THE EFFECT OF THREE METHODS OF PRESENTATION AND SOCIOECONOMIC CLASS ON RECOGNITION PERFORMANCE IN THE PRESENTATION OF LOW FREQUENCY WORDS TO KINDERGARTENERS

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Abstract. A word recognition task was presented to 72 lower social class and 72 upper-middle social class kindergarteners who were randomly assigned to one of 3 methods (Word, Word Picture, or Word Object) and were asked to learn to recognize eight low frequency words. There were significant differences between lower and upper socioeconomic levels and among the three methods (p<.01). The Word Method was superior to the Word Picture and Word Object Methods (p<.05) for children from both lower and middle class schools and students from upper socioeconomic level schools scored higher than those from the lower socioeconomic schools (p<.01).

In recent years much emphasis has been placed on the importance of using concrete learning experiences in the elementary school (Dale, 1946; Carpenter, 1953); however, there has been little research supporting this emphasis. Research concerning the acquisition of vocabulary words (King and Muehl, 1965; Samuels, 1967) indicates that concrete learning experiences do not aid, and in some cases, hinder learning. Specifically related to the present research, Ollila and Olson (1972) investigated the effectiveness of three different methods of presenting words to children who were beginning to recognize words. The word method produced the most efficient learning rate followed by the word picture and word object methods. There were two major limitations to this study. First, all the pupils came from an upper-middle class school. Second, the words used were ones already familiar to many of the children.

The present study explores the effectiveness of different methods of presentation using low frequency words with white children of both lower and middle socioeconomic backgrounds. It is hypothesized that: 1) Performance using the Word Method of

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presentation is significantly higher than performance using the Word Object or Word Picture Methods. 2) Children from lower socioeconomic backgrounds will learn to recognize fewer words than those from higher socioeconomic backgrounds.

METHOD

Subjects and Design

The subjects were 72 male and 72 female kindergarteners. Half were from low socioeconomic schools and half were from upper-middle socioeconomic schools. A 3 x 2 x 2 factorial design with three methods of presentation, two levels of socioeconomic status, and sex was used.

Procedure

Eight low frequency words (feather, key, record, fork, dollar, scissors, crayon, glove) were used. Actual objects and color photographs were obtained for each word.

For each method, the eight words were presented in random order with five seconds between presentations and ten seconds between each acquisition and test trial. Each student was tested individually and received twenty alternating learning trials and acquisition trials.

RESULTS AND DISCUSSION

There is no difference in the performance of male and female subjects or in those tested for retention one day versus one week later.

Hypothesis 1 is supported with an analysis of variance indicating significant differences for method of presentation among the three blocks of scores and retention scores. For Block 3 scores the Word Method group scores significantly better than the Word Picture Method group, (k (120) = 1.08, p < .05) and the Word Object method group (k (120) = .84, p < .05). Mean retention scores show the Word Method group scored significantly higher than the Word Picture Method group, (k (120) = 1.39, p < .05) and the Word Object Method group (k (120) = 1.36, p < .05).

Hypothesis 2 is supported with significant differences between lower and upper socioeconomic schools for Blocks 1, 2, 3, and for mean retention scores. The upper socioeconomic schools score significantly higher for Block 1 (k (12) = .78, p < .01), Block 2 (k (120) = 1.06, p < .01), Block 3 (k (120) = 1.28, p < .01), and mean retention scores, (k (120) = 1.23, p < .01). Also, children from both middle and lower socioeconomic schools learned to recognize more words in the Word Method of presentation.

Of greatest importance is that children in the Word Method group also scored highest in the retention tests both one day and one week later. This suggests that, once this method becomes superior, its superiority is long lasting.

The finding that children from both lower class schools and middle class schools did better with the Word method of presentation clearly challenges the use of a "concrete" approach to education that is often voiced and acted upon by early childhood programs designed specifically for children from the lower socioeconomic class (Cruickshank and Johnson, 1975).

Further research might include two basic areas: 1) The relative effectiveness of concrete and representative materials in other learning areas such as math, science, and social studies. 2) The effect of visual or auditory cues in a word recognition task involving mentally retarded or learning disabled children.
REFERENCES