

*Special Papers.**ON THE VALUE OF A TRAINING IN
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THE question to be discussed in this paper is not the relative value of all the branches of study on our curriculum, but the value of this one branch in the education of our teachers, without disparagement of the value of other subjects. All these have their acknowledged place in our educational system. Who ever dreams of disputing the necessity to a teacher of a thorough acquaintance with English or mathematics, and the advantage also of a knowledge of Classics, French or German? The place of Science is not, as yet, so clearly defined, and it is the object of this paper to endeavor in some slight degree to define it.

Modern education supposes a knowledge, however slight, of the laws and forces of nature. From the pulpit and platform, as well as in social intercourse, we hear constant reference to natural phenomena, and these remarks are given as if the audience must necessarily know all about the subject, whereas, if an allusion to some mythological character is made, an explanation naturally follows. Again, our workshops, factories, businesses of all kinds pre-suppose some acquaintance with these laws, and our modern household life, with its arrangements for light, heat, drainage, requires at least some practical familiarity with natural laws. If such is the tendency of our modern life it is clearly our duty to provide the next generation with the amplest instruction in such matters, and the changes in the character of our teaching must be in the direction of providing this needed instruction.

In this democratic age "the greatest good of the greatest number" is the law. Dr. McLellan, in one of his addresses, says that only two per cent. of our school children are even entered on the books of a High School; and we know well that a very small percentage of our High School pupils take a University course. Evidently the knowledge obtained by the ninety-eight per cent. is derived from the teachers who have obtained their education at our High Schools, and thus it is to the curriculum of these schools that we must look for the means of influencing the mass of our children in an educational point of view. The recognition of this fact was the real cause of the founding and extending of our High School system, and thus, certainly, it is the duty of these schools to supply these teachers with the best possible training for their work. Now we must remember that a very large majority of our teachers have to pursue their work, not in our large towns and cities, but in remote country districts, and in isolated villages, among a population not interested in art, literature, or manufactures, but earning a living by agricultural pursuits of some kind or other. To such a population a knowledge of the chief facts of botany, zoology, physics and chemistry is more valuable than classics or mathematics.

A close inspection of our Readers will show that the Education Department in compiling them has kept this necessity of our schools carefully in view. In the IV. Reader there are more than ten selections which will require a considerable amount of knowledge of Natural Science on the part of a teacher, to make them interesting and instructive to the pupils, and the same may be said of the III. Reader, as well as of the others. In the subject of Temperance it is manifestly impossible for any teacher unacquainted with the laws of nature to properly explain the facts set forth in the authorized book. Now our Second and Third Class teachers have to teach these subjects. Should they not be required to take up the necessary Sciences sufficiently in our High Schools and at their Non-Professional Examinations to enable them to make these lessons really valuable? We do not by any means undervalue the study of classics, but let us consider which will be of the greater practical value to the average teacher in our public schools—a knowledge of Natural Science or of classics—especially of the amount of the latter usually required to pass an examination.

Again, let us consider the relative practical usefulness of our present option subjects. Whether is the knowledge of the antidote to a common poison, vegetable or chemical, the common facts in physics by which the pump can be made to work in unusual circumstances, the means by which the drain can be prevented from exhaling its deadly gas, the well cleansed from its discovered impurities, or the amount of knowledge gained by our students of the other options in the allotted time, the more useful? Let us remember that we have the duty imposed on us, not merely of teaching these things but also of showing the pupils how, in future years, they may obtain further information in such matters. In order to spread a knowledge of these subjects among all our school children the first step must be to make a general knowledge of them compulsory on all candidates for teachers' certificates, and to abolish the present system of options, which is merely an addition of work to the teaching staff of our High Schools without any compensating advantage to the students. In fact, as we have to impart to modern children ideas suited to this modern world, we must modernize our teaching to suit the change of times.

Neither the status nor the pay of our Public school teachers is sufficient to induce them to spend another four or five years in preparation. Obviously then we cannot expect them to have the same range of knowledge as a University graduate who has devoted so many more years to his intellectual training. The question we have to settle is simply, with a limited amount of time and means, which is the best of the present options to ask from our teachers? In our opinion, for the above-mentioned reasons, we would answer unhesitatingly, Science.

THE CULTIVATION OF A LITERARY
TASTE.

ONE of the most important questions before the teacher of pupils between the ages of twelve and fourteen is how to create in them a pure literary taste. They are so accustomed to read in a perfunctory manner selections from the school books, and so little habituated to study any one of the masterpieces of literature that it is difficult to determine exactly how to proceed in order to give them a real love for pure and elevated expression of thought. The suggestions given below come directly from the school-room of a teacher of large experience in schools of all grades. For several years he was trying to find the best methods of teaching English literature, and at last employed this plan as one of the best he had ever tried. It is given here to our readers for the first time. He first selected the following from Lord Byron's "Ocean," and wrote it in distinct and large letters on the blackboard, where it remained for half a day.

I.

"There is a pleasure in the pathless woods,
There is a rapture on the lonely shore;
There is society where none intrudes,
By the deep sea, and music in its roar.
I love not man the less, but Nature more,
From these our interviews, from which I steal
From all I may be, or have been before,
To mingle with the Universe, and feel
What I can ne'er express, yet cannot all conceal."

This was then read by the teacher, and the following questions asked:

What is meant by "the pathless woods"?
Where do we find "the lonely shore"?
What is "society"?
Can there be "society where none intrudes"?
Are we alone when we are by ourselves?
What is "music"?
What is the "Universe"?

These preliminary questions gave to the class the meaning of the words. Next followed a different sort of questions calculated to awaken connected thought, and stir the emotions.

Imagine you are wandering in the pathless woods, alone, hearing nothing but the rustle of the leaves, the singing of the birds, and the ripple of water. Then a little further on, through this forest, you come to the shore of the ocean, on a so itary spot where nothing is seen but a distant sail, and

nothing heard but the monotonous roar of the waves beating against the shore. Here you sit down and think. What emotions you feel! The Universe is all around you. Especially is this felt as the sun goes down and the stars come out, and the heavens and earth seem to touch each other. How deep now are your emotions! You feel that you can almost converse with the stars, the ocean and the trees. All around you there seem to be creatures of intelligence, although unable to utter a word of what we call language, but yet, capable of communicating with man. Then the teacher read the opening lines of Bryant's "Thanatopsis": "To him who in the love of nature," etc.; after this asked the pupils one by one to read the selection written on the board; and there began to be created an appreciation of the spirit of the poet's thought. In other words, a sympathy was excited between the thought of the poetry and the thought of the readers. This is but an imperfect outline of what the teacher did or said, for it was his own *spirit* that came from him and went into his pupils that gave them somewhat of his inspiration.

A few days afterward he wrote on the board the following from John Milton's "Morning," and pursued nearly the same course as with the selection from Byron.

II.

"Sweet is the breath of morn, her rising sweet,
With charm of earliest birds; pleasant the sun,
When first on this delightful land he spreads
His orient beams, on herb, tree, fruit and flower,
Glistening with dew; fragrant the fertile earth
After soft showers, and sweet the coming on
Of grateful evening mild; then silent Night,
With this her solemn bird, and this fair moon,
And these the gems of heaven, her starry train."

This appropriately followed after the former selection. The conversation that followed dwelt upon—the beauty of an early summer morning—its breath—the rising of the sun—the sparkling dew—the slow coming on of evening—the silent night—the silver moon—the gems of heaven. This created much thoughtful interest and when the selection was read again each member of the class caught more or less of the spirit of the immortal poet, and saw as he saw the glories of nature in the early morning, in the evening and at night. The interest of the class was visibly increasing. After this the teacher selected a few lines from John Keats' "The Grasshopper and Cricket." The class had been prepared for it, but if it had been given first it would have been almost impossible to have created much interest in it; but as it came with the previous preparation, it was appreciated from the commencement of the conference. It will be noticed that these were not called "lessons," but "talks." No task was assigned, no work demanded, but the class worked and thought nevertheless.

III.

"The poetry of earth is never dead;
When all the birds are faint with the hot sun,
And hide in cooling trees, a voice will run
From hedge to hedge about the new-mown mead:
That is the grasshopper's—he has never done
With his delights; for when tired out with fun,
He rests at ease beneath some pleasant weed,
On a lone winter evening, when the frost [shrills
Has wrought a silence, from the hearth there
The cricket's song, in warmth increasing ever,
And seems, to one in drowsiness half lost,
The grasshopper's among some grassy hills."

After this other selections were discussed. We cannot give all of the methods. The whole work on these three selections occupied three full weeks, and at the end of the time each pupil was voluntarily reading elegant poetry and prose with an interest and zest never known before. Their mental eyes were opened. The questions we print are specimens of a few asked.—*The Teachers' Institute.*

THE man of pure and simple heart
Through life disdains a double part;
He never needs the screen of lies
His inward bosom to disguise. —Gay.

MANY a teacher mistakes work for "growth." That is, if his pupils work hard he accepts it as proof that they are growing. This may be true or it may be false.—*J. E. Williams.*

*Abstract of an address delivered at the recent meeting of the Science Association.