Pedagogical techniques that involve students in doing and thinking about mathematics provide opportunities for students to actively engage in course content. Developments in online educational media offer the potential to further promote these innovative pedagogical strategies. For example, web-based learning objects (LOs) afford students with a range of representations, examples, explanations, and interactive explorations that can support the development of mathematical knowledge, as well as engage students in problem solving. To further expand the impact of LOs on student learning, the Wisconsin Praxis Project involves teams of students in the process of designing and creating the LOs for the use in introductory mathematics and science courses, as well as prepare pre-service teachers for the Praxis II Content Knowledge Examination. This session will showcase a collection of these LOs and examine the design process that affords students the opportunity to actively connect to course materials in a learning through teaching environment. (Received September 20, 2007)