

## The Significance of Word Length

Despite the lack of direct empirical evidence on the issue, much comment from teacher educators has been made about the effect of word length on word recognition. A report of this relationship as found with fourth-grade children is reported here. The results of three tests of this relationship are reported: the percentages of these children's correct reading of words of varying syllabic lengths; the correlation between these correct readings of words and their syllabic counts; and the correlation between these correct readings of words and their letter counts. None of these statistics supports the conclusion that there is a significant relationship between word length and word recognition.

The controversy over whether the length of words in syllables or letters has a critical effect on pupils' learning to read them continues to the present. Without offering any direct evidence as to whether the lengths of words actually have any influence on the rate or effectiveness of children's learning to read them, some educational experts have taken strongly-held yet diametrically opposed positions on this issue.

On the one hand, some teacher educators insist that the syllabic or letter count of a word should not be given any consideration in the determination of the words presented for pupils in reading programs (Aukerman & Aukerman, 1981; Dauzat & Dauzat, 1981). To the contrary, other reading instruction experts maintain that shorter words are usually easier for children to learn to recognize than are longer ones (Carnine & Silbert, 1979).

At present, however, there appears to be no available findings from investigations made of this issue. That is, no researcher so far has tried to determine if, in fact, monosyllabic words, or ones with a relatively few number of letters, are less difficult for pupils to learn to read than are polysyllabic words or ones with relatively greater numbers of letters.

### The Present Study

Although there appears at present to be no reports of primary evidence on the relationship of the syllabic or letter count of words to children's abilities to read them, information regarding this relationship can be gained through a secondary source. Dale and Eichholz' (1960) study of written word recognition abilities of fourth-grade pupils offers a source from which to determine if children at this grade level find polysyllabic words more difficult to recognize than single-syllable ones.

The Dale-Eichholz study presents the percentages of “200 or more” fourth-grade children in selected schools throughout the U.S. who correctly responded to a three-item, multiple-choice written test of 1302 words. These pupils were asked to read and decide which of three choices best identified a given key word. For example:

bear---- (A) to laugh (B) drinking glass (C) to carry

The goal of this testing was to identify words that fourth-grade children read with not less than 50 percent and not more than 85 percent accuracy, on the average. The study actually reports on all words within the range of 51 to 99 percent accuracy. I calculated that the average score on these 1302 words was 76.4 percent, with a standard deviation of 9.9 percent.

An inspection of the Dale-Eichholz findings disclosed the following information about the relationship between the different syllabic lengths of words and the percents of fourth-graders who could correctly read words of varying syllabic lengths. Presented here are the (1) words used in the study arranged into five different categories according to their syllabic lengths, (2) the percents of the total words that each of these five categories represented, and (3) the average percents of correct readings by fourth-graders of these words of different syllabic lengths:

<u>Word length in syllables</u>	<u>Percent of total words</u>	<u>Average reading in percents</u>
1	19.0	76.2
2	53.0	77.8
3	23.1	76.7
4	3.8	74.7
5	1.1	74.2

A second analysis of the Dale-Eichholz findings then was made. A Pearson product-moment coefficient of correlation was obtained between the percents of these fourth-grade pupils’ correct readings of these 1302 words and the syllable counts of these words. This  $r$  was  $-.004$ . This statistic indicates that there is almost no degree of observable relationship between these two variables.

A third analysis of the Dale-Eichholz findings produced the same results. Here a Pearson coefficient of correlation was obtained between the percents of these fourth-grade pupils’ correct readings of 1302 words and the letter counts of these words. This  $r$  was  $-.023$ . This statistic indicates that there is almost no degree of observable relationship between the length of these words in letters and fourth-grade children’s abilities to read them.

## Discussion

The findings of these three tests of the relationship of the length of words and fourth-grade children's abilities to read them suggest that by the time pupils have reached to fourth grade the syllabic and letter counts of words are of no consequence in these children's efforts to read them. Syllabic and letter count factors thus should not be a significant consideration in the decisions made about which words to teach children at this grade level to read. The findings of the present study obviously support the conclusion that the length of words is not a critical matter of concern in reading instruction—at least at the fourth-grade level.

While word length in syllable or letter count does not appear to be a crucial factor in fourth-grade children's reading performance, one cannot legitimately generalize that this conclusion equally applies to the reading performance of beginning readers. Dale and Eichholz (1960) found that 87 percent of the fourth-grade children they tested could correctly read and comprehend the word *hippopotamus*. It remains to be determined, however, if long words (in syllabic and letter count) like *hippopotamus* have such striking imagery and relevancy for young children that they become relatively easy for beginning readers to learn to read. Does the fact that polysyllabic words generally have fewer connotations assist beginning readers in this aspect of reading behavior?

On the other hand, are monosyllabic words easier for beginning readers to identify because with such lexical items these children do not have to differentiate between a word and a syllable? Does the evidence that phonics rules apply more regularly and more easily to monosyllabic words, while fewer phonics rules are needed to decode them, indicate that short words are easier than long words for beginning readers to recognize?

The data examined in the present study obviously does not provide answers to these critical questions. These data suggest that word length in general appears to be of no consequence in fourth-grade children's reading behavior. It remains to be seen, however, whether this statement can legitimately be made about the reading performance of primary-grade pupils.

## References

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