Dan Gries, Barbara Margolius and Felipe Martins*, Department of Mathematics, Cleveland State University, Cleveland, OH 44115. WeBWorK labs? A case study in differential equations. Preliminary report.

WeBWorK is an online homework system, initially developed at the University of Rochester and currently supported by the MAA and NSF. WeBWorK is traditionally used as a practice and assessment tool. Under our NSF-CCLI grant, DUE-0941388 we have developed a library of Flash applets embedded in WeBWorK homework assignments for entry level university mathematics courses including calculus, pre-calculus and differential equations. This opens the possibility of creating dynamic WeBWorK pages that can be used for instruction, instead of just assessment. In this talk, we will present a case study, where we create a WeBWorK “lab” for exploring parameter dependency in Ordinary Differential Equations. (Received September 22, 2011)