In large sections of Calculus, it can be challenging to provide frequent and detailed feedback on student work. One possible solution is to have students provide peer feedback on each other’s work. However, since the students are themselves just learning the material, the feedback they provide may be incomplete or incorrect. In this study, I investigated the impact on student learning of a structured Peer Problem Review activity in Calculus I, in which each student completed a problem individually, then reviewed a peer’s solution using a detailed rubric. After participating in this activity, students scored higher on relevant quiz problems than their peers in other sections. Students also reported that the activity helped them to learn from their own mistakes and gave them a better idea of what was needed for a complete solution. Evidence from student work and student feedback will be presented. (Received September 26, 2017)