In this presentation, I will share the results of a study that examined the relationship between calibration and students’ mathematical proficiency. Calibration is defined to be the measure of a person’s perceived performance on a task compared to his or her actual performance on that task. The literature on calibration has quantitatively linked calibration’s effect on student achievement. However, there has not been an attempt to connect calibration to students’ mathematical proficiency. In this study, mathematical proficiency was defined using the five strands of mathematical proficiency in Adding it up: Helping Children Learn Mathematics. Each participant filled out surveys before and after an assessment, which were used with their actual scores to determine their calibration score and grouping. Then their assessments were coded for mathematical proficiency. Comparing the students’ calibration to their mathematical proficiency and achievement, I found that the study matched findings within the literature with higher calibrated students performing better on exams; in addition, to them being more mathematically proficient. These results suggest that by helping students become more calibrated, instructors and researchers may help students succeed in the mathematics classroom. (Received September 24, 2012)