

1106-S1-2809      **Paul E Seeburger\*** (pseeburger@monroecc.edu), 1000 E. Henrietta Rd., Rochester, NY 14623.  
*Creating Effective Online Homework Problems in Intermediate Algebra (Using WeBWorK)*. Preliminary report.

Many of us assign our students online homework problems in our courses. These online problems can be valuable learning tools, helping our students spend more time practicing the skills and concepts we teach them. But are we assigning pedagogically well-designed problems or just problems that ask for a single answer (even word problems) and follow a clear pattern? Even the best students sometimes just look for patterns to get the right answer (or look up the answer on Wolfram Alpha or another online math engine), worrying about how to work out the problem later (if they find time). I believe we train students to do math problems by the way that we assess them. Problems that only require a numerical (or even symbolic) answer that can be found easily using a calculator or a website train students to use these tools, and may fail to train them to work out the problems in the way that we show them in class and require on exams (showing clear work). Without help, students can also become frustrated in these one-answer problems when their answer is not accepted. I will present some of my attempts to address these issues in problems I have created or adapted using WeBWorK and propose some best practices for creating online homework problems for algebra (and other math) classes. (Received September 16, 2014)