

popularized. He put his theories into practice in Philadelphia by gathering a class of children under his personal supervision. This experiment, which began in 1878 and continued four years, was looked on by some as only one of the vagaries of an enthusiastic wealthy amateur, but he so far succeeded as to get his school adopted as part of the Public School system of his native city (Philadelphia).

"All pupils are obliged to draw their own patterns here," he writes. "Those who draw in light freehand, or what may be called Calligraphic, or 'fair flowing' style, learn to draw accurately in half the time which was required by the old method. It is said that in mountain passes the fastest mules are the surest footed, and those who draw most rapidly are the most exact. The development of simple outline from spirals and waves into lines of construction, and so on, modelling Moorish or Renaissance Arabesques, form the first step, and from the beginning the pupil, having the final given, or selecting one, develops all the design without aid. . . . It is not unusual for the pupils to manifest a perfect ability to design, even before they can draw lines respectably.

"As the boys grow older they can be advanced, step by step, to technology or the most practical mechanical pursuits. Even if a boy has only carved panels or modelled in clay, he does not find himself like a cat in a strange garret when taken into any kind of a workshop to learn a trade.

"I observe that there is a great impression among the educational reformers in England as to education in cookery, art, farming. There is one clear principle in all practical or manual education—that is, that design, or a system, underlies it all, and that this should be carried out by teaching children in simple form the theory of any calling or occupation or art. By design I make children think of and comprehend many arts. By a little easy teaching you can make them think of agriculture, or housekeeping, or business, as a whole, and thereby simplify the practice.

"If you will reflect you will see that to design it to do something original—to think—to lift your mind above mere copying to creation. It is an awakening of the will, and a beginning of thought. I have observed that in children the creating, the consciousness of being able to make correct original designs, acted on the whole character. They became generally more intelligent. The School Board ascertained, by careful enquiry, that the pupils who attended the Art School stood higher in all studies than those who did not. It may be said that such development of the power to design according to the law of organic development is like making genius by rule. This is perfectly true, and it is also quite as true that the greatest genius is the one who makes the most of rules, or of the laws of nature, to produce from them new combinations and results.