

Using Online Video Pre-flights to Enhance Preparation, Technical Skills, and Conceptual Understanding in the Mathematics Classroom

This project investigates the use of pre-flights with a video component in Engineering Math. Prior to class, students will watch a short video, do a learning activity (practice problems) in response to the video, and come to class the next day where class will be designed to take advantage of this preparation (a quick drill will assess preparation and class format / content will be modified based on student performance on the quick drill). The questions that we are asking are "Does the use of the video pre-flight process produce gains in conceptual understanding & technical skills?", and "Does the use of the video pre-flight process lead to better completion of pre-class work compared to standard readings and homework?"