Proceedings of the Iowa Academy of Science

Volume 46 | Annual Issue Article 118

1939

Some factors Affecting the Achievemnet in Physics subjects of Students in a Survey Course in the physical Sciences

W. H. Kadesch
Iowa State Teachers College

Let us know how access to this document benefits you

Copyright ©1939 Iowa Academy of Science, Inc.
Follow this and additional works at: https://scholarworks.uni.edu/pias

Recommended Citation
Kadesch, W. H. (1939) "Some factors Affecting the Achievemnet in Physics subjects of Students in a Survey Course in the physical Sciences," *Proceedings of the Iowa Academy of Science, 46(1),* 371-372.
Available at: https://scholarworks.uni.edu/pias/vol46/iss1/118

This Research is brought to you for free and open access by the IAS Journals & Newsletters at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

CHEMICAL MICROSCOPY AS A TOOL AND TEACHING METHOD IN CHEMISTRY

I. B. JOHNS

By means of a projection apparatus the application of the methods of chemical microscopy to the teaching of general chemistry were illustrated. The simpler types of equipment necessary were shown. The use of the optical methods were shown in the teaching of such things as allotropy and transition temperatures, formation of stable and unstable double salts, formation of solid solutions, eutectics, etc., tests for purity and tests for identity. The teaching of important optical properties of matter by means of simple polarization apparatus was demonstrated.

CHEMISTRY DEPARTMENT,
IOWA STATE COLLEGE,
AMES, IOWA.

SOME FACTORS AFFECTING THE ACHIEVEMENT IN PHYSICS SUBJECTS OF STUDENTS IN A SURVEY COURSE IN THE PHYSICAL SCIENCES

W. H. KADESCH [1]

In the fall and winter quarters of the school year 1937-38 the gains made by about 200 students were examined to find what correlation existed between success in the physics portions of the course and the two following factors: 1) Intelligence rating, and 2) Previous study of physics.

The gains were greatest for the group of highest intelligence and least for that of lowest intelligence. The average gains made by these two groups differed by about 40 per cent.

Those who had credit for a year of high school physics made a somewhat greater gain than those who had not previously studied physics. The difference in this case amounted to about 7 per cent.

During the winter quarter of the year 1938-39 the gains made

1 In collaboration with the Bureau of Research, Iowa State Teachers College.

Proceedings of the Iowa Academy of Science, Vol. 46 [1939], No. 1, Art. 118

by students whose course included 3 hours of lectures and 4 hours of laboratory work per week were compared with those of an equal matched group who had had 3 hours of lectures and 4 hours of experimental demonstration work per week, in which the instructor performed the experiments.

The gains of the latter group were about 10 per cent greater than those of the former.

DEPARTMENT OF PHYSICS,
IOWA STATE TEACHERS COLLEGE,
CEDAR FALLS, IOWA.