*CONTROL OF ARITHMETIC ERRORS USING
INFORMATIONAL FEEDBACK AND GRAPHING¹*

WILLIAM T. FINK AND DOUGLAS W. CARNINE

UNIVERSITY OF OREGON²

The effect of informational feedback and graphing on reducing the number of arithmetic worksheet errors was investigated. The present study replicated and extended earlier findings with other populations (*Journal of Applied Behavior Analysis*, 1974, 7, 547-555; 1970, 3, 1-4; 1970, 3, 235-240) to a first-grade classroom. Ten first-grade pupils (four males and six females) served in an ABAB design. During the feedback-only phase, subjects were provided informational feedback, in the form of a written number, on the number of errors made on individual arithmetic worksheets. The feedback-only phase lasted seven days and was followed by the feedback-plus-graphing phase, during which subjects graphed the number (of errors written at the top of the individual worksheet) daily on individual graphs on their desks. The feedback-plus-graphing phase lasted 10 days and was followed by a reversal to feedback only for 10 days. The final phase was a replication of the feedback-plus-graphing phase. All subjects showed a change in number of worksheet errors, in the predicted direction, during the feedback-plus-graphing phases. An overall mean difference of -2.66 was found to be statistically significant ($P < 0.01$), using a Wilcoxon Matched-Pairs Sign Test. The results were interpreted as being empirical support for earlier findings in other populations. In addition, the present findings represented a successful extension of feedback and graphing interventions to the management of academic behaviors in a first-grade classroom.

DESCRIPTORS: feedback, academic; graphing, effects on arithmetic errors; academic behavior; mathematics.

Received 11 October 1974.

(Final acceptance 7 April 1975.)

¹The full text of this manuscript is deposited with the National Auxiliary Publications Service (NAPS). For copies, order NAPS Document #02615. Order from ASIS/NAPS Co., C/O Microfiche Publications, 440 Park Avenue South, New York, New York 10016. Remit with order for each copy \$1.50 for microfiche or \$5.00 for photocopies. Outside the United States and Canada postage is \$2.00 for a photocopy and \$.50 for a fiche. Make checks payable to Microfiche Publications. This study was supported by grant OEG-0-70-4257(286), from the United States Office of Education for the Training, Management, and Research Support for Follow Through Districts (Engelmann-Becker Model). The authors wish to express their appreciation to Drs. Barbara Bateman and Wesley Becker for their help and encouragement. The authors also wish to thank Ms. Penelope Kimball and Carol Witcher, for their assistance in the classroom.

²University of Oregon, College of Education, Department of Special Education, Follow Through Project, Eugene, Oregon 97403.