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HIGH SCHOOL STUDENTS' MISCONCEPTIONS ABOUT PROJECTILE MOTION

Abstract:

The purpose of this research was to determine the effectiveness of conceptual based instruction and traditionally designed physics instruction on students' understanding of projectile motion concepts. Misconceptions relevant to projectile motion concepts were specified by related literature on this subject. Projectile Motion Concepts Test was developed according to misconceptions. The data were gained through 43 students in an experimental group taught with learning activities based on conceptual change instruction and 39 students in a control group who followed traditional classroom instruction. The results showed that conceptual change-based instruction caused significantly better acquisition of conceptual change of projectile motion concepts than the traditional instruction.

Keywords:

conceptual change; misconception; physics education; projectile motion

JEL Classification: I29