

Research: The Concept Mastery Routine

Overview

This study investigated the effects of teacher use of the Concept Mastery Routine on students' test performance in general education classes. Nine science and social studies teachers learned how to use the routine and used it for one concept in each instructional unit. Four hundred seventy-five high school students enrolled in their classes participated in the study. Thirty-two of these students had learning disabilities. A multiple-baseline across-teachers design was used with the teachers; a multiple-baseline across-classes design was employed with the students. Two types of tests were used as student research instruments* (1) publisher-made tests corresponding to each unit in the textbook and (2) researcher-made tests that focused on the taught concepts. Both types of tests were administered at the end of each unit.

Results

Results indicated that the teachers learned to use the routine at mastery levels within three hours of instruction. Their students scored significantly higher on both publisher-made classroom tests and researcher-constructed concept acquisition tests in science and social studies classes when the routine was used versus when it was not used. On regularly scheduled publisher-made classroom tests, the scores of students without LD improved from a mean of 72% correct at baseline to a mean of 87% correct following use of the routine, whereas the mean scores of students with LD improved from a mean of 60% correct during baseline to 71% correct following use of the routine. Similarly, on tests measuring student acquisition of concepts, the scores of students without disabilities improved from a mean of 49% correct at baseline to 83% correct following use of the routine, whereas the scores of students with LD improved from a mean of 40% correct during baseline to 62% correct following use of the routine. Moreover, 57% of the students with LD and 68% of the non-LD students were passing the regularly scheduled unit tests before the intervention, and 75% of the LD students and 97% of the non-LD students were passing unit tests after the intervention.

Conclusions

The strengths of this study are that regularly assigned teachers used the routine in regularly scheduled inclusive science and social studies courses at the high school level using actual content information and tests at that level. The study showed that, under those conditions, the routine produced enhanced learning as demonstrated by student test scores on routinely scheduled unit tests as well as on specially constructed concept tests for students with and without LD.

References

Bulgren, J., Schumaker, J. B., & Desnler, D. D. (1988). Effectiveness of a concept teaching routine in enhancing the performance of LD students in secondary-level mainstream classes, *Learning Disability Quarterly*, 11(1), 3-17.