Cal State Monterey Bay uses a web-based homework system to supplement pre-calculus, calculus and other mathematics courses. The infrastructure of the homework system has been expanded to include web-based group quizzes in the classroom. These web-based quizzes were piloted in a pre-calculus course during the Fall 2013 semester. The web-based quizzes are used as a formative assessment tool to elicit student understanding and/or misconceptions of mathematical ideas and techniques, and provide feedback on student work that moves learning forward in real-time. These quizzes can be accessed using classroom computers, laptops or other mobile devices such as a smartphones or tablets. The presenter will report on the overall effectiveness of the web-based quiz concept as it relates to student learning. How this web-based resource was incorporated into the classroom and can be adapted to almost any online homework system by a wide-range of institutions will also be discussed. (Received September 17, 2013)