

THESIS.

Subject, Drill - Has it a place?

Name, Alvaro B. Cober.

Drill is a term used in education, particularly in school instruction, to denote the strict routine of exercises required to train pupils to the ready performance of mental or physical processes, and to impress upon their memory those associations of facts which are required in many subjects of study.

It is quite evident that drill has a place in our schools, for there is and must be a mechanical side to education. By repetition both mind and body acquire fixed habits by means of which intellectual and physical activity may be accommodated to the performance of acts which at first might have seemed impossible. Thus drill is essential for the formation of right habits, for the acquisition of skill in certain work in the primary stage of

instruction, for the accumulation of the proper experiences, and for the full development of the child's moral, mental, and physical powers.

It is not enough that pupils be led to the apprehension of a truth, but it is just as important that they acquire the ability to apprehend the same truth again with greater readiness and clearness. Pupils must be taught not only to solve a long problem in arithmetic, but they must be instructed in such a way that they will gain the power to take the successive steps involved in a problem with promptness and ease. It is not enough that pupils learn to read and write, but they must repeat the exercise until they can do it with readiness and rapidity.

These results are secured only by drilling and by repeating acts until the requisite power and facility is secured. Every time the mind acts it gains an increased power to act again in like manner. The mind and the body should therefore be directed in the right channel, for if thus continued a kind of automatic force will be imparted to the activity.

Drill is an indispensable means of imparting that form of power called skill. This is especially true in teaching the school arts which involve the action of the hand, the eye, the vocal organs, etc. as reading, writing, drawing and singing. How could anyone ever learn to sing, or draw, or write without repeating the

same exercises over and over until they become a very part of his own natural activity?

There is a time however when drill ceases to be of any value for the growth of knowledge or skill, and becomes positively harmful. Intelligence cannot be strengthened by unintelligent and improper repetition. If pupils are continually questioned on dry and unimportant subjects, they will soon lose all the interest which is necessary to hold their attention, and it will cause a mind wandering, the greatest enemy that the educator has to confront. The ability to concentrate the attention is of inestimable value, and unless the teacher is very skillful in giving drill work it will become very monotonous and the pupils

mind will wander away from the subject taught and the power of concentration may be destroyed forever. The attention of pupils in drill work is often held by the introduction of interesting stories; but there is great danger in using these stories when they have for their aim only the holding of the interest and attention of the class. In number work stories are often told of which the heroes are two mice, or two dogs, or two elephants; but it is not in the two, it is in the mice, or the dogs, or the elephants that the children are interested.

There is beyond doubt nothing in school work that can exceed the stupidity of some of the drills to which classes are subjected. Pupils are required to go over the same

exercises or lessons day after day
 which they have known for many
 weeks, and derive no benefit or intellect-
 ual growth from them whatever. The
 greater part of a spelling drill, for
 example, is often spent on words
 which no pupil has misspelled or
 is likely to misspell. Pupils drone
 over reading lessons which they know
 by heart, and read them without the
 least gain either in grasp of thought
 or in vocal expression. They are re-
 quired to solve problems over and over
 which they first solved at a glance,
 and are kept combining and separating
 groups of objects after they have
 acquired the power to add and sub-
 tract the corresponding concrete numbers,
 and even abstract numbers. The method
 of drilling in numbers by the use

of shoe-peg, match-sticks, etc. may be as useless and senseless as drills in counting by naming the numbers in succession, and this can certainly be made sufficiently stupid and monotonous to illustrate what is possible in this direction.

Useless drills are generally useless, and one of the most serious evils in school work is the waste of time in useless drills. The right use of drill requires insight, judgment, and tact, and can be used with satisfactory results only by the most competent and skillful teachers.

Now in summing up both the uses and abuses of drill in our public schools we come to the conclusion that, although it has been misused in many schools and

has been noxious to the pupils, yet the want of good thorough drill has been a greater hinderance to many educational workers than its excessive use. No army can fight well unless it has first had a thorough drill in military tactics. No sailors dare venture out on the deep waters before they have had a thorough drill in steering their ships. No one becomes skillful in writing, drawing, or painting before he has had a thorough drill in that line of work. And no one is prepared for any vocation in life before he has been drilled in the work which he intends to do. The highest attainments are secured largely by repetition, therefore, we say that drill, properly used, has an important place and is indispensable.

Bibliography

- Methods of the Mind. (Whole Book)
- White's Pedagogy. - Pages 140 - 147.
- Cyclopaedia of Education. - Page 239
- McLellan's Applied Psychology. - Pages 195 - 201.
- James's Psychology. Vol. I. Page 104 - 127.