

are educative. This caused the new claimant to be distrusted by all teachers who had investigated what is called the educational value of the several branches of study. For it was known that each branch has its specific function and that no one branch can take the place of another. Arithmetic and other mathematical studies open the window of the soul that looks out on the physical universe and shows the necessary laws of matter and motion. On the other hand, grammar opens a window of the soul that shows the operations of the mind itself. For the mind has revealed itself in nature language and shown its logical in the structure of the sentence and in the functions of the parts of speech.

Geography, on the other hand, shows the social structure of the world of humanity. It shows the interdependence of one individual on another, and of one community on another. Through division of labour and through distribution of peoples in all parts of the world, the fruits and productions of all climes and conditions are made use of. Commerce is a great world process that collects all these articles of food, clothing, shelter, luxury, amusement and culture, and distributes them again to each section and to each individual, so that all share in the labour of each, and each in that of all. Thus geography opens a window of the soul that reveals to the pupil this great industrial process going on at every moment in all parts of the world, and he learns to see himself as related to this process and thereby gains a rational self-consciousness. For a rational self-consciousness is the perception of the larger self of the race: the social whole acting to reinforce the individual and assist him in his efforts to conquer nature and gain a supply of food, clothing and shelter without sacrificing his higher spiritual manhood in mere drudgery.

History shows us the higher selves of man organized into the form of institutions, the family, civil society, the State, the church, each realizing man's higher rational self in such a manner as to reinforce the puny individual. It thus opens a window of the soul which affords a vast survey of human nature. Literature exhibits the process by which feelings arise in the soul and become distinct ideas, and afterwards pass over into convictions, and then become actions.

The insight into the educational value of these general school studies caused the plea for manual training to be slighted at first, because of the evident absurdity of its claim to an educational value of the same kind as studies that open the windows of the soul.

But then it came to be considered later that modern civilization rests on productive industry, and that productive industry uses labour-saving machinery as its chief instrument to emancipate human beings from drudgery; that it takes the hand-worker and turns him into a brain-worker—for the machine does the hand work but it requires a brain to direct it. Hence productive industry needs more and more directive power, and less and less mere sleight of hand. Machinery increases the productive power of labour a hundred fold, and certainly the youth of the rising generation needs some general training in school which enables him to understand both the construction and the management of machines.

Now the manual training school has hit upon just the course of study and practice that will teach the pupil the construction of machines out of wood and iron. Manual training will therefore have its justification as a part of the common school curriculum.

The youth will, thus educated, find himself at home in a civilization which is more and more accumulating in-