*PUPILS' SELF-SCORED ARITHMETIC PERFORMANCE:
A PRACTICAL PROCEDURE FOR MAINTAINING ACCURACY¹*

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Scoring of student performance is often costly in teacher time. Self-rating may be a practical alternative, if ratings are accurate. Some conditions affecting self-rating accuracy were examined in two special-education classes in two experiments. The first assessed the separate effects of submitting self-ratings to the teacher and token reinforcement for those ratings. Actual and self-rated performance during daily 20-minute arithmetic assignments were observed in a class of four boys with an average age of 10 years, four months. Subjects answered assignments in pen for later detection of falsified answers. At the end of the session, correct answers were projected and papers self-scored in pencil. During class dismissal, the experimenter surreptitiously scored actual performance. Three experimental conditions were introduced in an A B C B A design. During A, subjects self-rated but submitted no report, nor received token reinforcement. During B, self-ratings were reported to the teacher on a folded slip of paper, without reinforcement. During C, points were awarded for self-reported scores based on changes in individual performance from the prior condition and later exchanged for prizes. Subjects self-rated accurately during A, with little change during B. However, awarding points for self-reported scores in C, produced highly exaggerated performance. There was little change in correct arithmetic performance throughout the experiment. The second experiment examined a low-cost procedure to produce and maintain a low level of exaggeration in a class of 17 boys with an average age of 15 years, three months. Continuous, then intermittent checks on the accuracy of self-rated arithmetic performance were assessed in a multiple-baseline design across groups of subjects. Following a condition where subjects' self-reported performance was reinforced as in the first experiment, the self-rating accuracy of all subjects was checked publicly and a penalty applied for inaccuracies or bonus points for accuracies (Maximum Checks). During Minimum Checks, the self-rating accuracy of one randomly selected subject was checked. The reduction in checking frequency was gradual for one group and abrupt for the other. When self-reports were reinforced, 13 of the 17 pupils submitted ratings discrepant with actual arithmetic performance by more than two problems per session. Maximum Checks reduced discrepancies below two problems per session for 15 of the 17 pupils. This same low level of exaggeration was maintained during Minimum Checks for 14 of the 17 pupils. Correct arithmetic performance showed no systematic change. Teachers reported that self-rating resulted in time savings over their usual methods of scoring. The results indicated that pupils exaggerate when rewarded for self-ratings. Exaggeration was reduced and maintained at low levels by infrequent accuracy checks.

DESCRIPTORS: arithmetic performance, token economy, self-recording, students

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