Number Talks are a popular way to promote efficiency and flexibility in mathematical thinking at the elementary level (Parrish, 2011, 2014). By focusing on a wide variety of strategies for solving a single task, this pedagogical tool blends computational fluency and conceptual understanding, while simultaneously engaging students. In recent sections of Calculus II and Advanced Differential Equations, we applied the Number Talk idea through student-led discussions of multiple approaches to a calculus or differential equations task. Both as leaders and as participants in the talks, students juxtaposed ideas from different content areas of the course, resulting in imaginative and innovative approaches. We will share examples of Number Talks at the elementary level, how the idea came to fruition in our undergraduate mathematics courses, examples of student-led Number Talks, and the insights we gained from implementation. (Received September 13, 2019)