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Some Factors Affecting Achievement in Physics in a Survey Course in the Physical Sciences

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

W. H. KADESCH

A study was made of the gains in physics achieved by different groups. Those who presented high school credit in physics for college entrance made a greater average gain than those who did not, but a smaller percentage of gain. Those whose intelligence rating was in the upper fifty percentile made a greater gain than those in the lower fifty percentile, but a smaller percentage of gain.

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A STUDY OF THE LEARNING EFFECTIVENESS OF A SOUND MOTION PICTURE, ELECTRODYNAMICS, IN COLLEGE PHYSICS

C. J. LAPP

Many findings have been made concerning motion-picture effectiveness as a teaching technic for school pupils, but little similar work has been done on a college level. The new sound film "Electrodynamics" produced by Erpi Picture Consultants was studied in detail to find: (1) The learning produced by two showings of the film; (2) The effect of an additional stimulus to learning in the form of a study sheet to be used during the class hour when the picture was shown; (3) The variation in the first two effects with class quartiles; (4) The ability to transfer new learning to specific situations not used in the picture; (5) The effect of knowing facts about a principle on the ability to transfer and use the principle in a new situation. Within the limits of the technique used, it was found that: (1) The teaching effectiveness of this sound film was considerably increased by the supplementary use of a study sheet; (2) The study sheet decreased the teaching effectiveness in some areas; (3) The study sheet had its greatest effectiveness in next to the highest quartile; (4) The study sheet