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## ACQUISITION OF INCIDENTAL READING VOCABULARY

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Methods of teaching beginning reading have not changed significantly during the past 30 years despite strides in communication technology. However, one change that has been seen in reading materials is the advent of read-along books for prereaders and beginners. Read-along books or listen-and-read materials are printed stories which are accompanied by an audio recording of the story-text. The objective is for the child to listen to the spoken words as he/she views the printed text. Publishers imply or state that read-along materials help children learn to read.

Most reading experts support the concept of incidental sight word vocabulary for beginning readers, meaning, that some sight words are learned without intentional teaching or deliberate attempts at remembering (Brown, 1975; Hall, 1976). Thus, it would seem to follow that children could learn some sight vocabulary words merely from following along printed material while listening to a recorded version of the text.

The purpose of this study was to investigate the effect of using read-along materials on the acquisition of incidental sight reading vocabulary for prereaders and beginning readers. This research was designed to investigate the following questions: (a) do prereaders and beginning readers acquire sight vocabulary words from exposure to read-along materials; and (b) are some type of words learned more readily than others.

Whether or not research evidence supports the use of read-along materials for the acquisition of incidental sight word vocabulary has interesting implications for beginning reading instruction and utilization of teacher time. Some kindergarten and primary grade teachers are using listening centers with read-along or listen and follow materials in their classrooms. However, an extensive review of the literature of beginning reading, visual perception, sight word acquisition, and reading readiness fails to disclose published research relevant to norming data for the acquisition of incidental sight word vocabulary based on read-along or listen and follow materials for beginning readers. Carbo (1978) reports reading gains using a recorded book technique in a formal reading program with children having severe learning disabilities. Chomsky (1976) also reports reading gains for average third graders when commercially produced recorded books are utilized. A review of the research of sight word acquisition indicates some factors which may influence the number of trials

necessary to learn words in isolation (McNinch, 1976; Spring et al., 1979). Other studies have investigated the child's conceptualization of the spoken word as it relates to the task of beginning reading (Chomsky, 1972; Johns, 1976). In related research E. B. Coleman has investigated the effect of word readability on the acquisition of beginning sight vocabulary. Coleman developed a model for designing easy to read materials. According to Coleman, highly motivational reading materials when presented in either cartoon or film-strip format yield incidental sight vocabulary (Coleman, 1975). The Coleman research did not involve the use of auditory materials for acquisition of incidental sight vocabulary. The Coleman materials did focus on short one- or two-word cartoon-type stories. The currently available read-along materials are generally not as simplistic as those suggested by Coleman's model.

## PROCEDURE

The subjects of this study were 36 children from two kindergarten classes of a school located in a southcentral state. Data were collected from one class of 20 children in the spring of 1980, and from a second class of 19 children in the fall of 1980. Due to illness and family moves, data on three of the original subjects was incomplete and deleted from final analysis. Children in this study were age 5 years before October 1st of the year they were enrolled in kindergarten. Thus, children tested in the spring of 1980 were near the end of their kindergarten year and closer to age 6, while children involved in the fall of 1980 sample were closer to age 5 years and were at the beginning of the kindergarten year. The study included 16 boys and 20 girls.

Each child was individually pretested using 88 flashcards of the words contained in the read-along stories to be used in the study. Most of the words are from the Dolch list of 220 easy words. After pretesting, the children participated in 5 daily sessions lasting approximately 10 minutes with read-along materials. At the first session, the teacher oriented the children to the listening center equipment and storybooks. During each session a taped version of a story was played twice as each child paged through an illustrated, printed version of the text. The week following the listening sessions, each child was posttested with the 88 flashcards. In both the pretest and posttest situations, no time limit was imposed for response.

## DISCUSSION

Using the t-test it was found that both the spring ( $t=2.62$ ,  $p=.066$ ) and fall ( $t=2.54$ ,  $p=.007$ ) classes of children made significant gains in incidental reading vocabulary as a result of the read-along sessions. The chance probability of the spring gain was .0008 and for the fall it was .0023. There was no significant difference between the means of the combined scores (pre and posttest) of the spring ( $X=2.84$  and  $5.15$ ) and fall ( $X=17.47$  and  $19.94$ ) samples. However, the older children nearing the end of kindergarten had significantly higher pretest and posttest scores than did the younger pupils nearer the beginning of the kindergarten experience.

When gain scores of the two groups are compared however, there is no significant difference (tested probability of  $t=.4333$ ) between the spring and fall classes. Therefore, it appears that regardless of length of time in school the children did make significant gains in incidental sight vocabulary although the initial means of the two groups differed significantly. Thus, both groups had the ability to profit from the read-along materials.

The second area of concern of this study was relevant to the ease with which words are acquired. Due to the nature of the student sample, mostly short, easy, primary level words were included in the read-along stories. Approximately 77% of the words were four letters or less in length. The 88 different words included in the stories were analyzed for: (a) the frequency of occurrence in the stories; (b) word length measured in number of letters; (c) word configuration; and (d) presence of special features. In each case student gain scores were correlated with word characteristics. Findings indicated that the frequency of occurrence of a word in the story was not significantly correlated to word gain. There was a significant correlation of .32 between length of word as measured in number of letters and incidental sight word gain. Gain tended to increase as the length of word decreased.

The word configuration characteristic was subdivided into four categories: (1) those words with no ascending or descending letters; (2) words having ascending letters; (3) words having descending letters; and (4) words having both ascending and descending letters. An analysis of variance of word configuration characteristics group gain score means demonstrated that words of the category 1 type, those having no ascending or descending letters, were learned significantly more easily than the other types, while category 2 type words, having ascenders, were least often learned.

Special feature words were defined as words containing a double letter. It was found that this feature of double letter was not significantly related to acquisition of incidental sight word gain.

## CONCLUSIONS

Based on the results of this study it can be concluded that read-along materials can significantly increase the incidental sight word vocabulary of kindergarten children. However, when gain scores of children were analyzed based on their pretest knowledge of sight words, it was found that children with greater knowledge of sight words prior to exposure to read-along materials, gained significantly more words from the listening and following sessions than did their peers. In fact, as the experiment was in progress it was noted that children who scored low on the pretest did not appear to follow the printed text as the tape was played. Low scoring children appeared to be less attentive to the task of following words. Post treatment investigation demonstrated that many of the low scoring children did not recognize word boundaries in print. In short, children with low pretest scores (less than 3 words recognized) were less able to gain from read-along materials. Children who recognized from 0 to 2 words on the pretest had a mean gain of 1.17 words, children who recognized 3 to 7 words on the pretest gained 2.6 words; and the children who identified 10 words or more on the pretest had a mean gain of 4.44 words. Children having the highest average pretest scores also had the greatest posttest gain scores.

It would appear that based on the results of this study it is beneficial for teachers and parents to make read-along materials available to kindergarten age children. Kindergarten children can increase their sight vocabulary through the use of read-along type materials. However, prior to utilizing such materials the child has need for prerequisite skills of (a) recognition of boundaries of printed words, and (b) understanding of left to right word progression. It may also be found that the child who has not developed the two above concepts has not yet acquired an interest or curiosity about the printed word and is not ready for reading from a motivational viewpoint. A caution relevant to read-along materials should

be noted, however. Most commercially available stories do not stress controlled vocabulary nor high frequency word repetition. It may be that although word frequency was not highly correlated with word gain, that difficulty of vocabulary load could influence sight word gain. Further studies in the areas of long term retention and child attitude relevant to read-along materials are recommended. It would be interesting to know if voluntary usage of read-along materials affects word retention and sight word gain.

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