

it sum up each step of the solution in a short statement. Do not be afraid of considerable writing. Writing makes an exact man, woman or child. What one knows he can tell orally or in writing.

For what must I sell 40 bbls. flour, bought at $\$4\frac{1}{2}$ per bbl., to gain $\$75$? The unit in this problem is the cost of one bbl. of flour. Put into an equation the first statement is, $\$4\frac{1}{2} = \text{cost of 1 bbl. flour}$. The fact thus expressed is our major premise. Then $\$4\frac{1}{2} \times 40 = \text{cost of 40 bbls. flour}$. $\$4\frac{1}{2} \times 40 = \180 ; here we have performed the number work and reach our minor premise. $\therefore \$180 = \text{the cost of the flour}$. Here is our first conclusion, reached through the use of the syllogism. $\$180 + \$75 = \text{selling price of the flour}$. $\$180 + \$75 = \$255$. $\therefore \text{the selling price of the flour} = \255 . A second syllogism leads us to the final conclusion, the result we are seeking.

Such practice in problem work, I take it, is language training of the best kind. It is logic, neither more nor less.

Concluding, let me summarize as follows:

1. Language training should accompany and form a part of every teaching exercise.

(a) Thought—power and language must be developed together.

(b) A pupil does not know what he cannot tell.

2. Arithmetic is particularly valuable for developing thought—power, and the faculty of reasoning logically to a conclusion.

(a) Arithmetic teaches (1) facts in regard to numbers and the operations with them; (2) the solution of problems involving logical thought.

(b) The two processes are necessarily combined more or less, but the second is the more important.

3. From the beginning of the pupil's written work in arithmetic, teach the solution of problems, requiring written statements.

Keep in mind the distinction between the two phases of work. In the first, aim at accuracy in numberwork and familiarity with principles and processes; in the second, aim at language and thought training.

4. Teach the use of the equation and a proper understanding of it; teach the use of the sign of deduction, read "therefore," and let the solution take the form of a syllogism, or a series of syllogisms.

Thus we may, through arithmetic, teach logic, the foundation of all accurate speech.

✻ Hints and Helps. ✻

TEACHING COMPOSITION BY LETTER WRITING.

BY MRS. EVA D. KELLOGG.

EXPERIENCE has been the slow and sure teacher to convince me that letter-writing is the very best means of composition teaching.

The letter-form is the one which pupils will use in ninety-nine cases out of a hundred in all their after-life composing. Its practical utility seems to appeal to them and make them work harder to attain skill.

The letter-form creates by its personalism a feeling on the part of the pupil that he has an audience—a definite "somebody to talk to." Consequently his thought has not that loose, wandering tone which characterizes a composition.

The letter-form allows room for great originality, and necessitates sufficient similarity of productions to make class criticism effective. The work is so easy that a large proportion of it can be well done.

Doing away with a text-book gives opportunity to bring strongly before the pupil the errors which he actually *does* make, without confusing him with the errors he *might* have made.

I would give pupils something to write about. In this way can be ingeniously worked in, points of honor, morality and etiquette, not to mention business letters, which would at once suggest themselves. These directions as to subjects make the pupil grasp the thought and reflect on it before he begins to write, and render the plagiarisms of the average essay impossible.

While we acknowledge that a genuine letter-writer is born, and not made, we believe in a generous attempt at their construction, so long as electricity has not quite done away with the necessity of letter-writing.—*Educational News*.

IS IT TRUE?

THE leading article in the *Atlantic Monthly* for June was written by Charles Dudley Warner, and is entitled, "The Novel and the Common School."

Mr. Warner very justly argues that there is very little taste for good literature found among the masses in this country, and, therefore, the low trashy novel has a greater sale than the good one: that, but for the magazines, the best writers of fiction could earn no more than day laborers, and that the literature underlies all other knowledge, and hence, must be given more attention in the common schools. He blames the common school teacher for this lack of taste for good reading, because very few teach literature at all, and some who try do not know how. Is it true that the poorly paid Public or Private school teacher, who has so many other charges to bear, must also bear the cause of the evil wrought by the trashy, sensational novel? Is it true that the educator must be responsible for not only what he does that is wrong, but also for what he fails to do that should be done? Alas! too true! In many professions and callings such is not the case, at least, to so great a degree, but the teacher must deal with the mind, that immortal being, that part of man which, through his higher endeavors, like the twig, grows and bends and develops according to the force brought to bear upon it, forms habits, becomes strong or weak as the teachings of his instructors may warrant.

Mr. Warner says that the remedy lies with teachers. Good literature must be introduced early and taught through the entire course. Not simply who wrote and when, but the actual reading is the study of literature.

When the people demand better books the publishers will publish better books, and when the teachers cultivate the taste for better and higher literature the people will demand it.—*Educational Exchange*.

ONE KIND OF POOR TEACHING.

THE writer visited a school recently in which a lady was teaching a class of young ladies arithmetic. It was in one of the best schools of a large city. The surroundings, the order, the spirit were all that the most exacting could demand. The entire building, containing many rooms, was a model of neatness, and the control was perfect.

The class were learning to "tread the mazes" of percentage. The mysteries of "purchase price," "selling price," "rate per cent." and "amount of gain or loss" were being unravelled in the following manner:

TEACHER.—(Reads problem out of her note book for pupils to solve.)

PUPIL.—(Solves and gives wrong answer.)

TR.—"That is wrong. What had you given?"

P.—"Purchase price and rate per cent. to find the selling price."

TR.—"Well, how did you do it?"

P.—"I multiplied the purchase price by the rate per cent."

TR.—"But that is wrong. How have I told you to do when you had the purchase price and rate per cent. to find the selling price?"

P.—"I have forgotten."

TR.—"Who can tell her?"

MARY.—"Multiply the purchase price by the rate and then add the result to or subtract it from the purchase price, as it is gain or loss."

TR.—"Right. Now do you see your mistake?"

P.—"Yes."

TR.—"Well, correct it."

Another pupil is called on. The answer is pronounced right.

TR.—"What did you have given?"

P.—"The purchase price and rate per cent. of loss to find the amount of loss."

TR.—"How have I told you to proceed in such a case?"

P.—"Multiply the purchase price by the rate per cent."

TR.—"Right."

Another pupil is called on but the result is wrong.

TR.—"What have you given?"

P.—"Selling price and purchase price to find the amount of gain."

TR.—"Well, how have I told you to do in such a case?"

P.—"I have forgotten."

TR.—"But you must learn to remember. Who can tell her?"

Some one in the class gives the rule.

ANOTHER PUPIL (who is working an example given to her).—"I have forgotten what to do when I have the purchase price and amount of loss to find the per cent. of loss."

TR.—"Why, you must remember. Who will give her the rule? (Some one gives it.) 'Now has not that been told several times?' (This question was evidently for the visitors, to impress upon their minds that the teacher had not neglected her duty.)

And the writer could readily believe that she had not neglected her duty as she understood it. She was a conscientious and devoted teacher, and a lady of refinement. She was evidently exerting herself to the uttermost to teach the young ladies percentage, and they were doing their part as best they could.

It seems almost incredible, and yet there is good reason to believe that there are many teachers in that great imperial state who are pursuing the same general process in teaching the children. Is it any wonder that the press is mourning over the ignorance of the school children when any test of power to think is made?

The lady teacher seemed to have no idea that her pupils possessed any other faculty than that of memory. Every item of knowledge was to be held in the mind by the power of memory (recollection). When there was one group of ideas, a certain rule was to be applied. When a different grouping was made, a different rule was to be learned, and so on, a new rule for each new grouping, to the end of the chapter. Such demands would tax the memory of a Chinaman.

The demands thus made upon these young ladies were more than their ordinary ability to meet. And yet the writer read a few days after a report of a speech made by the mayor of that city to the Pan-American Commission, in which he declared that the Public Schools of that city were the "best" (or possibly "among the best") in the world.—*The Public School Journal*.

Teachers' Miscellany.

PEACE.

BY MRS. J. W. A. STEWART.

I HAVE known those whose smile was benediction,
Whose voice was dropping balm;
Yet who had passed through storms of great affliction
To find the after-calm.

Perhaps within their hearts some voiceless yearning
Still longed for human love;
Yet did their thoughts, like constant incense burning,
Forever mount above.

Ah me! To learn their holy self-denying,
What bitter pangs it cost,
What nights of tears, what weary days of sighing,
The victory well-nigh lost.

For is there one, ah! surely there was never,
Who loving yet could say,
"I will love on, although unloved forever."
And not have wept that day.

They strove in tears, at times almost rebelling
Against the guiding hand,
Sweeter to die of grief than, passion quelling,
To follow stern command.

Sweeter to let the heart fulfil its breaking,
And sooner end its grief,
Than to return to patient labor, taking
A wound without relief.

Yet at the last, though without exultation,
Did they victorious rise,
And something that was more than resignation
Shone steadfast in their eyes.

And they had learned to love, but now divinely,
Not looking love to reap,
Like angels spreading gracious wings benignly,
Where saints unconscious sleep.

Oh could I learn their deep self-abnegation!
Then were my soul thrice blest;
Finding, like them, enduring consolation,
And long-desired rest.

—*Woodstock College Monthly*.