Effective Mentoring for Faculty and Students in Science, Technology, Engineering and Mathematics

Derya Akleman, Kristy Delvo-Vela, Sara Thigpin, Mark Zoran
College of Science, Texas A&M University

ADVANCE Science Scholars

- 2010: Texas A&M received NSF ADVANCE award
- 2017: Program to ADVANCE Science Scholars (PASS) launched in College of Science for early career tenure-track women faculty hired since 2014

Purpose
- Increase retention
- Improve advancement
- Encourage professional growth

Target
- Early career women faculty
- Underrepresented minority faculty

Expected Effect
- Increased success
- Increased opportunities
- Increased collegial interactions
- Increased promotion or merit raises

Success
- Mentee agrees to be an internal advocate for future cohorts
- Students gained confidence and knowledge relating to their next steps

Progress
- 2017 Cohort 1: 5 Women
- 2018 Cohort 2: 2 Women
- 2019 Cohort 3: 4 Women
- 11 women faculty in PASS

Paired with Texas A&M internal advocate
Matched with eminent mentor in discipline
Regular meetings between mentee and internal advocate
Socials with mentees and mentors
Peer mentoring across PASS cohorts

Science Aggie Mentoring

Launched in Fall 2018 and created in partnership with the Texas A&M Career Center and The Association of Former Students, this program is designed to assist current undergraduate students as a bridge to their chosen profession or continued learning in graduate or professional school.

Purpose
- Grow professional networks
- Develop leadership skills
- Explore career opportunities

Target
- High performing students
- High achieving students
- Successful former students

Expected Effect
- Increased career readiness
- Increased confidence
- Increased professional and personal growth

Success
- Mentees gained confidence and knowledge relating to their next steps

Progress
- 2018-2019 Cohort 1: 28 Mentees 35 Mentors
- 2019-2020 Cohort 2: 28 Mentees 35 Mentors
- 2020-2021 Goal: 150-175 Mentees 100 Mentors

Cohort introduced
Student matched with Mentor by algorithm
Pairing length by academic year (9 months, 4.5 months for cohorts 1 and 2, respectively)
Mentee orientation starting with cohort 2
Mentee and Mentor regular meetings
Social with Mentees and Mentors
Mentoring panel and focus groups

College of Science Mentoring

Purpose
- Grow professional networks
- Develop leadership skills
- Explore career opportunities

Target
- High performing students
- High achieving students
- Successful former students

Expected Effect
- Increased career readiness
- Increased confidence
- Increased professional and personal growth

Success
- Students gained confidence and knowledge relating to their next steps
- Continued growth in engaged mentees

Progress
- 2018-2019 Cohort 1: 28 Mentees 35 Mentors
- 2019-2020 Cohort 2: 28 Mentees 35 Mentors
- 2020-2021 Goal: 150-175 Mentees 100 Mentors

Cohort introduced
Student matched with Mentor by algorithm
Pairing length by academic year (9 months, 4.5 months for cohorts 1 and 2, respectively)
Mentee orientation starting with cohort 2
Mentee and Mentor regular meetings
Social with Mentees and Mentors
Mentoring panel and focus groups