Aaron T Wilson* (aaron.wilson@utrgv.edu). A near-peer mathematical mentoring pipe-line from the secondary mathematics classroom to graduate studies in mathematics.

We report a near-peer mentoring project aimed at increasing entry, especially by minority and low-income students, into math and science careers at the college-level and also of promoting the matriculation of undergraduate students into either math teaching and/or graduate studies in mathematics. Working with participating school districts, our project works to accomplish this goal by exploiting a key idea to reach out to young people: we recognize that many students seem to be more enthusiastic and to absorb information more readily when delivered to them by their near-peers, rather than traditional figures of authority such as teachers. Studies have shown that peer and near-peer led activities have a strong impact on students. Moreover, such near-peer approaches not only affect the intended target audience, but also have a "feedback" effect on the group doing the presentations. We report the successful and highly sought after mathematical outreach work that we have completed over the last two years and show how we use this work as a cycle of near-peer interventions and mentoring that connects the high school mathematics classroom to the university mathematics classroom, facilitating students’ pursuit of studies in mathematics. (Received September 19, 2016)