

# Research: The Self Questioning Strategy

## Study 1 - Overview

This study investigated the effects of instruction of the Self-Questioning Strategy and the Visual Imagery Strategy (Schumaker, Deshler, Zemitzch, & Warner, 1993). Six students with LD in grades eight through 12 participated, and a multiple-probe across-strategies design was used for each student. Some students were taught the Visual Imagery Strategy first; others were taught the Self-Questioning Strategy first. However, all the students received instruction in both strategies. Several measures were used including a measure of student use of each strategy while they were reading a passage as well as a measure of reading comprehension after the students had read the passage. Two levels of 100- to 200-word passages were used to gather these measures; those written at the student's reading level and those written at the student's actual grade level. In order to gather the strategy-use measures, five dots were marked in the passage at relatively equally spaced intervals. The student was asked to read until he/she reached a dot and then to tell the researcher about the picture he/she had in his/her mind of the passage (visual imagery) or to tell the researcher about any questions he/she had asked him/herself about the passage (self-questioning), depending on which strategy was being tested in a given session. The researcher scored each student response according to a written set of objective guidelines. For example, a question was scored as appropriate if it was relevant to the content of the passage, if its answer did not include information that the student had already read, and if it was not a repeat of a previously asked question.

## Results

Results showed that all six students mastered both strategies with regard to applying them to ability-level materials. Five of the six students learned to apply both strategies to grade-level materials within four practice trials and did so in such a way as to improve their performance on the comprehension tests. The mean percentage of comprehension questions answered correctly over grade-level passages during baseline was 46% and after instruction was 90%. Follow-up tests conducted after instruction was terminated showed some decrease in mean comprehension scores (down to 70% for Self-Questioning).

## Conclusions

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## Reference

Clark, F. L., Deshler, D. D., Schumaker, J. B., Alley, G. R., & Warner, M. M. (1984). Visual imagery and self-questioning: Strategies to improve comprehension of written material. *Journal of Learning Disabilities*, 17(3), 145 - 149.

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## Study 2 - Overview

In a study that focused on the instruction of two reading comprehension strategies, the Self-Questioning Strategy and the Paraphrasing Strategy were taught to a 9th- grade English class containing 23 students. A comparison class contained 25 students. Three students with disabilities, three high-achieving students, and three low- achieving students within each class served as targeted subjects for a multiple-probe across-strategies design. Thus, a comparison-group design was combined with a multiple-probe design so that Individual student results could be highlighted as well as group results. The students in the experimental class received instruction in the strategies through the use of the eight-stage instructional methodology for teaching strategies combined with cooperative-group structures. Students in the comparison class received traditional English class instruction. Measures included a measure of the performance of each strategy and a comprehension measure.

## Results

The results showed that the students with LD and low-achieving students in the two classes were somewhat comparable at the beginning of the study. For example, the targeted students with LD in the experimental class earned a mean self-questioning score of 8%, and those in the comparison class earned a mean score of 5%. Low-achieving students in the experimental class earned a mean self-questioning score of 7%, and low-achieving students in the comparison class earned an average score of 10%. All students in the experimental class earned an average self-questioning score of 11%, and all students in the comparison class earned an average score of 9%.

All the targeted students in the experimental class mastered both strategies after the instruction as shown by the multiple-probe design. After the instruction, the experimental students with LD earned an average self-questioning score of 100%, and the low-achieving students earned an average self-questioning score of 80%. In contrast the comparison students with LD and low-achieving students earned average self-questioning scores of 30% and 18%, respectively. Also, after instruction, all the experimental students earned an average self-questioning score of 88%: all the comparison students earned an average self-questioning score of 20%.

Mean comprehension scores also increased for the experimental students. For example, the mean comprehension score for the experimental students with LD on grade-level materials increased from 24% to 70%; for experimental low achievers, it increased from 30% to 70%. For all experimental students, it increased from 50% to 70%. The only group to make gains in comprehension in the comparison class was the low-achieving group. Their mean comprehension score on grade-level materials increased from 48% to 60%

## Conclusions

Thus, this study showed that reading strategies can be taught in an inclusive general education high-school class in such a way that students make substantial gains in their reading skills and comprehension. Nevertheless, these results were achieved when the eight-stage strategic instruction methodology was used, and students had multiple opportunities to practice using each strategy. They also received help and

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feedback from peers in their cooperative groups. The cooperative-group structure was designed in such a way that the students would help and encourage each other to master each strategy (i.e., points were awarded to individuals according to how well all members of the group performed on the strategies).

## Reference

Beal, V. L. (1983), The effects of large group instruction on the acquisition of specific learning strategies by learning disabled adolescents. Unpublished doctoral dissertation, University of Kansas, Lawrence.