In this presentation we will introduce our results from the three-year NSF funded grant titled “Inverted and Active Learning Pedagogies (IALP) for Student Success” for the introductory statistics classes, taught by faculty from mathematics, information system and data analytics, at Texas Lutheran University. Our results are based on four semesters of data. We will present our results comparing student achievement and retention between inverted (flipped) classrooms and traditional lecture formats. We will discuss the study design, data gathering, faculty and students’ surveys, and the methodology used for the study. We will share results from instruments that were developed to measure different levels of cognitive understanding across multiple sections of the same course. We will also discuss various factors affecting the results including use of technology, classroom activities, class size, students’ attitudes, type and lengths of the instructional videos, and the instructor. (Received September 03, 2019)