

General Considerations - Maria Montessori, 1934

Until now the teaching methods used in elementary schools aimed at imparting knowledge using this for a direct approach to the mind of the child based on certain psychological considerations.

The mind of the child was considered independently of any previous knowledge which had not been acquired at school, and therefore as if the mind were completely empty.

Now it is, of course, true that empirical knowledge, such as may be acquired in a casual and unmethodical way, has not much value in the formation of a cultured... that is, a logically cultured mind. This holds good in all forms of a culture. We well know, for instance, that a piano teacher will think it a great pity that a pupil should have started playing untaught, so that his first lesson consists of getting rid of faults. After that he will proceed in a logical way.

The same thing takes place in a different sphere, such as geometry or arithmetic. Teachers will begin with lines or angles in the one case, with numbers in the other. And they ask themselves first, which is the easiest thing to understand, for it is with that their teaching will start. I remember the discussions of certain eminent professors in a congress of mathematics who were trying to decide whether the easier thing was to count numbers as they came – cardinal – or in their reciprocal relationship – ordinal.

When these teachers had arrived through logical discussion at the right way of proceeding in the imparting of knowledge only the actual teaching remained; they had to get the easiest thing understood, stringing on to it in succession the rest in order of difficulty, passing from the known to the unknown.

Later discussion relates specially to the teaching of geometry and arithmetic, where we have to do abstractions. The mind here has to start with real things and then continue in a purely logical field. Very good. But lines and numbers, the initial difficulties, are themselves abstract and symbolical. This being a difficulty for the child's comprehension, we have recourse in the first elementary classes such that material representations may offer to the senses a) quantities in their relation to numbers, and b) complete forms in their relation to geometry.

The chief concern of teachers is, of course, this: to get the child's mind to pass on rapidly to abstractions; otherwise, the whole point of teaching would have been missed, which is, above all, the leading of the mind of the learner up into the realms of abstract thought.

The path to follow rests entirely with the teacher. He is the arbitrator as to what is easy, what is difficult, and what is to be taught, and how. And when he has passed from the easy and concrete to abstract combinations of numbers and signs, he is persuaded that he has penetrated the child's intelligence and made himself its guide.

But how often the teacher deceives himself, for it is the rarest of things that he should be able to enter into the mind of a child. What happens most frequently is that the efforts of the teacher are rendered futile by the fact of his not managing to enlist the interest of the learner.

The abstraction the child is supposed to have achieved is nearly always the forced response of a purely mnemonic faculty, elicited by torture. "Difficulty" "obstacle" "stumbling block"... these words really testify

to a most pitiable failure occurring upon the very first steps of the ascent of culture... the teaching of elementary mathematics.

It is by no such study of difficulties in their logical succession that the aggregate of problems which present themselves to educators are capable of solution. The act of learning depends upon one condition... and it is an essential one... the learner's desire to learn and his attention... in short, his interest. The indispensable condition for success is that his mind should be at work; all that bores, discourages, interrupts this psychic activity builds a barrier that no mere logical perfection of the teaching art can ever surmount.

It is the ascertaining of what are the necessary conditions for the development of the learner's spontaneous activities that we must aim at; the art of awakening enthusiasm, of evoking joy in work. The real psychological key here is just interest... interest the impeller to spontaneous activity.

To illustrate the fact that comprehension... even the clearest possible understanding... may exist without any practical result ensuing, I will tell a story told me by a child. A foreigner who was but slightly acquainted with the language of the country was accosted by a beggar. The foreigner who was rich but miserly, listened to the beggar's efforts to make himself understood and it was a long time before he could grasp his meaning. When he did, he was silent for a while, and then said: "I understand, I understand, but I give nothing." The efforts made by the petitioner had had no practical result; in spite of the admirable clearness and persistence of his exposition he failed.

In the matter between teacher and taught we have something similar. Ineffective and fleeting is all that the child merely understands. He may understand a quantity of things; his head may be stuffed to bursting with a chaotic mass of things he has understood; and yet, nothing may have happened to stir his active ego into life, nothing been done to free the constructive energies of interest and enthusiasm. Nothing can be assimilated without effort, we grant; but at the heart of effort, effort bearing its fruit in work, in study, in learning... lies interest.

I will not here recur the discussions so forth called forth about interest and effort; they have been classed as contradictory aspects of the same thing, and many have said in education we have to choose between the two. In their view interest refers to what we like doing, and effort to what we dislike. But effort is the bringing into action of the individual's entire energy, and this happens only where interest is felt. Man is no machine... he acts inspired by interests... generosity...enthusiasm; and he will then throw himself with all his life, strength, and activity into this effort... even if it is irksome.

An education which succeeds in evoking interest... interest leading to a choice of some action, and the carrying out of it with the whole energy of the user, all his constructive enthusiasm... such an education has awakened a man to life. He has come into contact with that "breath of life" of which the bible speaks... the transforming breath which makes a living man out of a thing of clay.

Undreamt of forces reveal themselves very often in one whose interest has been evoked. The child spurred on by interest will display powers latent till then, or never guessed at.

It is by this new aspect of childhood as affected by interest which is perforce making a change in the old psychology; a far more living sphere of action is being laid open to educational methods.

Not that the old ideas are fallacious; they were quite consistent with the preconceived ideas of the adult. But new principles are bound to arise in education when the child comes to be considered the axis around which all has to turn, and when it is his choice which is to guide us rather than processes of reasoning logically pursued by professors.