A number of universities nationally have already adopted a technology based redesigned curriculum. The format University of New Orleans (UNO) has adopted is a variant of the emporium model of Virginia Tech, and it focuses on increased interaction between the students and teacher in the classroom. Under this format, individualized instruction is provided to students who need it to ensure that each student is able to do at least 5-6 problems during the class time itself. This is followed by homework and quizzes, which are done at home for mastery of the subject material. The mathematics department has documented the impact of the technology based interactive teaching by collecting data on student success and student retention (the students who registered at UNO in the following semester) by comparing these two teaching formats via: impact on student success; impact on drop rate; and impact on student retention. The success of the interactive format at UNO has been reported to Board of Regents under the Grad Act reporting for the past 3 years. The interactive teaching format is easily portable and can be implemented successfully. The interactive format has been extended to three high schools in New Orleans including with successful results. (Received September 08, 2017)