Team-Based Learning is an instructional strategy in which students first engage with course content at an introductory level outside of class and then actively engage with course content in class at an applied level in small teams. In this talk, I will give an overview of Team-Based Learning and describe our efforts at Iowa State University to teach calculus using this approach. I will share examples of course materials, including application exercises and instructional videos. In addition, I will discuss some of our initial findings based on data collected in Fall 2015 and Fall 2016. When compared with students receiving traditional instruction, students in Team-Based Learning had larger score gains on the Calculus Concept Inventory in both Fall 2015 and Fall 2016. I will also describe our efforts to assess transfer of calculus knowledge to downstream major courses.