

intendent. The very demand in such practice inherently presupposes that the child can visualize the word. Such practice, therefore, affords little aid in strengthening the association of letters. "Shall we turn the hands back on the pedagogical clock?" it will be asked. Yes, if the hands have got ahead, and have been keeping false time.

It is surely a wonder that we have so long, so diligently and so unsuccessfully tried to repress the use of the lips, and have never thought to ask if it has any significance. Have we not been making the mistake here that we have made in so much of our teaching and discipline—inhibiting the motor activities, where we might regulate them, direct them to useful ends, and making them one of our strongest aids? Dr. F. Tracy, in his excellent work the "Psychology of Childhood," says:—

"A very interesting question in this connection (memory in children) is this: Which of the senses furnishes the most vivid and lasting memory-images? The first impulse would probably be to attribute the preeminence to sight, but in so doing we might make a mistake. It is probable, as M. Queyrat seems to think, that the muscular sense is of paramount importance here. Children are full of *action*, and their psychic life is bound up with movement. If they are to develop they must *do* something, and they remember what they do a thousand times better than what is told or shown to them. This is also true of adult life. Many persons study out loud. We remember what we *write* better than what we simply *read*. Pedagogy is now recognizing this as a great principle in education, and the whole kindergarten system is based upon it."*

A complete analysis of the powers employed in learning to spell would, I think, be (1) the eye, (2) the ear, (3) the speech apparatus, and (4) the muscular resistance of writing. The eye visualizes the general form of the word and the individual letters in their order, the ear also retains the succession of letters and forms, the sound image the voice and writing associate the mental image with muscular movement. It is necessary to establish not only an eye or ear image but a *muscle image* as well. It is here that we have the real argument for written spelling. The reason why pupils who are good oral spellers fail in the writing

* The Psychology of Childhood, p. 68.)