The leap from college algebra to calculus is difficult for many students. We believe exposure to calculus concepts before students enter a formal calculus course is the key to bridging this gap. The payoff is even greater when students make calculus connections themselves through discovery activities. In this talk we explore hands-on techniques that lead pre-calculus college students to major calculus concepts on their own. Some of these techniques lend themselves to the use of technology; thus, we will also include a discussion of the effectiveness of these technology-driven exercises in helping students better visualize calculus connections. (Received September 20, 2007)