A Constructive Program in Silent Reading

Ernest Horn

To cite this article: Ernest Horn (1921) A Constructive Program in Silent Reading, The Journal of Educational Research, 3:5, 336-344, DOI: [10.1080/00220671.1921.10879166](https://doi.org/10.1080/00220671.1921.10879166)

To link to this article: <http://dx.doi.org/10.1080/00220671.1921.10879166>

Published online: 15 Dec 2014.

Submit your article to this journal [↗](#)

View related articles [↗](#)

A CONSTRUCTIVE PROGRAM IN SILENT READING¹

ERNEST HORN

State University of Iowa

The first step in a constructive program in silent reading is to mark out the objectives to be attacked. The material which we read silently falls into two large classes: that of a literary nature, read primarily for leisure purposes, and that of an informational character, read for the most part with a work attitude. While the abilities involved in the appreciation of literature are very significant, it seems wiser to classify them under the term *literature* and to develop them by special technics. At any rate, in this discussion the term *silent reading* will be used as a group name for those abilities which insure efficient work with books. The aims involved in this type of reading are more easily determined and more easily understood than in the case of literature, where the objectives are troublesome to mark out, the method of treatment hard to discover, and the results difficult to test. Certainly the standards for judging the two abilities are not the same. For example, it is by no means clear that it is always desirable to read literature rapidly. The individual who reads two stories in an hour does not benefit twice as much as he who reads but one in the same time. As a matter of fact, as in the case of poetry, it is often not even desirable to read literature silently at all.

Most of the tests and discussions of silent reading have emphasized two abilities, speed and comprehension. To these must be added two others, namely, the ability to organize and the ability to remember. Organization may be regarded as a logical part of comprehension, but in any program for the improvement of this ability it is necessary to focus upon it as a special objective. The ability to remember what has been read involves special technics which are not likely to be developed unless specifically set out and practiced. It is possible that a fifth group of abilities should be added to these four, including such technics as judging the worth of books; and the proper use of indexes, tables of contents, of

¹ A paper presented at the meeting of the National Association of Directors of Educational Research at Atlantic City, N. J., March 3, 1921.

dictionaries, encyclopedias, other reference works, the card index, and other library aids.

Of these abilities perhaps comprehension should be most strongly emphasized. In fact comprehension is necessary as a basis for progress in any of the other abilities. Rapid reading without comprehension is of no value. It is impossible to organize properly unless one understands the detail of the material which is to be organized. Accuracy of comprehension is necessary if material which is memorized is to be of any use.

CONSTRUCTIVE PROGRAM IN COMPREHENSION

The simplest element to which the problem of comprehension can be reduced is, of course, the word. In the last thirty years there have been a great number of very helpful studies of the vocabularies of children. All this information should be gathered up. There is need, also, of further investigations which will give us a more adequate idea of the type and extent of children's vocabularies in the various grades. There is particular need for some definite knowledge of the accuracy of comprehension of the three or four thousand words which may be regarded as basic in any reading vocabulary. It seems quite possible that one of the chief contributions of the kindergarten and early primary grades will be to give the children an enriched and highly accurate vocabulary.

Our reading and language tests have added to our information as to the ability of pupils to read sentences of varying length and complexity. We need, however, much more careful studies to point out degrees of difficulty in various types of sentences and to discover the elements of sentence structure which cause most difficulty. As a part of this work it is important to have a study of technics by which pupils may be encouraged to read in terms of thought units.

The low ability of students to understand paragraphs has been shown by such studies as that of Thorndike. During the last three years there have been a number of experiments at the University of Iowa to determine the ability of students to read paragraphs taken from textbooks in such subjects as history, geography, mathematics, hygiene, and science. The following is typical of the selections and exercises used.

I want to see how carefully you can read a short paragraph. After you have read it you will be asked to answer some questions about it. In answering these questions there are three things you should remember. They are:

1. Give just the information needed to answer each question but make sure that the answer you give is to be found in the paragraph.

2. If any question is asked for which you think there is no answer given in the paragraph, write on your paper, "The paragraph does not tell."

3. You may read the paragraph as often as you wish to make sure your answers are correct.

Now that you know exactly what to do, read the following paragraph and answer the following questions just as you have been told, remembering that you may have all the time that you need.

PIONEER FURNITURE

The big fireplace would be among the first things to attract attention. Above it, resting on a shelf, or mantel, would be seen a candle, a clock and one of the housewife's most beautiful plates. Within the fireplace fastened at one side would be seen the crane upon which hang the kettles over the blazing fire.

Sketch the picture you see when reading this paragraph.

A large proportion not only of the elementary-school children but also of high-school and college students and even of super-intendents drew for a pioneer clock a modern alarm clock.

After using this illustration in a lecture on the subject of silent reading a teacher in the audience decided to test the comprehension of some of her pupils. The class was reading in preparation for Washington's birthday. One pupil had just read the sentence "Washington was very fond of outdoor sports." Upon being asked the meaning of this sentence he said, "Those were the fellows he ran around with."

It is entirely possible that much of the difficulty college students have in their work grows out of their inability to read accurately. In a series of experiments now being conducted at the University of Iowa, it is shown quite clearly that there is a considerable number of students who cannot read anywhere nearly as well as some students in the elementary school. In fact students are found in the freshman class who score in comprehension only one-fifth as high as some of the elementary-school children. A great many university students were found whose reading ability was of such a nature as to constitute a very serious handicap.

The main principles underlying a constructive program in improvement of this ability are:

1. The course of study must be enriched. This is not only the best method by which a vocabulary may be made more accurate and more extended, but it is also the best means of insuring that a large amount of factual material will be read.

2. It must be recognized that comprehension can best be taught and measured where material is logical and factual in character. For the purposes of developing comprehension, literary materials are likely to be inferior to selections which deal with such subjects as history, science, and geography.

3. Some of the best teaching of comprehension can be done in connection with the proper assignment of lessons. If assignments are focalized, if they involve large amounts of reference reading, and if the study period is properly supervised the study involved constitutes a very efficient and practical method of improving the ability of pupils in the comprehension of what they read.

4. As a part of all exercises in comprehension great care must be taken to provide rigorous tests. Not only should the student have an opportunity to show how accurately he has comprehended what he has read, but he should develop definite prejudices against reading which results in "half baked" or inaccurate ideas.

CONSTRUCTIVE PROGRAM IN SPEED

We shall probably find that too much attention has been given in the last three or four years to the development of speed in silent reading. No doubt this is due to the fact that speed in reading is easier to measure than are any of the other qualities. Small improvements and differences are comparatively easily shown. Moreover, considerable improvement may be made rather easily, since the prevailing rate of reading is in general rather low.

In brief, studies of the status of speed in reading seem to show that the improvement in this ability in grades IV-VIII and beyond is not what it should be. For a time the flattening out of this improvement curve led many students of the problem to assume that the ability was approaching its limit, and that additional practice exercises would give a small amount of return. However, the ease with which the standard rates for the various grades

have recently been surpassed by experimental groups seems to indicate that the rate for the intermediate and grammar grades is probably the result of poor methods of teaching.

It should be clear that one ought not to speak of *speed* in silent reading but rather of *speeds* in silent reading. The rate at which one should read is determined both by the material read and by the purpose in mind. It is quite possible for sixth-grade children to skim at rates running from six to nine hundred words a minute and to do so with perfect efficiency where the purpose is to discover the answer to a simple question. On the other hand, where material is rather difficult and is to be learned with some completeness, a reading rate of one hundred words a minute for the same children might be high.

How speed may be improved.—In all grades, and especially in the earlier years, provision must be made for *eliminating mechanical distractions* and for giving control of the mechanical phases of reading. All special exercises, such as phrase flashing, speed exercises in reading short directions, etc. should have for their purpose the shortening and strengthening of the bonds between the printed symbol and the idea for which the symbol stands. It should be remembered that it is quite probable that all tendencies to articulation are harmful except in the case of verbatim memorizing.

This raises the whole question of the teaching of phonics. It seems probable that any tendency to stop to analyze a word phonetically constitutes a distraction, although at some times a necessary one. A reference to phonics should be made by the child under much the same circumstances as those under which we refer to the dictionary. In other words, he should not be conscious of the phonic make-up of a word except when he must use this knowledge to determine what the word is. Perhaps an investigation is needed to show whether or not there is some subtle phonetic sense which aids in the rapid identification of symbols even when the reader is not conscious of the use of phonics.

It is the writer's judgment that a small amount of phonics should be taught in grades I, II, and III; and that, beginning in grade IV, a transition should be made to the pronunciation keys in the dictionary.

Basic principles.—The most essential condition for exercise in the improvement of speed is perhaps to be described under the

term "time pressure." If, however, the exercises are to be given so that proper reading habits will be developed, the child must read within the limits of perfect comprehension, and should realize that the results of his reading will be rigorously tested. These conditions hold whether or not the exercise consists of short word and phrase flashing or of the reading of longer selections.

In the case of longer selections, such as are found in the ordinary text, other conditions should exist. First, the material should be factual in character. Second, the child should have a purpose to guide him in his reading. Third, he should read at top speed but within the limits of perfect comprehension and without fluster. Fourth, he should be tested rigorously over the material read.

Where this is done there will be not only an increase in speed but also a large increase in comprehension. Dr. O'Brien's experiment, reported in the *Twentieth Yearbook of the National Society for the Study of Education, Part II*, showed that, according to one method of computation, the groups having special silent-reading drill made 31 percent more improvement than the groups having the ordinary work in reading.² Of course, such improvement is eminently worth trying for. But from preliminary experiments, organized on a somewhat different basis, it seems clear that as great an increase may be obtained in comprehension as in speed. For example, in one exercise children are given a problem, the answer to which they are to get by reading. They are asked to read at top speed but within the limits of perfect comprehension. They read with the knowledge that they are to be tested. At the close of the exercise a rigorous test is given in order to determine whether or not the answer which they secured was the complete and accurate answer to the question for which they read. There is reason to believe that the effect of reading under the guidance of a problem is not only to speed the child up but also to make conditions favorable for more adequate comprehension. At any rate, comprehension scores and speed scores do improve very rapidly where such drill exercises are given.

In addition to such special exercises as have just been described, there should be a large amount of reading of rather easy materials.

² O'Brien, John A. "The development of speed in silent reading," *Twentieth Yearbook of the National Society for the Study of Education, Part II*, p. 61, 1920.

This may be done in a free reading period and in directed home reading. For this purpose literary material may be used along with books of an informational sort. Without entering into a discussion of the reasons for this type of reading, it is significant that most students of the problem of improving speed in silent reading encourage extensive reading of easy material.

I do not believe we are yet in a position to say what sort of speed scores may be expected in the case of children in the various grades. As pointed out earlier in this paper, the scores will vary with the type of material and with the purpose for which it is read. In the case of such careful reading as students should do in preparing their geography and history lessons, the rate is probably less than children make on the Courtis test. According to Dr. Germane's³ findings, the rates in words per minute at which the children of a certain city read an article on tuberculosis were: sixth grade, 168.1; seventh grade, 168.9; eighth grade, 185.0. In the same city, the rates for reading an article on peanuts were: sixth grade, 165.9; seventh grade, 171.5, eighth grade, 197.5. Judging from the comprehension scores, even this rate was too hurried.

However, children who had had special drill were found to read these exercises with much greater speed, and with much better comprehension.

THE CONSTRUCTIVE PROGRAM IN ORGANIZATION

In a way organization may be regarded as subordinate to comprehension, but no amount of practice in the comprehension of the detailed data of an article will give satisfactory power in organization. This ability is very important. A very great proportion of the reading which we do involves the necessity of getting at the main points and of organizing these, usually according to some purpose. Dr. Germane found that a summary of material read often gave smaller returns than the same amount of time spent in thoughtful re-reading. A study of the detail of his experiment revealed that this was due to the fact that an ordinary pupil could not organize the material in the selection adequately and, therefore, could not summarize. This points rather clearly to the need of frequent and rigorous exercises in

³ Germane, Charles E. *The value of summarizing in silent reading as compared with the re-reading of the same article.* Doctor's thesis, State University of Iowa.

getting the main points out of a paragraph or chapter. Detailed exercises cannot be given here. It seems probable, however, that the best conditions under which such exercises may be developed are to be found in the regular work of the school. If assignments are focalized and detailed, if the student is encouraged to work carefully but at top speed during his study period, and if the recitation is based on the questions put in the assignment, considerable ability to organize will be developed. However, short exercises are necessary in order to put before students standards of the sort of work they are expected to do, and in order to develop proper methods of work.

CONSTRUCTIVE PROGRAM IN REMEMBERING

The constructive program in the development of the ability to remember what is read is based upon two things: first, that a single reading ordinarily gives a very small return, and that even this small return is very rapidly forgotten unless additional work is done to fix the material; and second, that there are certain technics which are superior for learning material thoroughly and for future use.

An investigation by Yoakum⁴ showed that the amount of material that could be reproduced immediately as the result of a single reading varied with types of material, but that ordinarily the proportion retained ranged from 20 to 40 percent. He found also that unless the material were read a second time, or unless some exercise was given to fix this material, very little would be retained after a few days.

As to the technic of remembering materials, Germane's investigation seems to show that until students have learned to summarize efficiently, better results are to be obtained by continued thoughtful re-reading, and by summarizing with the aid of questions prepared by the teacher. As in the case of other exercises, the best work in establishing the habit of learning material for future use can probably be done in connection with such subjects as geography, hygiene, nature study, and history. The proper conditions seem to be to read under the guidance of a problem or series of problems; to read directly through the article at fair speed but within the limits of perfect comprehension;

⁴ Reported in part in the *Twentieth Yearbook of the National Society for the Study of Education, Part II*, page 70 ff.