CSU Student Success Executive Gathering
April 27, 2016

Science Educational Enhancement Services (SEES)
Science Educational Enhancement Services (SEES) is a support and engagement program serving historically under-represented minority (URM) students in the College of Science. It was established in fall 1987 to increase the retention and the number of URM students graduating from Cal Poly Pomona with degrees in the sciences and mathematics. Currently, the program serves 600+ students. The program maintains a support structure comprised of various components, each of which address a barrier to success in college. SEES services include special faculty advisors in each department of the College, a peer mentoring program and a faculty-alumni-student mentoring program, paid fellowships for performing research with faculty, conference travel support, a science First Year Experience course for freshmen, Academic Excellence Workshops for high fail-rate classes, professional development workshops all year long, textbook loan library for lower and upper division STEM courses, Discovery camps (science, computer, robotics) for elementary schools students that benefit SEES teachers in training, a computer lab, community rooms, and socials throughout the year.

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Website: http://www.cpp.edu/~sci/sees/

- Who: URM students majoring in the sciences (biology, chemistry, computer science, geology, kinesiology, mathematics, physics). Approximately 600 students in program.

- What: An umbrella program that offers several high impact practices to retain and graduate science URM students.

- Why: By their 5th year at Cal Poly Pomona, nearly half of the non-URM science majors have graduated with a bachelors degree. URM students, as a whole, graduate at approximately one-third. This requires an intervention program that supports URM students in both academic and personal aspects of college success.

- Where: The Science Educational Enhancement Services (SEES) program within the College of Science at Cal Poly Pomona.

- How: The top Best Practice approaches we use are (1) establishing a community for the students, (2) professional development workshops, (3) a mentoring program, (4) academic support workshops & tutoring, and (5) financial support opportunities, such as fellowships and scholarships.

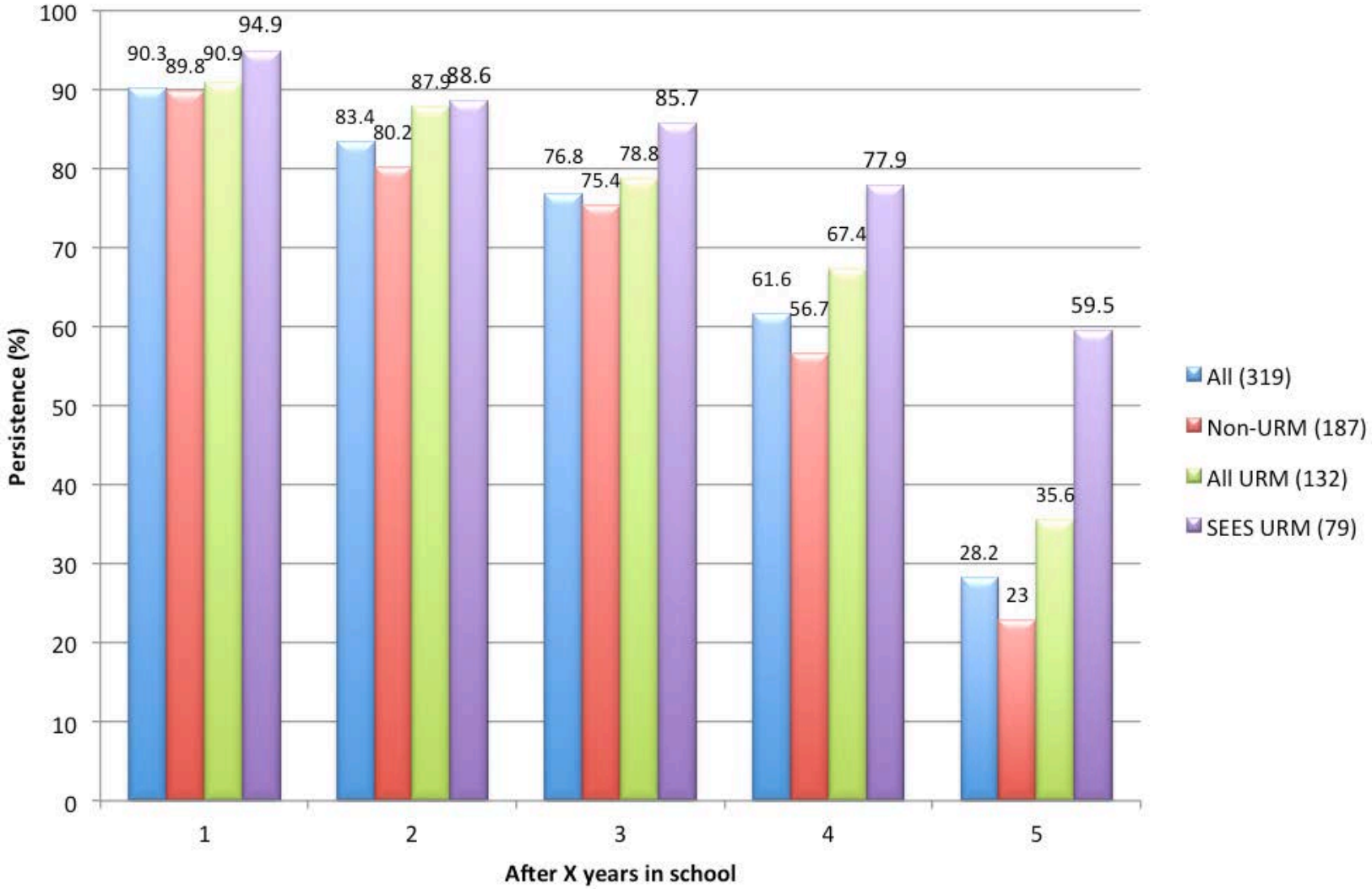
- So What: With the best practices implemented by the program, SEES students graduate at a rate similar as non-URM students in the College of Science, by their 5th year. This demonstrates that the programmatic structure of the SEES program has closed the achievement gap. Moreover, the data shows that persistence rates

are higher for SEES students, than for non-URM students. While we see overall URM students graduate at a rate of 38.6% by their 5th year, this population includes the SEES students. Therefore, if the SEES students were subtracted from the URM population, the non-URM SEES students would show graduation rates further below 38.6%, and much further than the 46.8% achieved by SEES members.

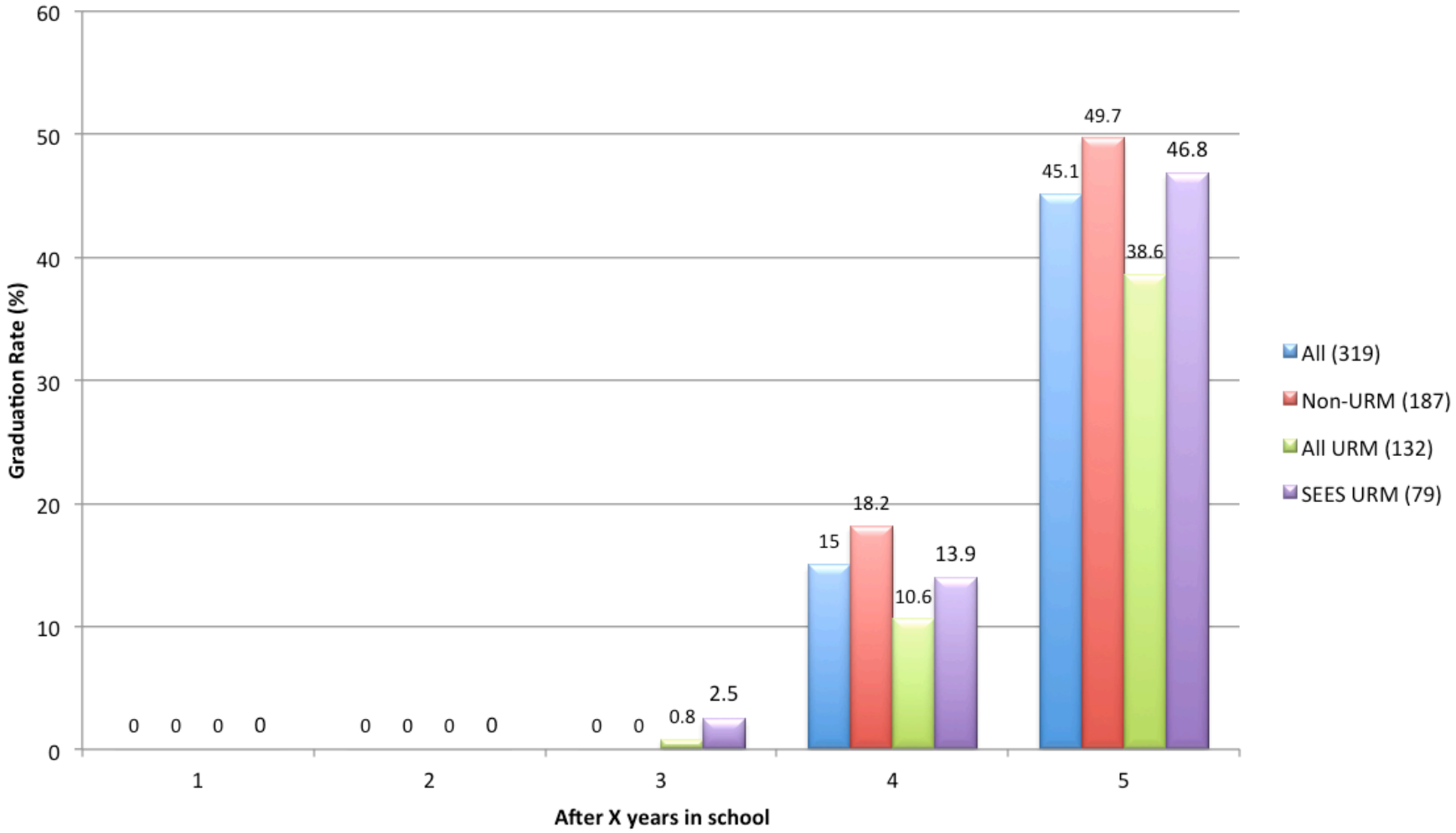
- **Data** to demonstrate effectiveness of student success intervention (i.e. grad rates, persistence, gpa, etc.): See graphs.

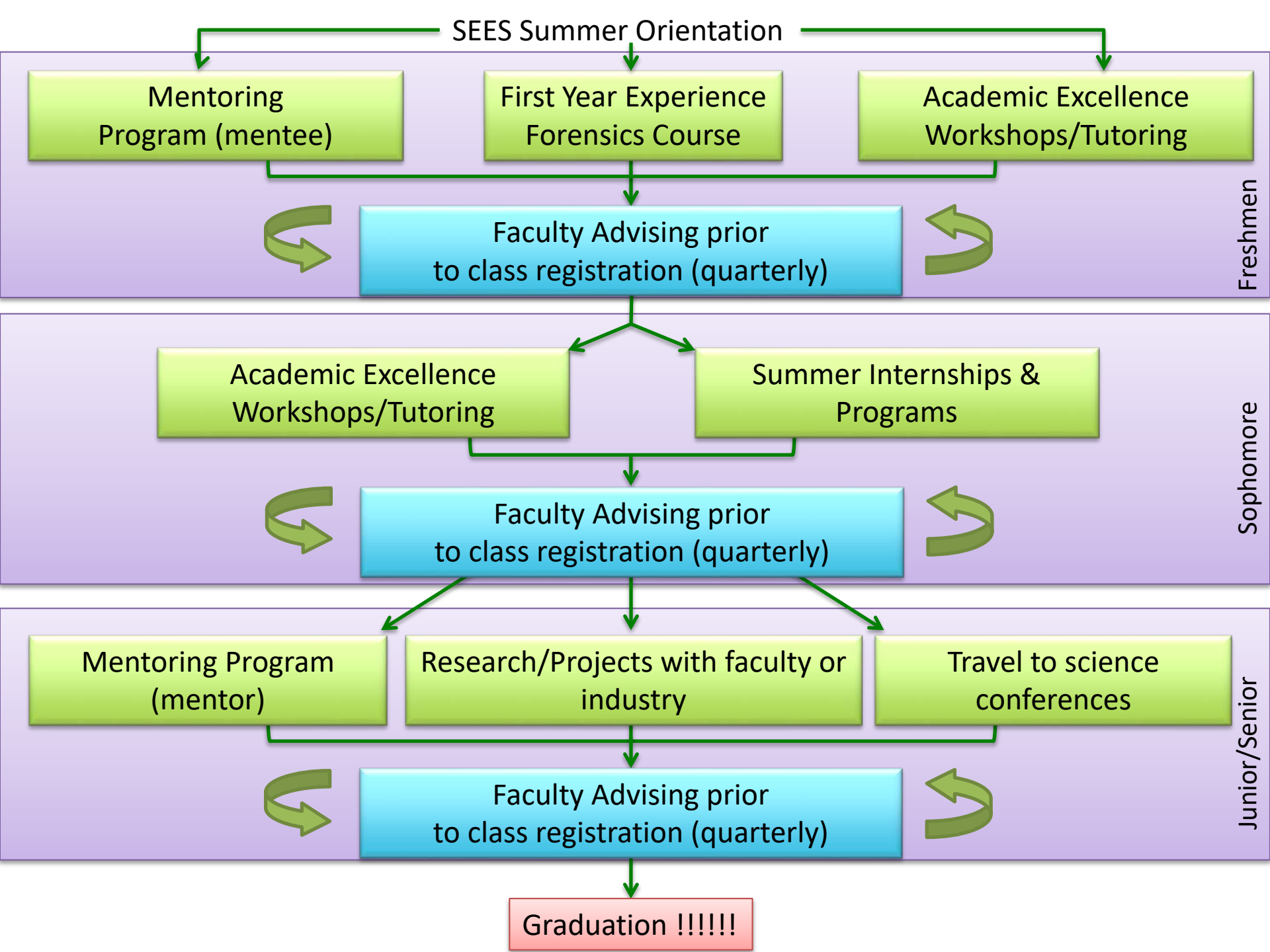
- **Opportunities for expansion/replication/collaboration:** Please discuss your STEM Success/STEMpire project here and other points you feel are important
  The new STEM Success program at Cal Poly Pomona plans to expand the best practices approach implemented by the SEES program, yet also be complementary to SEES by establishing new activities. STEM Success is positioned to include 1000-1500 incoming STEM freshmen in its program. The program will establish it's own community for the students. However, students will be encouraged to also become part of other communities on campus, including college based programs, undergraduate research programs, student clubs and student government. In addition, the program will have it's own mentors, to assist freshman in adapting to the rigors of the STEM curriculum and the University system. The STEM consortium on campus, including SEES and many other programs (McNair, RISE, MEP, etc), will provide STEM Success students access to their various professional development workshops. The Learning Support Council (consortium of tutoring and learning centers on campus), will be providing tutoring to STEM Success students, while SEES will provide academic excellence workshops.

College of Science Persistence: Incoming class of 2010



College of Science Graduation Rate: Incoming class of 2010




SEES Summer Orientation
Mentoring Program (mentee)
First Year Experience Forensics Course
Academic Excellence Workshops/Tutoring
Faculty Advising prior to class registration (quarterly)
Freshmen
Academic Excellence Workshops/Tutoring
Summer Internships & Programs
Faculty Advising prior to class registration (quarterly)
Sophomore
Mentoring Program (mentor)
Research/Projects with faculty or industry
Travel to science conferences
Faculty Advising prior to class registration (quarterly)
Junior/Senior
Graduation !!!!!!