

Development and Validation of an Electronic Module in Linear Motion for First Year College Students of Iloilo City

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Abstract : This study aimed to develop and validate an electronic module in physics for first-year college students of Iloilo and find out if there would be a significant difference in the performance of students before and after using the electronic module. The e-module was composed of one topic with two sub-lessons in linear motion (kinematics). The participants of the study were classified into three groups: the subject matter experts who are physics instructors who suggested the content, physical appearance, and limitations of the e-module; the IT experts who are active both in teaching and developing computer programs; and 28 students divided into two groups, 15 in the pilot group and 13 in the final test group. A researcher created 30 items checklist form (difficulty of a sample problem, comprehension, application, and definition of terms) was prepared and validated by the experts in subject matter for gathering data. To test the difference in student performance in physics, the researcher prepared an achievement test containing 25 items, multiple choices. The findings revealed that there was an increase in the performance of students in the pretest and post-test. T-test results revealed that there was a significant difference in the test scores of the students before and after using the module which can be used as a future reference for linear motion as an additional teaching tool in physics.

Keywords : electronic module, kinematics, linear motion, physics

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