This program fosters collaboration between local middle and high school teachers and first- and second-year undergraduates in LSA gateway science and mathematics courses. FUTURE gives undergraduates the chance to design and implement a lesson in an authentic classroom setting, leading many to consider a career in teaching.

Two to three U-M students are matched with in-service teachers who propose lesson ideas that they’ve previously lacked the resources to carry out. The U-M students visit their host’s classroom and enroll in the FUTURE seminar, which covers practical, ground-level ideas about teaching, learning, and instructional design. Students have access to the ideas and experiences of previous participants, as well as consultation time with LSA and SOE experts (graduate students, post-docs, faculty members).

To date, FUTURE has engaged 30-45 students per semester and 15-20 teachers in six schools across five subject areas. These are school districts in which students typically do not succeed in science and mathematics. FUTURE’s impact extends well beyond the delivery of a single lesson as students come to envision U-M as a place for future interactions. Indeed, the program has already had its first instance of a Detroit high school student not only enrolling at U-M, but now being part of a FUTURE teaching team herself.

"I was entrusted with the task of creating for high school students a new, exciting, and engaging experience that I would have direct ownership over.... Meeting weekly with other faculty and student staff from IDEA, I worked through my troubles, celebrated my triumphs, and created what was ultimately a physics-based high school crime scene project that I, to this day, am proud of."

"I have had the pleasure of being a part of the FUTURE program all six semesters here so far, and I plan on continuing my senior year as well."

"I think that many students never even give teaching actual consideration. Most that are talented in the sciences or math tend to go into medical school, or dental school, or become engineers....[It] really takes a first-hand experience like FUTURE to help give students a well-rounded background to make informed career decisions."

"Inquiry-based learning is something I wish I had a chance to experience in high school. It allows for a way of new thinking: relying on yourself to come up with a solution to a problem."

"I realized that being passionate about science did not limit me to just a career in medicine, as I previously thought. What I saw through FUTURE was that I could translate my passion into an effective teaching tool and impart that same passion in younger students in my community."

FUTURE is currently organized and managed by the IDEA Institute, which Professors Krajcik and Coppola co-direct.

Most undergraduates who participate in FUTURE stay with it, forming strong relationships with their collaborating teachers.

The IDEA institute maintains a pool of portable equipment and supplies.

**Examples of Teaching Innovation**