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TEACHING AIDS IN BOTANY. I — THE PLACEMENT TEST

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The written placement test has proven a valuable teaching aid in General Botany at Iowa State College, particularly when used to segregate students into high, medium, or low sections. In the fall of 1938 it was used to segregate 350 students into 5 high, 2 medium and 5 low sections. The administrative difficulties of sectioning were met by placing the 90 students who were classified for the same class period into 3 sections of about 30 each.

This test has been evolved over a period of ten years and is composed of ten comprehensive questions of the following types: information, interpretation of data, testing of hypotheses, methods of proof and deductive reasoning. The effectiveness of the placement test is indicated by a correlation of .57 between it and the comprehensive final examination administered to 323 students in the fall of 1938.

The placement test is used as an aid for both the individual student and instructor. The sectioning of students by the placement test allows the course to be graduated to fit individual sections. High sections are given more supplementary materials, more freedom in selection of materials and experiments, a wider range of applied problems, and more practice in the use of the scientific method. Segregation further affords each individual student the opportunity to progress at a rate nearer his capacity. The results of the placement test, correlated with that of the comprehensive final examination, provides a basis for measuring student progress.

The correlation of paired questions of the placement test with corresponding pairs of questions in the comprehensive final examination affords a valuable teaching aid to the individual instructors by: (1) indicating in which type of section an instructor is most capable; (2) indicating the strong as well as the weak points of individual instructors; and (3) affording a quantitative measure of student progress which is used in teacher-conference groups.

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