Effective mentoring is one of the most important key factors for student engagement, retention, and motivation for higher studies. Quantity and quality of faculty-student interactions outside classroom particularly in a minority serving institutions plays a significant role in students’ retention. Many minority students are first in their families to attend colleges and academically under-prepared for the college studies. Lack of financial aid in the form of scholarships or grants also make it harder for minority students to pursue higher studies. Recently however, an effort is made to increase financial aid, in particularly for undergraduate education. Close interactions with the mentors provide students from diverse backgrounds a sense of belongings and make them feel welcome in the institution. In this presentation numerous bio-math connected classroom and research problems will be discussed and students’ reflections will be shared. (Received September 22, 2010)