

structing a theory of education, look for the solution of his problem regarding the facts? Should he look in the direction of a purely speculative philosophy which presents an ideal, or in the direction of a more or less speculative psychology, which presents the child and its supposed development, or should he look for his facts in that department of psychology in which exact scientific methods are used? To ask such a question is surely to answer it, for, if the theory of education is to be scientific in any sense it must be founded upon facts and, even more exactly, upon just those facts which experimental psychology presents.

To a theory of education then, essentially in the form of a theory of teaching and learning, experimental psychology should contribute the following:

1. Scientific definitions of the terms used to designate mental operations.

It is necessary to point out here only two things. First, the elements of any science can never be defined within that science at least, and as the elements of consciousness are the very last and final results of the process of analysis they can never be defined at all. So the sensations—red, blue, hot, cold, etc.—admit of no definition whatever. Second, scientific definitions of the complex facts consist in stating their constituent elements, and in nothing more. This is the only definition or “explanation” which science recognizes in the physical sciences; it is the only kind a psychologist can give if he be true to the methods of science.

To contribute such definitions of the terms used in a theory of education would be by no means the least service which experimental psychology could render, and it can be very largely done at the present day.

2. Experimental psychology, should contribute, with such definition, an accurate account of the elements of consciousness and of the conditions under which they arise.

3. In addition to such an account of the elements there should be contributed a scientific theory of the more complex facts of consciousness, such as memory, imagination, association, thought, emotion, volition.

Here one needs to remember that we are not yet, nor are we likely to be for many a day, able to say with any degree of com-