

Research: The THINK Strategy Program

Overview

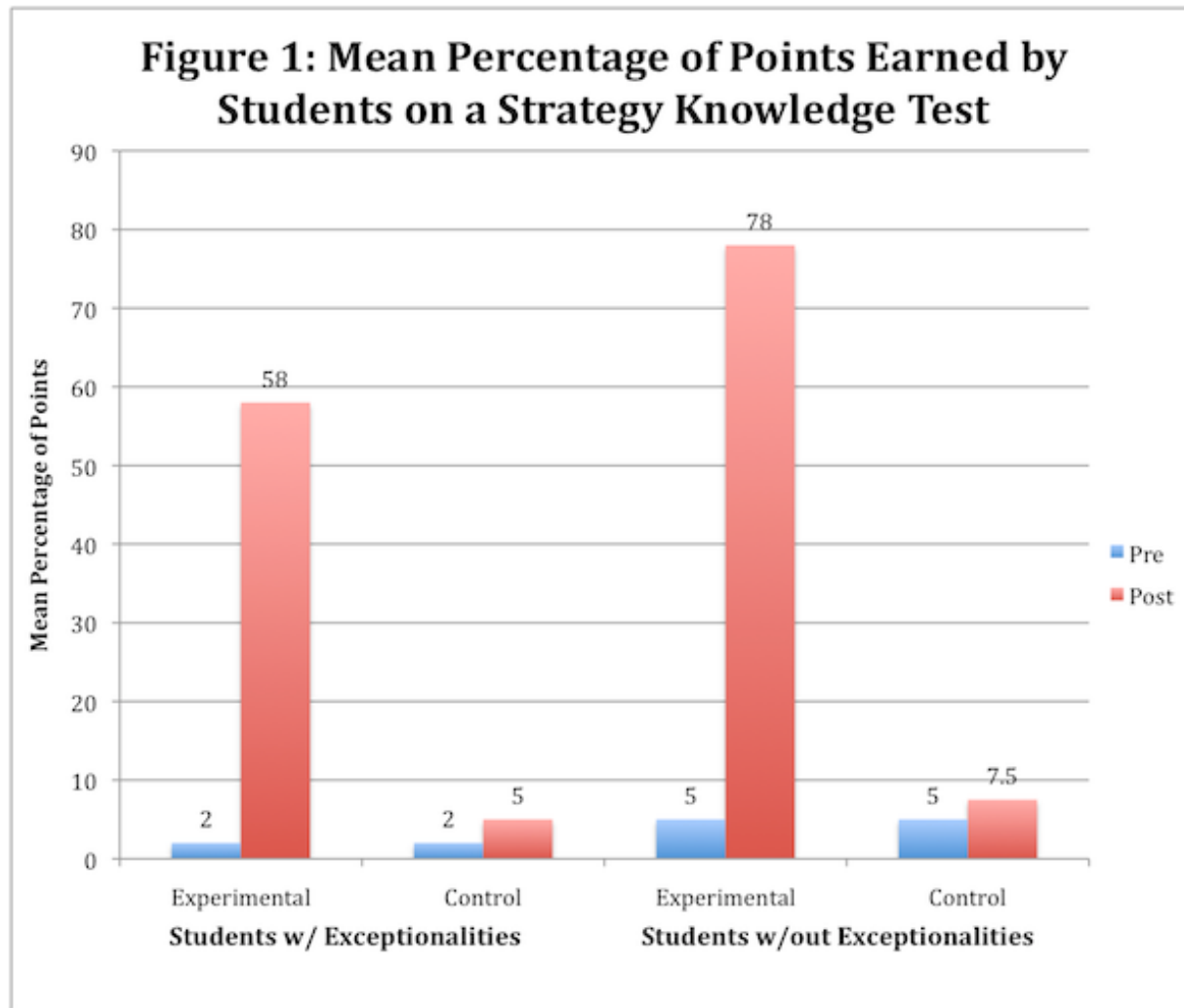
The THINK Strategy is used by cooperative groups to solve problems. The research was conducted in 20 fourth- and fifth-grade general education classes. These intact classes were randomly assigned to the experimental or control conditions. A total of 392 students participated. The 10 teachers of the experimental classes taught their students the SCORE Skills and the THINK Strategy. The 10 control teachers did not teach the SCORE Skills or the THINK Strategy to their students.

Results

Observational data were gathered on the fidelity of the experimental teachers' implementation of the instruction. They presented a mean of 80% of the information on the SCORE Skills and 95% of the information on the THINK Strategy, according to a checklist based on the two instructor's manuals.

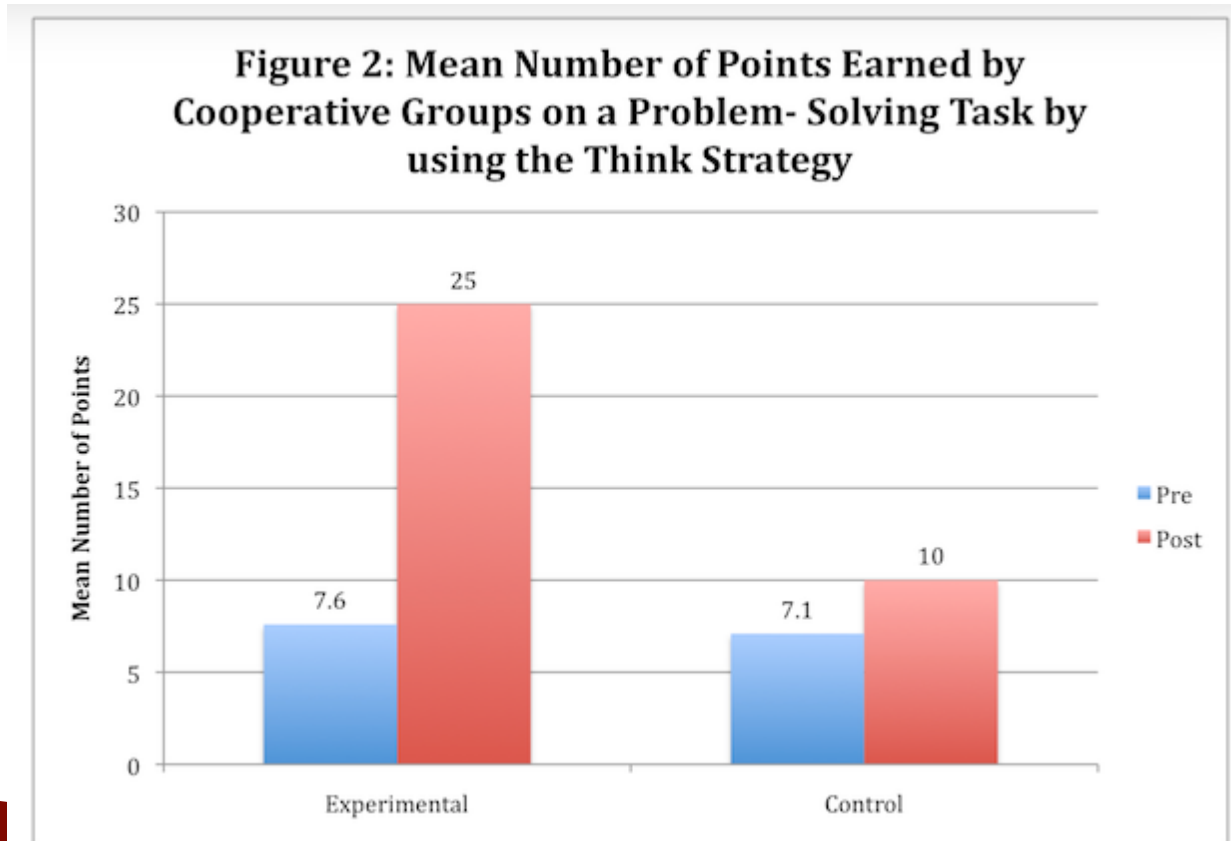
All students in experimental and control classes completed a written test of their knowledge about social skills and problem-solving skills at pretest and posttest. The ANCOVAs revealed significant differences between the posttest scores of experimental and control students for students with exceptionalities, $F(1, 19) = 148.03, p < .001, \eta^2 = .90$, and for students without exceptionalities, $F(1, 19) = 53.36, p < .001, \eta^2 = .76$. (These are very large effect sizes.) For students with and without exceptionalities, the adjusted mean for the experimental group was significantly larger than the adjusted mean for the control group. (See Figure 1 for the mean scores.)

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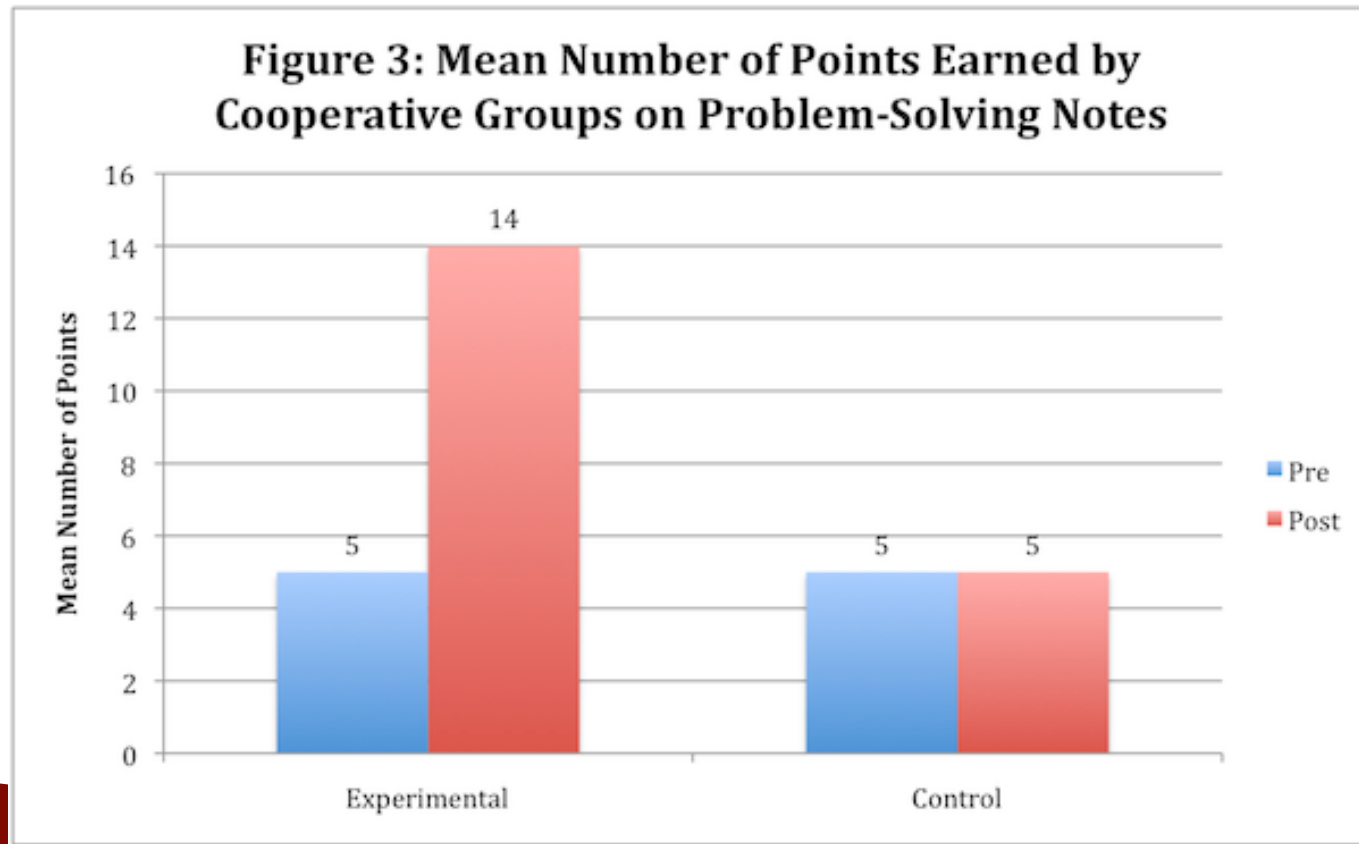
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Data were also gathered on the students' performance as they solved problems together in small groups during the pretest and posttest. Since students with and without exceptionalities worked together in these groups, the analysis was conducted on the combined group means. Observers determined the percentage of strategy steps the students used. The ANCOVA revealed a significant difference between the experimental and control group posttest scores, $F(1, 19) = 92.03$, $p < .001$, $\eta^2 = .84$, a very large effect size. The adjusted posttest mean for the experimental group was significantly larger than the adjusted posttest mean for the control group. (See Figure 2 for the mean scores.)



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As the students solved problems in their groups, they were to write, on a blank sheet of paper, what was discussed. They earned points according to what they wrote. For example, they earned points for designating a name for the problem, listing background information for the problem, and identifying potential solutions. Again, the ANCOVA was conducted on the combined group means. The ANCOVA revealed a significant difference between the experimental and control group posttest scores, $F(1, 18) = 68.25, p < .001, \eta^2 = .81$, a very large effect size. The adjusted posttest mean for the experimental group was significantly larger than the adjusted posttest mean for the control group. (See Figure 3.)



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Experimental teachers and students used a 7-point Likert-type scale to rate items regarding their satisfaction with the program ("7" indicating extremely satisfied; "1" indicating extremely dissatisfied) at the end of the year. Teachers endorsed the program, and their ratings indicated satisfaction with each aspect of the program. Students also indicated that they were satisfied with the program, with mean scores on items ranging from 5.4 to 5.6. Eighty-six percent of the students recommended that all fourth- and fifth-grade students receive this instruction.

Conclusions

The THINK Strategy instructional program can be successfully used to increase student knowledge about social skills and solving problems with others and to teach students how to solve problems in small cooperative groups. This is an important skill for students who will be faced with solving problems on committees and in meetings and work groups the rest of their lives. Both teachers and students were satisfied with various aspects of the program.

Reference

Vernon, D. S. (1998). *Effects of instruction in The THINK Strategy: Progress report*. Washington, D.C.: National Institute of Mental Health, SBIR Phase II #R44 MH47211.