

### 13. The Necessary Mental Age for Beginning Reading

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For some time the problem of determining the optimum or necessary mental age level at which reading can be successfully introduced has been under investigation. Recently, in books written primarily for professional workers, statements have been made which implied that this problem is fairly well solved. Such statements usually imply, more specifically, that success with typical first-grade reading programs requires a stipulated mental age, six and a half years being the age usually given.

The fact remains, however, that it has been by no means proved as yet that a mental age of six and one half years is a proper minimum to prescribe for learning to read by all types of teaching skill and procedures. Representative data gathered by the writer indicate rather clearly that statements concerning the necessary mental age at which a pupil can be intrusted to learn to read are essentially meaningless. The age for learning to read under one program or teaching method may be entirely different from that required under other circumstances. The crucial mental age will vary with the materials; the type of instruction; the skill of the teacher; the size of the class; the amount of preceding preparatory work; the frequency and the treatment of special difficulties, such as visual defects; and other factors.

Among a number of classes analyzed in this connection, four groups may be cited. In the first, the teaching was done under the supervision of Miss Florence W. Raguse of the State Teachers College at Indiana, Pennsylvania. Not only was the teaching rather closely supervised, the teachers were provided with a larger amount of easy-reading and self-diagnostic material than usual, and with supplementary practice and teach-and-test materials made up for the purpose. With this modern and effective instruction, well adjusted to individual differences, a mental age of 5.0 years appeared to be sufficient. Of the children equaling or exceed-

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ing this mental age only 7 percent fell below a reading grade of 1.95, the corresponding average for American pupils at large.

A second group was taught in a New York City School by teachers judged to be more expert than the average, and who used experimental materials developed by the writer and his colleagues. Here the minimum reading age was about half a year higher. Pupils with a mental age of less than 5.0 years were not so successful as in the class reported by Raguse. But of those who began with a mental age of 5.5 or higher, only 12 percent fell below 1.95.

A third group had good teaching with better-than-average classroom reading material and other equipment, but without the specially prepared types of material employed in the two groups just mentioned. Here a mental age of six was required.

The fourth group was from a metropolitan public school. The teachers were judged to be somewhat below the average in the system, and the reading materials and other equipment were inferior. The classes were taught by mass methods with little individual work. In this group children with a mental age of 6.5 fared none too well, and some with mental ages of 7.0 or higher had difficulty. Of the latter, 36 percent failed to exceed the national norms.

Obviously, therefore, general statements that any given mental age should be achieved by the pupil before he begins to learn to read are misleading. In the four groups mentioned the correlations between mental age and reading grade were .62, .55, .44, and .34, respectively, varying directly—and significantly—with the quality of instruction provided. More specifically, the magnitude of the correlation seems to vary directly with the effectiveness of the provision for individual differences. When the teacher uses a mass method, pointed at pupils with a certain equipment and background, these pupils seem to get on rather well but others encounter difficulty. If each pupil is to be given an opportunity to apply his mentality most effectively, attention must be given to his particular difficulties and limitations as well as to his special aptitudes and interests.

This study shows that the determination of the optimum mental age and other factors in reading readiness is not so simple as some recent pronouncements would imply. Reading is begun by very different methods, materials, and procedures, some of which a pupil can master with reasonable ease at the mental age of five, others of which would give him difficulty at the mental age of seven. It is necessary for each teacher to determine exactly what mental age, what background of previous experience, what special aptitudes, her particular program requires.

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Finally, nothing in this report answers the question: At what age is it best to introduce reading? The data indicate that it is *possible* to organize materials and methods to teach children to learn to read at mental age 5.0 or higher, but they do not, in any way, imply that it is *desirable* to do so. Research is needed on this point.