

Abstract Submitted
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Examining the Effects of Testwiseness Using the FCI and CSEM

SETH DEVORE, JOHN STEWART, West Virginia University — Testwiseness is generally defined as the set of cognitive strategies used by a student and intended to improve their score on a test regardless of the test's subject matter. To improve our understanding of the potential effect size of several elements of testwiseness we analyze student performance on questions present in the Force Concept Inventory (FCI) and Conceptual Survey on Electricity and Magnetism (CSEM) that contain distractors, the selection of which can be related to the use of testwiseness strategies. Additionally we examine the effects of the position of a distractor on its likelihood to be selected in 5-option multiple choice question. We further examine the effects of several potential positive and negative testwiseness effects on student scores by developing two modified versions of the FCI designed to include additional elements related to testwiseness.

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