# Research: The Paragraph Writing Strategy

# Studies 1 and 2

Two studies were conducted where seventh through tenth graders learned to use the Paragraph Writing Strategy in conjunction with three paragraph styles: enumerative, sequential, and compare and contrast paragraphs. In the first study, a multiple-probe across-paragraph-styles design was employed with three junior-high students. In the second study, a multiple-probe across-paragraph-styles within a multiple-probe across-students design was used. Five students participated. Instruction was provided by a researcher.

## Results

Each time the students wrote a paragraph, the paragraph was awarded points for each type of sentence including topic, detail, and concluding sentences. In Study 1, all three students learned to write organized enumerative paragraphs in the resource room. Their paragraph scores exceeded the 85% level. Also subsequent to strategy instruction, their scores on paragraphs assigned in a general education class improved above the 80% level. However, because the students also immediately generalized their use of the strategy to the other two paragraph styles (and therefore destroyed the experimental control inherent in the multiple-probe across-paragraph-styles design), the second study was conducted with five more students.

Study 2 demonstrated that the students learned to use the paragraph organization strategy for enumerative paragraphs after instruction. All of the students earned more than 85% of the available points on their paragraphs in the resource room. In addition, all of the students generalized their use of the strategy to at least one other paragraph style; three of the students generalized to both additional paragraph styles. After instruction, all of the students met the mastery criterion of earning at least 85% of the points available for paragraph organization on all three paragraph styles. Their mean scores on enumerative paragraphs were 52% in baseline and 92% after instruction; on sequential paragraphs the mean scores were 49% in baseline and 95% after instruction, and on compare-and-contrast paragraphs the mean scores were 38% in baseline and 91% after instruction.

## Conclusions

These studies showed that students with LD could learn how to write organized paragraphs given instruction provided in a small-group setting by a researcher. They also showed that students could generalize the structure of paragraphs to different types of paragraphs and to general education settings.

### References

Moran, M. R., Schumaker, J. B., & Vetter, A. F. (1981). Teaching a paragraph organization strategy to learning disabled adolescents. (Research Report No. 54). Lawrence, KS: University of Kansas Institute for Research in Learning Disabilities.



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# Studies 3

## Overview

This study focused on the instruction of four writing strategies within a resource room program by the regularly assigned special education teacher. The writing strategies were taught across the course of a full school year. General education English and social studies teachers were recruited to give writing assignments in their classes to provide measures of generalization. Seven participating high school students with LD who had not been enrolled in general education courses in the past were enrolled in these English and social studies classes at the beginning of the school year. The students were first taught the Sentence Writing Strategy (Schumaker & Sheldon, 1985) by their special education teacher in the resource room. Next, the students learned the Paragraph Writing Strategy (Schumaker & Lyerla, 1991). Subsequently, they learned how to detect and correct errors in their writing by learning the Error Monitoring Strategy (Schumaker, Nolan, & Deshler, 1985). Finally, they learned the Theme Writing Strategy (Schumaker, 2003). Throughout the instruction, the students' writing performance in both the resource room and in targeted general education classes was monitored. That is, every time they wrote a paragraph or an essay in any of the targeted settings, the product was scored for the types of sentences used, the organization of the paragraph, the number of errors, and the organization of the essay. A multiple-probe across-strategies design was employed.

### Results

The seven students earned an average of 36% of the points available for a well-planned and organized paragraph during baseline and an average of 80% of the points after instruction on products written in the resource room and in their general education classes. The multiple-baseline across-strategies design demonstrated that each student made gains on pertinent measures only after instruction began for each strategy.

Five of the students made the same kinds of gains on their writing assignments in general education classes as they did in the resource room, even though they had not been taught to use the writing strategies in those settings. The two students who did not generalize their use of the strategies to other classes did so quickly after they had been taught to do so.

Before the study, the students' GPA was 2.1 in special English and social studies courses designed for low-achieving students and students with disabilities; after the study, their GPA was 2.7 in regular-track general education English and social studies courses.

On a standardized test of writing instruction, the Woodcock Johnson Psychoeducational Battery, the students' mean grade equivalent score increased by two grade levels from 6.2 to 8.2. On the district's minimal competency writing exam, the students earned a mean overall score of 3.5 (out of 5.0), which compared favorably to the mean overall district average of 2.5. With regard to maintenance of strategy usage, the four students who returned to the school the following school year and who had learned all the strategies demonstrated that they could write organized paragraphs in their general education classes at mastery levels.

## Conclusions

Thus, this study demonstrated that high school students with LD could learn the Paragraph Writing Strategy in a resource room program when instructed by their regularly assigned special education teacher. It also showed that they could generalize their use of the Paragraph Writing Strategy to assignments given in their required general education courses and that they could maintain their use of the strategy across several months. It also showed that strategy instruction was associated with growth in standardized writing test scores and produced favorable writing competency test scores.

### References

Schmidt, J. L. (1983). The effects of four generalization conditions on learning disabled adolescents' written language performance in the regular classroom. Unpublished doctoral dissertation. University of Kansas, Lawrence.

Schmidt, J. L., Deshler, D. D., Schumaker, J. B., & Alley, G. R. (1989). Effects of generalization instruction on the written language performance of adolescents with learning disabilities in the mainstream classroom. *Reading, Writing, and Learning Disabilities*, 4(4), 291-309.