Research: The LEARN Strategy

Overview
The LEARN Strategy is used by cooperative groups to study and learn subject-area information. The research was conducted in 25 fourth- and fifth-grade general education classes. These intact classes were randomly assigned to the experimental or control condition. A total of 519 students participated. The 13 teachers of the experimental classes taught their students the SCORE Skills and the LEARN Strategy. The twelve control teachers did not teach the SCORE Skills or the LEARN 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 82% of the information on the SCORE Skills and a mean of 84% of the information on the LEARN 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 how to study for tests before and after the instruction. The ANCOVAs revealed significant differences between the posttest scores of experimental and control students for students with exceptionalities, F (1, 22) = 73.10, p < .001, η2 = .77, and for students without exceptionalities, F (1, 22) = 400.29, p < .001, η2 = .95. (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 mean scores.)
Data were also gathered on the students' performance as they studied information together in small groups during the pretest and posttest. Since students with and without exceptionalities worked together in these groups, analyses were 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, $F(1, 22) = 21.23, p < .001, \eta^2 = .49$, 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. For the experimental group, t-test results indicate that students' performance increased significantly, $t(13) = 8.67, p < .001$, from a pretest mean of 6.17 to a posttest mean of 21.63. No significant differences were found for comparison students.

![Figure 1: Knowledge Test Results](image)
After the students had studied together in their small groups, they took a written quiz independently over the information that they had studied. The ANCOVAs revealed a significant difference between the experimental and control group posttest quiz scores for students with exceptionalities, $F(1, 22) = 18.59$, $p < .001$, $\eta^2 = .45$ (a very large effect size) and for students without exceptionalities, $F(1, 22) = 6.22$, $p = .022$, $\eta^2 = .22$ (a very large effect size). Again, the adjusted posttest mean for the experimental group was significantly larger than the adjusted posttest mean for the control group. (See Figure 2.)

**Figure 2: Quiz Results**

<table>
<thead>
<tr>
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<th>Experimental</th>
<th>Control</th>
<th>Experimental</th>
<th>Control</th>
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</thead>
<tbody>
<tr>
<td>Students with Exceptionalities</td>
<td>40.53</td>
<td>52.64</td>
<td>57.81</td>
<td>65.96</td>
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<tr>
<td>Students without Exceptionalities</td>
<td>64.43</td>
<td>76</td>
<td>62.88</td>
<td>65.96</td>
</tr>
</tbody>
</table>

Mean Percentage Correct
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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. For example, teachers rated the relevance and benefits of the program in the “very satisfies” range (Mean rating = 6.3). Students also indicated that they were satisfied with the program, with mean scores in the satisfied range.

Conclusions
The LEARN Strategy instructional program can be successfully used to increase student knowledge about social skills and studying with others and to teach students how to study information in small cooperative groups. This is an important skill for students who need the benefits of studying with others. Both teachers and students were satisfied with various aspects of the program.

Reference