

1934

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Recommended Citation

Swanson, Donald E. (1934) "An Analytical Study of the Common Elements in Silent and Oral Reading," *Proceedings of the Iowa Academy of Science*, 41(1), 259-261.

Available at: <https://scholarworks.uni.edu/pias/vol41/iss1/95>

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AN ANALYTICAL STUDY OF THE COMMON ELEMENTS IN SILENT AND ORAL READING

DONALD E. SWANSON

This paper will give in a preliminary way a brief summary of a new approach and a new technique for the diagnosis of reading difficulties at the college freshmen level. The oral reading of 70 poor silent readers has been recorded phonographically. Scores in the lowest quartile on the *Iowa Silent Reading Test* and *Whipple's High School and College Reading Test* were used as the criteria of inferior silent reading. The subjects thus selected were inferior in comprehension and in rate of silent reading and in vocabulary. Intelligence as approximated by the *University Qualifying* composite scores ranged between percentiles 1-60.

What does the poor silent reader do when he reads orally? This question can be answered objectively by making a phonograph record of his oral reading. Recordings are made on aluminum disks with the Fairchild recording apparatus.

Each subject read two short selections which contained simple informational material. He was instructed to read so that the meaning would be clear to himself as well as to a listener. At the end of each selection his comprehension was checked by means of objective questions.

In order to determine what was actually read the records have been played through several times. A convenient system of differentiating the errors made by each subject has been worked out.

A detailed analysis of the records and a systematic classification of the errors made, allows a quantitative and a qualitative study and comparison. Oral inaccuracies have been classified into the following major headings, each having many subdivisions: substitutions, repetitions, insertions, omissions, mispronunciations, reversals, and miscellaneous. The most frequent types of errors found were substitutions, repetitions, omissions, and insertions.

The oral reading of a control group of 11 superior silent readers (*Iowa Silent Reading Test*, percentiles 90-100) has also been recorded. This group made very few errors.

Inaccurate perception in oral reading, thus, tends to be characteristic of inferior silent readers. A visual perception experiment

was designed to test the hypothesis that perception is inaccurate in poor silent reading, and to support the contention that common elements exist in silent reading and in oral reading. A series of 50 phrases containing two or three words was exposed (225σ) by means of the *Whipple* tachistoscope. The phrases were selected from the oral reading material in order to make the two situations comparable. A correlation of $.81 \pm .04$ ($N=41$) was obtained between the number of errors made in tachistoscopic presentation and the number of errors in oral reading.

Another common factor in oral reading and in silent reading was poor comprehension. The poor silent readers scored in the lowest quartile in comprehension on the two silent reading tests given. In a comprehension test on the two selections read orally, 32 inferior silent readers scored 8.78 correct out of 22 questions of the recall type. Another group of 38 inferior silent readers scored 10.76 correct out of 16 multiple-choice questions. 10 superior silent readers averaged 17.7 correct out of 22 recall questions.

The average rate of oral reading for 70 poor silent readers on selection I (198 words) was 81.1 seconds, or 146 words a minute. The average rate of oral reading for 11 superior silent readers was 66.7 seconds, or 178 words a minute. For selection II (120 words) the average rate was 51 seconds, or 141 words a minute, for the inferior group; and 41 seconds, or 175 words a minute, for the superior group.

The slow oral reading rate of the poor silent readers can be accounted for by such factors as tendencies toward word reading, pausing before difficult words, frequent repetitions, etc. Another experiment was designed to discover whether it takes longer for poor silent readers to perceive material exposed tachistoscopically than it does for good silent readers. 50 meaningful sentences of 5 words each were selected from the simple story of "Aladdin." These were subdivided into 5 series with 10 trials in each series. The series were subjectively equated in difficulty. Rotation of order of presentation was used as a further means of ruling out any differences of difficulty among the series. Series A was given the longest time of exposure (225σ); series E was given the shortest time of exposure (42σ); and series B, C, and D were exposed at times between series A and E. The subject recorded his own responses. The number of correct word responses was divided by the total possible (50) to determine the percent correct at each time exposure. This experiment tended to show that poor silent readers take longer to perceive simple sentences than average

readers. Further, when given plenty of time to see the material in series A and B their level of accuracy was lower than individuals with better reading ability.

In summary the results indicate that there are certain common elements in silent and oral reading. Inferior silent readers tend to be inferior oral readers. The technique of recording the oral reading of poor silent readers seems to be very useful in the diagnosis of the nature of reading difficulties because it gives the clinician an objective qualitative account of what is actually read.

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