Kenneth Horwitz* (ken.horwitz@njit.edu), Angela R Garretson (angela@njit.edu) and Bruce Bukiet (bukiet@njit.edu). Utilizing Inquiry Based Learning to Prepare Urban High School Students for Success in College Mathematics. Preliminary report.

In this presentation, we discuss an innovative year-long project that combines extensive professional development for teachers and inquiry-based math instruction and skills for success in life for rising high school seniors from an urban district in a college setting. This partnership brings together the leadership of the City of Newark, NJ, (Mayor’s Office) the Newark Board of Education (Superintendent’s Office) and New Jersey Institute of Technology (Office of the President) for the purpose of changing the paradigm from less to more underrepresented minorities pursuing STEM degrees. The gateway to success in STEM majors is a student’s readiness for Calculus 1. Thus, the project works to build the skills of the students through an inquiry based math enrichment program over the summer and a Precalculus or Calculus course on the university campus during the academic year. (Received September 17, 2019)