

The Educational Weekly.

TORONTO, MARCH 13, 1885.

PROFESSOR ALEXANDER BAIN, in his work on *Education as a Science*, enumerates a number of factors that tend to waste brain power—that use up brain force without giving any recompense. We think one of the most powerful of these is discouragement. No doubt the meaning of the word could be analysed and its different elements classified under different psychological heads. But with this we need not concern ourselves. Every teacher—certainly every pupil, knows what is meant by discouragement, for unfortunately it is very rife.

Teachers forget that they are not dealing with mature minds: they forget that they cannot expect the same quickness of comprehension from children which they find in adults; they lose sight of the fact that the subject which they have thoroughly mastered is to their learners as yet quite obscure; they have perhaps forgotten the various steps necessary to a correct comprehension of the matter in hand and the labor required to understand them and their sequence, and are often too apt to be impatient and irritated at what seems to them the dulness or wilful obstinacy of those whom they are teaching. As a consequence, also, they not seldom are unable to judge what amount of new matter to give their classes to prepare. It requires a delicate perception to know what is really difficult and what is comparatively easy in a new lesson. Often in translations from the classics or from the modern languages, there occur constructions which require a great deal of time spent upon them. Lessons containing these ought to be proportionately short. And yet we find it is always "Prepare fifty lines, or a page, as usual," whereas really there is no "as usual" about it.

These things discourage pupils, and than discouragement few influences are more deleterious. It affects their tempers; it affects their ambition; it affects their reverence for their masters; it affects above all their ability to learn. It blunts the faculties, takes away the keen edge of enthusiasm, and renders apparently dull and stupid boys and girls who were before remarkable for their keen perception and indomitable perseverance.

What is the remedy against this? Clearly for the teacher to put himself as far as possible in the place of the child: to remember how he first learned the lesson he is now teaching; to recall the difficulties he himself experienced; to retrace the steps by which he arrived at his present knowledge; and to make allowances for the different degrees of acuteness in comprehending them which exist in his different learners. Till he does

this he can never be sure that he is not discouraging some.

A FAVORITE question amongst undergraduates at college, and also amongst newly-fledged graduates, is "How much 'outside reading' have you done?" The importance, the practical benefit of reading a certain amount of work that is not specially mentioned in the curriculum, but which very materially bears upon the subjects covered by the text-books specified is recognized by all, and it is usually the case, we think, that the honest worker who, in addition to lectures and text-books, manages to read well round his subject, is able to obtain a wider view of all his branches, and, therefore, to take a higher stand in examinations.

Could "outside learning" be taught in schools? Could the pupils, that is, be habituated into keeping their eyes and their ears open for the observation of matters other than the details of lesson-learning? A great many interesting topics are continually cropping up in the daily lessons upon which the master might spend a few minutes both entertainingly and instructively. It brings in a little diversion, gives a sort of breathing spell, recuperates the flagging energies, gives a zest, the influence of which flows over and makes more easy the keeping of the attention fixed on drier necessities.

Of "outside" topics there are myriads in every branch. We remember gaining the riveted attention of a class that was becoming restless over some axioms of Euclid by descanting on the number of degrees in a circle, and from this going on to speak of longitude. On another occasion the origin and history of coal, with a few simple geological principles did much to wear off the ennui consequent on teaching dry tables of productions of countries in a geography lesson. These will suffice for examples of what we mean by "outside learning."

"AN action and not a thought," said Aristotle, "is the end of life." We may add as a sort of corollary or explanation to this, Carlyle's dictum: "Conviction is useless till it be converted into action." If this is true for the whole of life it is true for its every detail. A truth is applicable to every connected circumstance. The highest ideal includes and involves every the minutest factor that tends to its attainment. The most abstract generalization is abstracted from particulars. The highest aim is but an amplification or extension of lesser aims. A great aim is an aim that evinces itself in little things just as much as in great. Or rather is it not great, and does it not belong to great things, just because it includes a larger

number of little things than another and lesser aim? If so, then we can carry out these sayings of Aristotle and Carlyle in the "daily task," the "trivial round," equally as much as in the profoundest speculation or in the most abstruse thought.

Is there not at present greatly prevalent a separation between thought and action in education? It seems to us that we are most of us regarding only thought, leaving action as beneath our notice. We talk glibly of "methods." We are not so ready to apply them. We make wonderfully intricate analyses, and we tabulate them under wonderful-sounding "ologies." Do they help us? Again; we instil ideas, we teach rules, we draw out and develop the powers of the mind, we make our pupils think. How many of us make them apply what they have learned to the every-day acts and thoughts of life? We try to "turn out" brilliant scholars. We forget that true brilliancy—brilliancy other than gilt or varnish—is obtained by polishing hard material substance. Give a mind *substance*, it will polish itself in the friction of life.

SOME masters make little or no difference in the amount of work they set their pupils to perform at different hours of the day. They will hear a heavy list of lessons in the morning; another equally heavy in the afternoon; and set a third batch, perhaps equal in amount to the other two, to prepare in the evening. Surely there should be some method in this. Professor Bain tells us that the brain is most active shortly after the first meal, after which follows a sluggish period. These are repeated after the second and third meals, with this distinction: that each period of cerebral activity is shorter than the last, and that the activity is also less.

The mind, then, is strongest after breakfast. It is then that its powers can best be used, and they should be used on the most difficult subjects. The difficulty of the subjects presented to it, and the length of time spent upon them, ought, on Bain's theory, to be graded according to the power we have to work with.

In the evening often there is likely to come on a sort of fictitious energy, due to excitement, or the novelty of fresh subjects, or fear of not knowing the lesson, or various other sources. This probably is injurious. It drives the blood to the head when it ought to be somewhere else; it forbids sleep; it taxes the nervous system; and in time, in young children, there will in all probability be a marked falling off of health and consequently of mental energy.