Robert Howard London* (rlondon@csusb.edu). A curriculum of nonroutine problems: A contemplative approach to teaching the process of problem solving.

This presentation explores the integration of contemplative approaches in a curriculum of nonroutine problems. The curriculum focuses on the process of problem solving, especially problems that require a transformation of understanding to resolve. The curriculum has been field-tested in a variety of traditional mathematical content courses (as well as a semester mathematics course in problem solving) involving 8 to 15 problems per course, each involving one to two weeks work, mostly outside of regular class time. Only a few of the problems are directly related to the mathematical content of the course and approximately 40% of the problems involve content not traditionally considered mathematical (e.g., individually defined personally significant problems), supporting transfer of the approach to a variety of fields, both mathematical and non-mathematical. Field-testing indicates that the curriculum can be integrated into a traditional content mathematics course and effectively improve students’ problem solving ability as well as have a positive effect on the learning of the mathematical content of the course. This presentation will include a contemplative experiential component to facilitate an understanding of the approach. (Received September 15, 2015)