Richard G Lynch* (rglynch@tamu.edu), Department of Mathematics, Mailstop 3368, Texas A&M University, College Station, TX 77845. Solving the Online Homework Conundrum for a Differential Equations Course.

We present Texas A&M University’s efforts to create online assessments for an online course on differential equations. Although the department recommended a proprietary publisher textbook for the syllabus, we had latitude on how to approach the online homework component of the course. After evaluating various options, we opted to use Edfinity, an open homework system supported by the National Science Foundation. This enabled us to leverage existing WeBWorK algorithmic problems to quickly create assessments aligned with our syllabus, while taking into account the atypical topic coverage due to the short duration of the summer term. In doing so, we discovered a powerful lever for lowering our department’s dependence on publisher homework systems and avoiding lock-in. (Received September 17, 2019)