

learned. And it is not by any means certain that the unlearning is ever thoroughly accomplished.

Curiosity being the earliest form of scientific inquiry, it is clear, then, that it should be carefully nurtured. Children should be encouraged not only to ask questions concerning all things, but also to ask *all* the questions concerning all things. And parents should hold themselves ready and cheerful to answer all questions; bearing in mind, however, that wrong notions are easily conveyed but difficult to correct, they should be watchful against making wrong answers either through ignorance or misconceived delicacy. When in doubt as to the correct answer, the child should be frankly told so, and requested to remember his question until an opportunity occurs to have it answered by some competent person. And it should be a parent's anxiety to have answered, in the manner indicated, all questions which he is unable to answer himself. Such a course would be sure to inspire the child's confidence in the parent, and increase his affection and admiration, while the reverse course could not fail to have the opposite effect. To cheerfully and intelligently lead a child to exhaustive inquiry in every direction will unquestionably often prove a difficult and apparently hopeless or thankless task, but overshadowing such selfish considerations should stand the solemn word DUTY.—*William E. Simmons, Jr.—(Appletons Journal.)*

#### Teaching vs. Hearing Lessons.

To one who is familiar with schools, the first glimpse of a class room, the first movement of a class, almost the first word spoken, reveals the character of the work done in it. Power and skill, or the lack of these, are shown in every thing done, and felt in the very air. Both manner and results bear the unmistakable want of a master, or the equally clear signs of an apprentice or artificer. And this whether the work of a class be a "common" or a "higher" subject; whether the lesson of the familiar one or a new topic. A long visit may increase interest in the class or the subject and may disclose the source of power, but the *fact* of good teaching in distinction from mere hearing of lessons is apparent on the face of things. It may not be possible to put all the points of this difference into words, for we often see and feel the force of that which we cannot state as a formal precept for another to follow, but some elements of it may be separated from the complex whole.

1. It is immediately apparent that class and teacher now come together for some *definite purpose*. Each expects something of the other. The pupil is under a sense of responsibility to the teacher, and the teacher to the pupil, and each will hold the other to his duty. There is an air of business, an attitude of attention, a silent but effective demanding, or rather expecting of attention and effort and of preparation of all that was required, together with a manifest readiness to be patient without sacrifice of thoroughness, to be rigid in requirements and conciliatory in manner, that give appearance of results. No time is wasted in delay, in dawdling, in asking and answering needless questions. Every thing needed in the class has been brought to the class, and every thing required for use, map, pointer, crayon, *paper and pencils*, is at hand. No time is wasted in getting into order, or discussing "how far we went yesterday," or whether, "this was to be skipped," or in reminding the teacher that he promised to do this and that left over from last week. The teacher and the class have met for something understood by them both, and then proceed at once to do it.

2. *The teacher knows the lesson* and knows it in such a way that he could recite as he requires the pupil to recite. He does not need to keep his eye on the book and his finger on the place. *He can do without a book*, except as problems may be taken from it, or sentences given for analysis, or as it contains the text to be translated. It more frequently lies on the desk for occasional reference than is followed letter by letter. It is evident that the teacher is master of that part of the subject, that he sees how it grows out of a preceding part and prepares the way for what follows, and he has estimated the relative importance of it, and just how much time he can afford to spare upon it. His questions show this: his explanations, clear, right to the point, sharp and sharpening, confirm it; the manifest confidence of the class in his statements and the eagerness with which they seize and appropriate instruction make it plain that they are in the habit of receiving positive statements which will bear close questioning, and which will apply directly to the case in hand. Questions asked are for information, not "to catch the teacher"; the pupil knows that he will be expected to be sure of what he claims to understand, and that the teacher will not be satisfied until every point is made clear to all.

3. Teaching does more than to ask all the questions in the book, more than to go all round the class in order every day, more than to call for all the words of the text. It finds out, now in this way and now in that, *how much the pupil knows*, not how many words he can say; what application of knowledge he can make, not merely how many rules he can repeat. The teacher's knowledge is of things, not of words; he sees things in their uses and in their relations, and they become to him signs not of learning only but of wisdom as well. And as face answers to face in the water, so the knowledge of the pupil, when a subject is finished, is seen though in different degrees to answer to his own knowledge.

4. The Teacher's knowledge of a subject is also of such sort that it gives him the basis of all needed explanations and illustrations. He knows where difficulties lurk and how they can be met. He anticipates that such a step may be too much to take at once and divides it into two. He sees the need of some special illustration to aid in grasping a principle, and he inserts what will give necessary light. He knows how much the senses enlighten the mind, and he puts a hard question with some *sensible* answer. He does not expect a child to understand the "book definition" of *horizon* unless he has first called attention to the fact that the earth and the sky *do* appear to meet at a certain distance from the observer. He does not suppose that many learners will "know for certain" how net veined leaves differ from others unless the two have been compared, nor that they will know how "to write a composition" without information about the subject of it. He has had experience of all the trials of a learner and is ready to "bear a hand" when others ask for it. You may see how quick he is to vary a question, to add to an explanation, to lead the pupil into the light, to help him to perceive how this step follows that. His fertility of resources will not please more than his readiness to notice just when those resources must be used, and when the pupil should be left to his own devices.

5. It *compels*, or shall it be rather said *inspires*? pupils to use their own powers and does not allow them to suppose that all the heavy loads are to be carried by the teacher, but of all, the pupil must carry his part and of most, the whole. The pupil studies, the pupil wrestles with difficulties, the pupil tries and tries again, and in the end, the pupil gains the victory. He is aided, he is guided, he is encouraged, and that is all; he does the