Manual and Industrial Training.

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It is a well-known pedagogical fact that the child develops only through self-activity; therefore, when we stop to think how natural it is for a boy to whittle and for a girl to make doll clothes, is it not remarkable that only lately have we decided to utilize these and similar natural activities for educational purposes?

Not much more than a decade ago the small girl who was caught drawing (her teacher) on her slate was given a "hundred lines" after school; now we have pose drawing. The boy who brought a toad to school was punished, but now we have nature study, and tadpoles bask in a glass bowl on the teacher's desk, under her benign smile. John does not have to scribble pictures on his books, nor whittle his chair and carve initials thereon. John has manual training. And what is manual training? Merely manual work subserving a purely educational purpose. Niagara utilized, but thereby increasing its power—a bold figure; but it is true, nevertheless.

Manual training is, comparatively speaking, a new thing. Forty-seven years ago Uno Cygnæus started the first manual training school at Kelsingfors, Finland. Eight years later the city of Worcester, Mass., with characteristic American love of what is up to date, introduced manual training into the Worcester Free Institute. In the same year it was introduced into the Imperial schools at Moscow. In 1872 Herr August Abrahamson opened a Sloyd school at Naas, Sweden, whither students go from many parts of the world. In 1882 the first serious attention was given to manual training in Great Britain. Whittling was started in Springfield, Mass., schools in 1888.

Each nation seems to have given a different name to this new form of training. In Germany it is called manual dexterity, or workshop instruction; in Sweden, sloyd; in France, manual labor; in the United States and Canada, manual training. But the greatest difference in systems is seen when Swedish sloyd is compared with the Russian system. The latter deals with merely a set of exercises, that is, parts of models are made for the purpose of practice, and to show what principles are involved in the construction of the whole. On the other hand, Swedish sloyd believes in no practice pieces, and each exercise is a finished and useful article, of interest to the child, as key bag, flower stick, pin tray, sugar spoon, stool, box, and so forth. It is a mistake to call all manual training "sloyd," as I have heard some people do.

Why is manual training educational? Take, for instance, the simple whittling of a square corner. The child must be accurate in drawing the line, he must execute caution so as not to cut against the grain, he must observe lest he cut over the line, he must be independent — there is no way to copy this sort of work—persistent and patient. Manual training reaches more pupils than do Latin or Greek, and, I think, is about as useful when a boy comes to think of a vocation. An accurate eye and a steady arm are a good stock-in-trade.

But work with tools, bench work and carpentry are only some branches of manual education. Now-a-days our school girls learn how to cook, sew, mend, perhaps weave. Indeed, they are trained to be housekeepers. Much of the work would be merely mechanical, not tending to develop the æsthetic faculties were it not for the fact that drawing, painting and designing are taught in our schools.

To illustrate: Suppose two children, John and Tom, work side by side in a manual training class, each having the same amount of skill, but John having had the advantage of training in drawing and designing. Tom's box may be well made and the joints neat and accurate, but John's (let us hope, art teachers,) will be not only neat and correct, but the proportions, length compared with width, and height with length, will be just right. The design which John works out on the top and sides with his knife will be a simple one, in keeping with the grain of the wood, with just the right spaces left to balance the ornamentation, and, above all, will help to make the box a thing of beauty, and not detract from its gracefulness or its substantial structure.

The girl doll dressmaker who has had drawing, painting and design, will know that simplicity is a fundamental rule of beauty; that the ornamentation of a fabric should be suited to the texture of the fabric, and not detract from its utility. She will not put a red rose on a violet velvet hat, but will remember that red looks well with its complementary color green, and yellow with its complementary violet, and even then she will choose the right shade or tint, and use just enough of it to make good color harmony. Thus the "sweet girl graduate" who has had the proper "art" and industrial training ought, apart from her knowledge