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(david.galbreath@usma.edu), Bryan E. Adams (bryan.adams@usma.edu) and Kayla K.
Blyman (kayla.blyman@usma.edu). Written Versus Digital Feedback; Which Improves Student Learning?

It is understood that feedback is paramount to strengthening learning connections in students. It reinforces correctly understood knowledge and provides adjustment to misunderstandings. There are two competing requirements for providing feedback to students. The feedback needs to be quick but also detailed. Web-based homework provides instant feedback to students but does not provide feedback on the process they took to solve the problem. Paper-and-pencil based homework provides the instructor an opportunity to provide detailed feedback, but it is time consuming. This study is aimed to evaluate the effectiveness of these two means of providing feedback. Eight sections of a Probability and Statistics class at the United States Military Academy were randomly assigned to a control and treatment group. The control group is currently submitting homework through a common homework delivery system. The treatment group is currently submitting paper-and-pencil based homework. In addition to analyzing the impact of the homework methods on the students' performance in major graded events, we will also discuss the cost associated with grading the paper-based homework. (Received September 14, 2018)