Research shows that low-achieving students are less able to accurately assess their own weaknesses. As a result, many might fail to see the need to explore the subject matter more deeply, in order to improve their conceptual understanding and procedural fluency. This study investigates undergraduate mathematics students’ self-assessment behaviors. Students from a broad range of courses at three universities were asked to predict their expected grades on assignments, and these predictions were compared with the grades assessed by their instructors. They were also asked to justify their self-assessments if they did not give themselves full points. Preliminary results showed that students overall overestimate their grades. There was a significant difference between expected and actual grades. As test scores increased, the difference increased from negative to positive. Students in the B-range (between 80-89%) were the most accurate predictors. (Received September 12, 2016)