

The same reasoning applies to the class whose excuse is, "I have just so much to accomplish in the time the class is in my charge. The teachers from whom they have come teach from the book; the teachers who come after me use the book. I have barely time to get them started in the right way; and in the examinations at the end of the year they will be behind-hand." Try it, and see. If there is a right way to teach, and you know that way, no matter when or where, nor for how short a time you teach, teach in the right way.

There remains yet another class of teachers,—those who say, "It is so much work; this way of teaching puts all the work upon the teacher, and leaves the scholar nothing to do." They maintain that since the use of topics does away with books altogether, the teacher's time is taken up with devising ways and means to keep the pupils busy.

To begin with, topics, so far from supplementing books, teach the pupil *how to use books*, so as to derive the greatest benefit from them. Then, as to the teacher's work in finding employment for his pupils, even if he uses the books wholly, lessons that would keep the child busy all through the school-hours would be much more than he is capable of taking in at one time. The usual way, with such teaching, is to assign him a lesson of moderate length, which he will learn

(if he learns it at all) in a very short time, and then he can, and will give his undivided attention to mischief if he is a "bad little boy," or sit disconsolately idle if he is a "good little boy." Other employment must be provided for them with either system; so that objection falls to the ground.

The real reason for their being so "backward in coming forward" in the work is laziness. Was there ever a good teacher who did not work, and work hard? In the very nature of things this must be so. In every age the degree of lasting success attained in any undertaking is measured by the earnest, honest, hard work put into it. Why not in school-work as well as elsewhere? The teacher, who, seeing and acknowledging the right way, will deliberately sit down and say, "It is too much work, it does not pay to do it;" who is content to be a mere machine, without one atom of originality or one spark of enthusiasm; who is willing to hear her scholars drone on day after day, mere empty, meaningless words, feeling all the time that they *are* but words, making no effort to interest or to instruct, is unworthy the name of teacher.

And now, what can we do to *prove* that the system of topical teaching is what we claim for it? There is one way,—only one: "Do men gather grapes of thorns, or figs of thistles? Wherefore by their fruits we shall know them."

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A NEW method for squaring numbers, invented by Mr. Boas, of the freshman class at Williams College, is thus described:—Beginning at the left, multiply the double of each digit of the given number by the number represented by the preceding digits, and write each product under those already obtained, in such a way that its right-hand figure shall be two places to the right of the right-hand figure of the preceding product.

Then square each digit successively, beginning at the right, and place the right-hand figure of the first result one place to the right of the right-hand figure of the last product before obtained, and the right-hand figure of each succeeding square two places to the left of the right-hand figure of the preceding square. Add the columns together, and the result will be the required square.