Pilot Project - Computer Science Undergraduate Mentoring Position Targeting First Generation Students for Fall 2019

The goals of the pilot project were two-fold. The first was to expand our currently successful Women in Computing Mentoring program to include first-generation students of all gender identifications. The second was to see if increased mentoring and tutoring support increased our retention rates for our first-generation students majoring in CS or undeclared in our entry-level CS courses. To accomplish both goals, we hired a first-generation student who is a senior in the department, Westin. This student helped guide our changes and goals as an hourly staff member.

CS[U] Peer Mentoring

The students in the mentoring program renamed the program CS[U] Peer Mentoring to reflect the expanded goals of the program. For the non-CS people, [U] is a regular expression that means to include, so CS "inclusive of you" peer mentoring.

This past semester, Westin worked to expand our program to include male first-generation students. He would meet weekly with the rest of our peer mentoring leads. Through his efforts, 23 males were added to the program - either as a mentor or as mentees. He also increased the number of graduate students in the program by 5, who were paired with undergraduate students. For reference, the program added 24 new mentees this semester half being male.

Next year, the program is targetted to increase by at least 24 more mentees, as everyone who is a mentee this year is asked to be a mentor next year, developing chains of connections, eventually all the way to industry. Additionally, now that graduate students are mentors in the program, this chain has another path, which is directed connected to Westin's efforts.

Students in the program all reported meeting on a weekly basis with their mentor, and while unanticipated some mentors volunteered as tutors for the students (especially the grad students). This connection meets the goal of increasing belonging for underrepresented students in the department.

Tutoring

Westin also offered group tutoring, with an average of 2-3 first-generation students at any given session. A weekly meeting was also announced to the first-generation students and any other students wanting to participate. These meetings, about an hour in the evening, were intended to create a more solidified community of students. Attendance benefitted from 3 students who came every week and were very enthusiastic about this program flourishing and a variable 2-4 other students for an average total of 6 students.

The effectiveness of the tutoring and weekly first-gen meetings is still a question until we have the ability to pull grades and look at student retention for the semester. This leaves our primary means of reporting success to be outside of this report.

Overall

With the support of the provided funds, we were able to increase our mentoring program to be inclusive of more students. We would rate the use of the funds as a success, as the added staff helped us jump start lasting changes. If you have any further questions, please don't hesitate to ask.

Albert Lionelle
lionelle@colostate.edu