*TEACHING NAMING OF COIN VALUES—
COMPREHENSION BEFORE PRODUCTION
VERSUS PRODUCTION ALONE¹*

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The purposes of this experiment were to determine whether (a) it would require fewer trials to teach verbal production of coin values directly or to teach auditory comprehension first, (b) comprehension training would generalize or transfer to production, and (c) production training would generalize to comprehension. Fourteen mentally retarded subjects participated. Their mean mental age was 4.83 yr ($SD = 1.83$), their mean chronological age was 12.67 yr ($SD = 3.17$), their mean IQ was 43.86 ($SD = 7.81$), and their mean arithmetic grade level was Kindergarten 0.1. A matched groups pretest-posttest design, as well as a multiple baseline across responses within each group were employed. The Comprehension-Production Group received coin-value training using two procedures sequentially: auditory comprehension (pointing to the correct coins in response to their verbally stated value) followed by verbal production (verbally stating the coins' value in response to a pointing prompt). The Production Group was trained on the production procedure only. Each subject was repeatedly administered coin-value comprehension and coin-value production tests, which provided the dependent measures. The results indicated that the two experimental groups improved significantly in their comprehension and production of coin values from pretest to posttest and maintained those increments on one- and four-week followup tests. Mean group performance on four-week followups ranged from 89 to 96% correct for the two dependent measures and two groups. Multiple-baseline data showed pronounced increases in performance only after training was initiated on a particular coin. A comparison of the number of trials required for both groups to complete their respective training programs indicated that teaching production alone ($\bar{X}$ trials = 137.42) was significantly more efficient than training both comprehension and production ($\bar{X} = 281.71$). The failure of the comprehension procedure to facilitate production acquisition was evidenced by the fact that the Comprehension-Production Group required as many verbal naming trials to achieve mastery as did the Production Group. On the other hand, there was generalization from production training to comprehension. Subjects in the Production Group who were not trained to point to the coins in response to verbal instruction averaged 99% correct on the comprehension test. Research to this point may suggest an interaction between mental level and direction of transfer. The mentally retarded may experience facilitation from production to comprehension training, and for the nonretarded, the direction of transfer may be the converse.

DESCRIPTORS: coin values, auditory comprehension, verbal production, generalization, transfer, multiple baseline, retardates.

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