

Research: The Organizing Together PD CD Program

Overview

The Organizing Together Program is used to teach students how to organize their materials and calendars. To test the effects of a CD program for instructing teachers in how to teach the Organizing Together Program, a study was conducted with 17 general education teachers who taught a total of 293 students in grades 4 and 5. The teachers were randomly selected into three groups. Six teachers worked through this CD program and the instructor's manual (hereafter referred to as the "CD group") to learn how to use the Organizing Together Program. They used the program in their general education classes with a total of 121 students. Five teachers (hereafter referred to as the "manual-only group") read the instructor's manual. These teachers used the program with a total of 91 students. Six additional teachers received no instruction; they and their 81 students served as the "comparison group."

The purpose of the study was to determine the comparative effects of CD/manual combination, the manual alone, and no instruction in terms of teacher and student outcomes. A posttest-only control-group design was used to determine the effects of the two methods of teacher instruction (CD + manual vs. manual only) on teacher knowledge, implementation of the program, and quality of instruction. A pretest-posttest control-group design was used to compare teacher scores on a class organization measure. A pretest-posttest control-group design was also used to determine the effects of the teachers' instruction on student organization. Four types of analyses were used: analysis of covariance (ANCOVA), a repeated-measures factorial design, an Omnibus F test, and the general linear mixed model (GLMM) approach. All outcome (dependent) variables used in these analyses were treated as continuous variables. All analyses were conducted using a level of significance (α) of .05.

Results

The teachers' implementation of the Organizing Together Program was measured in the classroom after they had read the manual or worked through the CD and the manual. The mean percentage of instructional steps implemented by the CD group was 96%; the mean percentage of steps implemented by the manual-only group was 88%. The posttest (after-training) scores of the two groups were compared using the hierarchical linear model. A significant difference was revealed, $F(1, 19) = 6.87, p = .028$, indicating that the CD/manual combination was more effective in producing implementation than the manual alone.

The quality of the teachers' instruction was measured by observers using a checklist that listed the components/of quality instruction. Although the mean percentage of quality components was higher for the CD group ($M = 90\%$) than for the manual group ($M = 84\%$), no statistical difference was found between the groups on this measure.

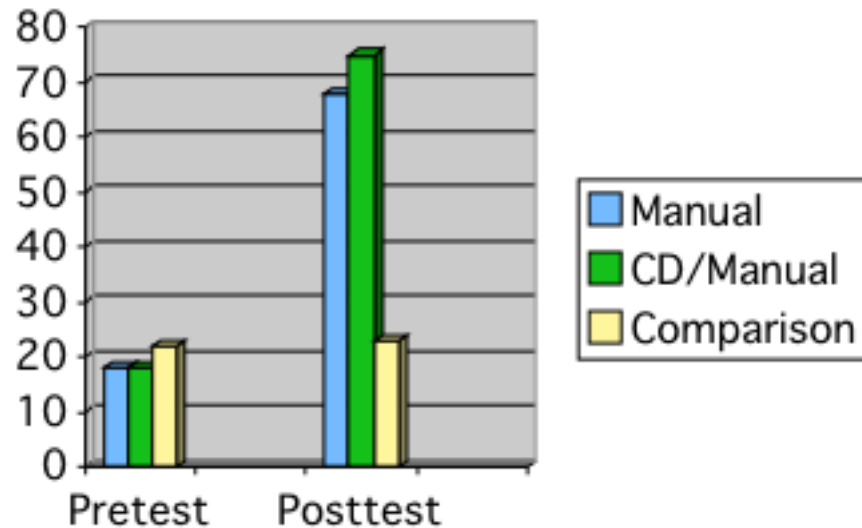
The two groups of instructed teachers also took a written test of their knowledge of the Organizing Together Program. An ANOVA revealed a marginally significant difference between the posttest scores of the CD and manual-only groups, $F(1,9) = 4.81, p = .056$; however, the effect size, measured by partial eta-squared, was .348, a large effect according to the guidelines provided by Cohen (1988), with the CD group earning a higher mean score ($M = 88\%$) than the manual group ($M = 72\%$).

Observers measured the general level of organization in the classrooms using a checklist. The Omnibus test for the equality of the three means indicated a statistically significant difference, $F(2,13) = 13.58, p = .001$. The partial eta-squared statistic was .68, representing a very large effect (Cohen, 1988). Follow-up tests revealed significant differences between the comparison group and the CD group and between the CD group and the manual-only group, both in favor of the CD group. There was no significant difference found between the manual-only group and the comparison group.

The students in the three groups of classes took a written test of their knowledge about organizing skills. The Omnibus F-test revealed significant differences between the means of the student groups, $F(2, 14.4) = 80.84, p < .0001$. Follow-up tests revealed significant differences between the comparison group and each of the treatment groups, in favor of the treatment groups. No significant difference was found between the two treatment groups. (See Figure 1 for mean scores.)

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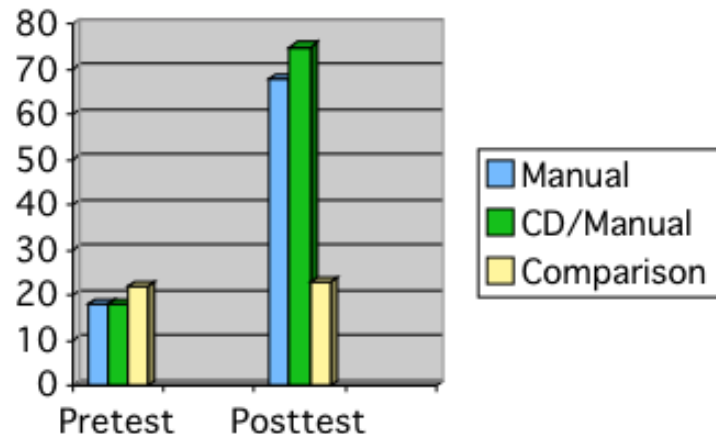
Figure 1. Mean pretest and posttest percentage scores for the Student Knowledge Test



Observers used a checklist to measure student performance in organizing their desks, backpacks, calendars, and notebooks in each classroom. The results of the Omnibus F-test indicated a significant difference in the mean posttest scores of the groups, $F(2,12.5) = 297.34, p < .0001$. Results of follow-up tests indicated significant differences between the comparison group and each of the treatment groups, but no significant difference was found between the two treatment groups. (See Figure 2 for mean scores.)

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Figure 2. Mean pretest and posttest percentage scores for the Student Organization Checklist



The CD group teachers completed a satisfaction questionnaire about the CD program. Their mean ratings on items on a 7-point Likert-type scale (with "7" indicating "completely satisfied" to "1" indicating "completely dissatisfied") ranged from 6.3 to 6.8, with an overall mean rating of 6.8. Teachers in both instructed groups completed a satisfaction questionnaire about the Organizing Together Program. The manual-only group had an overall mean rating of 6.35, and the CD group had an overall mean rating of 6.49.

The students also completed a satisfaction questionnaire. The mean rating for manual group students was 5.84 and for CD group students was 5.91 on a 7-point scale.

Conclusions

Working through the CD professional development program combined with reading the manual produces better results in terms of teacher implementation of the program and teacher knowledge than does reading the manual alone. Additionally, the CD program produced more highly organized classrooms in terms of teacher organization. Both reading the manual alone and the combined professional development approach yielded large gains in student organization. It also produced greater student knowledge of organizational skills. Teachers in the CD group were satisfied with the CD software program, and teachers in both groups were satisfied with the Organizing Together Program. Likewise, students in both groups were satisfied with the Organizing Together Program.

References

Vernon, D.S. (2005). *Effects of a professional development software program for the Organizing Together program: Progress Report*. SBIR Phase II # R44HD41819. Washington, D.C.: National Institute of Child Health and Human Development.