

1086-VE-1529 **Manyiu Tse*** (mtse@molloy.edu), 107 East Maujer Street, Valley Stream, NY 11580. *A Pilot Study on the Impact of Incorporating Problems with Incorrect Solutions into Exams on Students' Understanding of Mathematical Concepts.*

Students often learn mathematics through examples that have been worked out, and are then tested with similar questions. However, correct solutions written by students are not always indicative of their understanding of the mathematical processes behind the problems. This can be shown by revising a studied example that is outside of a student's thinking box. One way to enhance the students' reasoning and math communication is to look at problems with erroneous solutions. To facilitate this study, five questions with incorrect solutions were embedded in an exam, and the students were asked to identify and explain each error. What follows is both a qualitative and quantitative analysis of the study. (Received September 23, 2012)