

The Effect of Prenatal Instruction on Reading Achievement

During the past few years the controversy regarding *how* to teach reading has abated somewhat, only to give rise to a new topic for debate—*when* to initiate reading instruction. In the past, some experts have claimed that a child should have a mental age of 6.6 before reading instruction is inaugurated; others, that children should be taught to read when they reach five years of age. The trend, however, has been towards attempts to teach reading to even younger children. For example, a *Ladies Home Journal* article (May 1963) informed mothers how to teach their two-year-olds to read. Yet no one has suggested that reading instruction might begin even before birth. Such a hypothesis was postulated twelve years ago and a longitudinal study was undertaken to determine the effect of prenatal instruction on reading achievement in the elementary school. The study has been completed and is summarized in this article.

Sample and Procedure: In cooperation with local obstetricians, 112 women in their fourth month of pregnancy were obtained as subjects. California Tests of Mental Maturity and Nelson-Denny Reading Tests were then administered to each set of parents. Based on the assumption that the offspring would tend to approximate their parents in these factors, the average total scores of each set of parents were used to establish three groups which were matched as to intelligence and reading ability. The average CTMM score for each parent

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group of twenty-five equaled 104.6, and the average reading score 10.8. Next, the expectant mothers were assigned to either the Basal Reader Group, the Phonics Group, or the Control Group.

The instructional programs for the Basal Reader and Phonics groups consisted of the elements described in the manuals which accompanied these materials; and, what amounted to a placebo, repetition of nonsense syllables, was given to the Control Group. The instructional portion of each lesson was placed on tape and played for each mother individually. These instructions were transmitted concurrently to the unborn child by means of a specially designed fetoscope which was placed against the mother's abdomen. Later as the mother did the workbook or mimeographed assignments, she recited her responses into the fetoscopic device in order to transmit this part of the lesson to the fetus. After eighty-five such lessons, this phase of the experiment was terminated. No further attempts were made to teach the children to read until they entered the first grade.

In kindergarten, the children were tested to ascertain if any significant differences existed among them when they were grouped according to the methods used during the initial stages of the study. No statistically significant differences were found among the children's groups either as to intelligence or reading readiness. Average CTMM scores ranged from 109.2 to 113.4 and Lee-Clark Reading Readiness average scores ranged from 1.1 to 1.3.

Findings: As indicated in Table I, the levels of reading achievement attained by both experimental groups surpassed those of the control group at every grade level.

Table I

Metropolitan Reading Achievement Test:
Grade-Placement Scores

Actual Grade Placement	Group		
	Basal Reader N=25	Phonic N=25	Control N=25
1.9	2.7	2.1	1.8
2.9	3.9	3.2	2.9
3.9	5.0	4.1	3.7
4.9	6.2	5.2	4.9
5.9	7.1	6.4	5.9
6.9	8.1	7.3	6.8

(April 1965, pp. 431-432)

Moreover, the group which had been exposed to the Basal Reader approach exhibited a superiority to the Phonics Group. In every instance the differences between means were significant at the .01 level.

Summary: The results of this study suggest that prenatal instruction does have a positive effect on reading achievement in the elementary school. Furthermore, the use of a Basal Reader approach proved to be the most effective of the methods utilized. The main conclusion to be drawn from this article, however, was best stated by the Roman orator who proclaimed, "Nimium celeriter ne credas omnia quae legas."^o

^oDon't be too quick to believe everything you read.

Educators Stereotyped

- Fed-ucator:* One who works with federal programs.
- Said-ucator:* One who has no original thoughts, therefore quotes others.
- Veg-ucator:* One who has vegetated.
- Dead-ucator:* One who has died—but is not yet interred.
- Bed-ucator:* One who is soporific in thought and action.
- Head-ucator:* One who specializes in the theory of learning.
- Prej-ucator:* One who has a closed mind to new ideas.
- Med-ucator:* One who meditates on lofty ideals.
- Read-ucator:* One who is well-read.
- Led-ucator:* One who can demand over \$100 a day in consultant fees.
- Ped-ucator:* One who is a pedant.

These are only a few of many such classifications. Perhaps —ucators over the country would like to add to the list.

—Billy L. Turney, Assistant Professor of Education,
North Texas State University, Denton.

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