Project-based learning and assessment practices in mathematics classrooms facilitate increased conceptual understanding and support transfer-ability of knowledge into real life situations (Boaler, 1998; Boaler & Selling, 2017). Exponential functions have many real life applications, some of them are especially relevant to the growth and decay phenomena in everyday life. While solving a typical textbook problem with multiple parts on the application of these functions students often perform the computational parts that summons procedure knowledge easily. However, many students seem unable to answer the parts of the problem that require explanation of the answers in a meaningful manner. During this presentation I will discuss how assessment on exponential modeling using hands-on data exploration resulted in more fluent communication of the concept within the problem context and beyond in Precalculus students. (Received September 25, 2018)