Utilizing processes developed by the Institute for Innovation in Undergraduate Research and Learning (IIURL), teams of students, faculty and staff have developed a collection of media-rich learning objects which are being used in a variety of undergraduate mathematics courses. Recently, a subset of these learning objects has been packaged into an online College Algebra Credit-by-Exam “prep” course. This collection is designed to strengthen the algebraic skills of incoming freshmen in order to better prepare them for a college algebra final exam, which they will take during the second week of the semester. These learning objects also have served as a means to re-familiarize students with the background knowledge needed for successful completion of higher level coursework.

The process by which this collaborative project has unfolded will be discussed and the resulting learning objects will be presented. An analysis of the data collected relating to student perceptions (survey), student involvement (time on task data) and performance (exam and later course outcomes) will be presented. (Received September 15, 2010)