Dan McGee* (mcgeed4@nku.edu), Axel Brandt (brandta2@nku.edu), Steven Wilkinson (wilkinson@nku.edu) and Bethany Noblitt (noblittb@nku.edu). Using traditional online content, innovative online assignments and back-to-basic pen-and-paper in class student projects to address the needs of a diverse precalculus body.

In order to address the diverse needs of students at different skill sets, Northern Kentucky University has launched a precalculus project to promote growth mindsets in students, provide effective contexts for students to develop a “figure it out” attitude towards mathematics and incorporate pen-and-paper tables that students fill out in order to remedy numerical deficiencies while learning precalculus concepts. These objectives were addressed with the following materials: (A) Online course content with links to prerequisite tutorials that can be accessed at the discretion of the student and instructor; (B) In-Class activities that address numeric deficiencies while developing pre-calculus content through back-to-basics formula/table/graph connections; and (C) WeBWorK assignments that encourage reflective generalizations of ideas presented in the classroom. This presentation will present an overview of the needs of the project and the philosophy used to address these needs, samples of the online and in-class materials that were used and preliminary results associated with the project. (Received September 12, 2019)