

from the stand point of the pupils, and as indicated above, according to the laws of his development.

2. Dwell especially on the elements.
3. In the establishing of derived principles, refer frequently to the fundamental ideas, and deduce the former from the latter.
4. Divide each step into definite and little wholes.
5. Point out at each step some part of the following, in order that the curiosity of the pupil may be excited without being satisfied; proceed so that no essential interruption shall arise.
6. Divide and arrange the subject matter, so that where it is practicable in each succeeding step of the now the foregoing may appear.
7. Connect those subjects which are especially related.
8. Go from the thing to the sign, and not the reverse.
9. Be guided in your selection of a method by the nature of the subject.
10. Arrange the subject taught according to a special scheme but consider constantly all sides of it.

Third.—WITH REGARD TO THE OUTSIDE CIRCUMSTANCES OF THE TIME, PLACE, ORDER, ETC.

1. Follow up subjects with your pupil successively, rather than together.
2. Take into consideration the probable future position in the life of your pupil.
3. Teach with reference to general culture.

Fourth.—WITH REGARD TO THE TEACHER.

1. Strive to make your teaching attractive and interesting.
2. Teach with energy.
3. Make the subject to be learned palatable to the pupils; and require, above all, a good utterance, sharp accent, clear statement, and thoughtful arrangement.
4. Do not stand still.
5. Rejoice in development for progress; first for yourself; second, for your pupils.

Notes.

Successful experiments have been made in Coblenz, in Germany, into the practice of substituting ravens for carrier pigeons. Ravens being stronger and bolder birds than pigeons are less liable to be attacked and destroyed by birds of prey.

Gas-making by the various corporations in the Birmingham district (England) appears to be a very profitable business. Tipton, which up to the last nine months has been losing money, has made a profit of \$12,000; Walsall made a profit of \$40,000 last year; West Bromwich of \$34,000 and Limobank of \$16,000.

Now pests are appearing to consume our apples. The apple maggot (*Trypeta Pomonella*) leaving the outside of the apple fair to look upon, honeycombs its interior until nothing is left.

M. E. Payrasson has called attention to the danger following the use of old-ware in cases of infectious disease. It is liable to be marred by cracks and flaws in which germs may lurk. Only glass or porcelain should be trusted.

School Notes.

—Dr. Rush, according to the *Sanitarian*, used to tell his students that no physician should be permitted to engage in practice unless he had served six months in the kitchen, so important did he consider a knowledge of the art of cooking. This prompts us to say that a teacher should be permitted to engage in practice unless he has served at least twice six months in a normal class, so important do we consider a knowledge of the art of teaching.

—Given a room, a teacher, and fifty pupils; but is not necessarily a school. All the conditions are there but one, and that is co-operation. The *Indian School Journal* puts it thus: "If the teacher tries only so hard to teach, and does not secure the co-operation of the pupil in trying to learn, there is no real school. There may be methods, perfect in theory; order the hours the clock tick and the pin drop; examinations that answer perfectly every question; and yet there is no school unless between teacher and taught there is a mutual play of love, sympathy, and good will. Who of us, if weighed in the balance, would be found teaching, not a school, but an aggregation of little ones?"