Michael E. Gage* (gage@math.rochester.edu), Department of Mathematics, University of Rochester, Rochester, NY 14627. Embedding WeBWorK problems anywhere. Preliminary report.

The open source online math homework system WeBWorK has been used for many years to deliver homework sets with individually generated problems and immediate feedback to students at all levels of mathematics from algebra through calculus, differential equations and matrix linear algebra.

An old feature of WeBWorK, that the problems in the homework sets are also available individually via a webservice, has recently become more prominent as authors of OER materials seek to include ‘live’ homework problems not just as end of the chapter exercises, but embedded in the text. LibreTexts (libretexts.org), PreTeXt (https://pretextbook.org/) and ActiveCalculus (https://activecalculus.org/) are a few of the texts already taking advantage of this feature.

This webservice is available to anyone who has access to a course on a WeBWorK site. I’ll illustrate the basic capability of embedding these in a WeBWorK question in an ordinary webpage. This could be used in writing up class notes to present ‘live’ homework examples to reinforce the concepts or to create a worksheet to guide open exploration. With this basic example I’m hoping to encourage discussion and further exploration of innovative ways to use embedded online homework to further student learning. (Received September 13, 2019)