

from the activities of everyday life. The use of the "dictated experiment" does not give the pupil a chance to think out his own solutions. The solutions he obtains do not conform with any of the above-mentioned methods, with the exception of the method of "concomitant variation". Though the student receives plenty of exercise in the explanatory application of principles, he receives no training in using them as means to an end in doing things. Drawing abstract conclusions from single experiments or experiences, he becomes rash instead of cautious, forms absolute where he should make probable judgments and develops an inability to estimate the value of evidence. The course should be cut down and more closely related to the home life of the pupil. Dictated experiments should be abolished and scientific methods should be specified on the curriculum as things to be taught.

The subject-matter should conform to the needs of method-training, the interests of the child, and the requirements of citizenship. All three are represented in the out-of-school experience of the child. But this experience must be organised to form mental interest and gravitation centres. These centres are found in the principles and general conceptions of science. Hence the syllabus should specify the general conceptions to be taught, together with the chief classes of common phenomena in which each is exhibited. The concrete material should be left to the choice of teacher and class, to be derived from the out-of-school experience of the student. These general conceptions are rarely bounded by the confines of any of the special sciences. The course should not be differentiated into special science subjects. The pupil would gain a better conception of the provinces of the special sciences. He would more truly appreciate the meaning of "law" and would get a clearer idea of each particular principle and its range of application. The problem of correlation would disappear, time would be saved, and each topic stressed in proportion to its importance in real life.

The present course exhibits all the evils of premature differentiation. In physical geography unifying centres are found in conceptions of natural contiguity. Phenomena are studied apart from the establishment of explanatory causal principles. The biology course is based on type study, that is, on a system of technical classification rather than a system of causal relations. Neither the student nor the citizen is interested in the study of types or technical classification. True centres of mental organis-