practice does not make experience in the true sense of the word; it must be intelligent practice. Rules of art are derived from principles of science, and unless the "doer" has a clear knowledge of rules and of their underlying principles, he is not likely to acquire artistic skill in their practical application. It is a common mistake to assume that mere lapse of time, as it were, results in experience. On the contrary, there is many a "practical" man that is thoroughly unpractical, and many an "experienced" one quite without experience. An experience not derived from sound principles and their wise application, results in special powers and tendencies to work in the wrong direction, a fatal facility for leaving undone the things that ought to be done, and doing the things that ought not to be done.

It is not an uncommon thing to hear a teacher boasting of his long experience, and even claiming special privileges on account of it, who in his actual school work he violates almost every principle of scientific method, and who in consequence of his "experience" is beyond hope of improvement. It may be well, then, to indicate the principles on which the art of questioning rests, and since method of teaching is little more than method of questioning, to discuss as as fully as may be, such practical applications as may help the young teacher to begin right, to continue right, and so, with the least possible waste of time and power, to attain that true experience which arises from right doing guided by right knowing.

## LEARNING INVOLVES APPERCEPTION AND RETENTION.

It has already been suggested that in teaching and learning two things are to be considered: 1st. The preparation of the learner's mind for reception of the material and reaction upon it; 2nd. The proper presentation of material and its reaction on the mind. The action of the mind on the material presented to it is termed apperception ; while the action on the mind of this material when apprehended is termed *retention*. These two processes are mutually dependent : there can be no retention without clear apprehension; and, on the other hand, every new apprehension modifies mind. and so has its effect in interpreting every new experience. The teacher should therefore bear in mind that the two conditions of learning are *proper* presentation of material on the one hand, and proper preparation of mind on the other hand. In the light of this principle we may consider (1) the purposes of questioning, or what may be accomplished by it; (2) the qualifications of the questioner; (3) the form and matter of questions; (4) the form and matter of answers. If the first topic is fully discussed, it is evident that what concerns the other three may be fairly deduced from it. Since the two processes—apperception and retention-are reciprocal, the one necessarily implying the other, it is difficult to classify the objects of questioning as belonging definitely to one process rather than the other. But it may be convenient to roughly classify them under these heads, *i.e.*, we shall consider the purposes of questioning as (a) concerned with the presentation of material, or with the testing of re*tention*; and (b) as concerned with the preparation of mind, or the training of apperception.

I. (a) Presentation of material, or test of retention.—Under this head several important purposes may be considered, viz, (1) to discover actual knowledge; (2) to fix actual knowledge; (3) to extend knowledge (vague made definite, imperfect made accurate, new knowledge); (4) cultivation of language power.

1. To discover the pupil's knowledge.