL students on the right side of the figure. Students in the VL group took a test requiring use of the LINC'S Vocabulary Strategy; students in the WM group took a test requiring use of the Word Mapping Strategy. With regard to the VL group, a significant difference was found between the pretest and posttest scores, Wilks' $\Lambda = .262$, $F(1,77) = 217.184$, $p < .001$, partial $\eta^2 = .738$ (a large effect size). There were no differences between the SWDs and the NSWDs in learning the LINC'S Vocabulary Strategy.



Conclusions

Students in ninth-grade general education classes were able to learn the LINC'S Vocabulary Strategy and the meaning of words taught during strategy instruction. The effect sizes in each case were large. There were no differences in performance between the students with and without disabilities.

Reference for this study*

Harris, M. L., Schumaker, J. B., & Deshler, D. D. (in preparation). The effects of strategic morphological analysis instruction on the vocabulary performance of secondary students with and without disabilities. Available through Edge Enterprises, Inc. or call Edge for updated publication information.

*This research study won the Researcher of the Year Award from the Council for Learning Disabilities in 2008.