Do your students think they are prepared for a test only to be surprised by their low score? We will discuss how we use a series of online Pretest and Try It quizzes to help each individual student master course material effectively. The Pretest quizzes diagnose a student’s weaknesses with course material then provide specific feedback for incorrect responses including directions on how to access online material for remediation, whereas the Try It quizzes provide an opportunity for students to determine if they have mastered the objective. The quizzes are given using Moodle, an online learning management system. Preliminary assessment of data shows a decrease of 15% in the number of students who fail or withdraw from the course. (Received September 22, 2011)