I was fortunate to play a small role in a study to try to increase minority participation in upper-level math classes in high school. The study began with an invitation to Latino 8th grade students to attend a meeting about mathematics opportunities. Counselors and the local Latinos in Action organization helped to spread the word and get students to the meeting. The Calculus teacher detailed the typical demographics of his class and shared our collective desire to provide opportunities for all students to take Calculus. The idea of a cohort of students was formed, with the intention of working together for four years towards a Calculus capstone class.

The cohort was formed as a supportive structure to advance students to high levels of understanding, to fill in gaps in knowledge, to establish productive study habits (including good attendance), to provide motivation, and to connect students to universities or post-secondary training courses.

Without regard to current math proficiency levels or English language proficiency levels, all cohort students worked on honors curriculum at each grade level. Before and after-school work parties were held to provide supported homework and catch-up time. Snacks were always provided at these gatherings. District computers were provided during the summer to support continued individual skills practice.

Naturally, involving families was a major source of motivation. Students were asked to talk specifically to their parents about why it might be important to take high level math classes. Students shared these responses and teachers continually referred to these stories. Families often provided food for study parties. In retrospect, it would have been better to continue parent meetings throughout the four years, rather than on an as-needed basis.
Additionally, college representatives were invited to speak to the cohort about opportunities and college visits were arranged (including tours and basketball games). As seniors, in-class time was dedicated to filling out college applications, FAFSA forms, and housing applications.

Students were asked to give a lot of time in their schedule to work on mathematics. Students were also asked to volunteer at our district math competitions and serve as role models for students from younger grades. With high expectations, math class was typically the best attended class in each student’s schedule. I truly believe that simply talking about college and career opportunities as a result of hard work in mathematics classes inspired many of these students to enroll in a university program.

As 9th graders, I believe there were about 25 students in the cohort. Twenty-three students graduated with their class. Nine took the AP Calculus exam. I don’t have an exact number on those that enrolled in college the next year but it is the majority of the group. Two entered the military.