Graduate Students in Extension: Recommendations for Moving Beyond the Pilot

Reid Johnsen[1*], Alana Siegner[2*], Laura Ward[3*], Global Food Initiative

Executive Summary

This academic brief highlights benefits, challenges, and recommendations from the three-year Graduate Students in Extension Fellowship pilot program at UC Berkeley. Results are compiled from a stakeholder survey of 14 CE stakeholders (mentors, advisors, and AES faculty) and graduate student final reports. Findings reveal the uniqueness of this program and its importance for ANR and graduate students, in addition to a need for better integration of existing CE projects with student research priorities and faculty advisors. It is recommended that pilot program be transitioned into an ongoing ANR fellowship.

Benefits

Stakeholder Survey (14 of 41 responses: 7% AES Faculty, 29% CE Specialists, 64% CE Advisors): Stakeholders report that the number of students categorized as understanding cooperative extension increased from 21.4% before the fellowship experience to 85.7% after (categorized as "well" or "very well"). 92% of stakeholders think that the fellowship experience has facilitated progress toward the students' project goals and enhanced the students' academic/professional skill sets. Stakeholders report a number of skills that students gained (see Figure 1 below). In addition, they report that the program facilitated CE training, to the benefit of both students and ANR, and built connections between counties and campuses.

Student Final Reports (8 of 11 responses): Students report that the fellowship enhanced science usability and public accessibility to UC Berkeley student research. Further, they report that the program improved science communication skills of participating students and allowed for access to large networks of research stakeholders (land managers, ranchers, farmers). The program increases interest in and exposure to Cooperative Extension

Wetland created with pasture runoff
Photo Credit: Nathan Van Schmidt

career pathways. It also provides a useful platform of recognition for receiving future grants, as well as provides freedom to pursue adaptive academic agendas.

"Don't Bug Me" event, Pacifica Sanchez Library
Photo Credit: Kevi Mace-Hill

Challenges

The stakeholder survey illuminates the challenges of getting faculty support and/or connecting extension to the student's primary research. The survey also emphasizes the issue of geographic isolation between extension advisors/specialist and campuses, logistical challenges related to this distance, and scheduling with academic and field work schedules. Stakeholders also found it difficult at times to match students to their projects and/or arrange funding for the mentorship team portion of the project.

The student reports illuminate the challenges of gaining AES Faculty support in addition to balancing research goals, outreach efforts, and numerous mentor personalities. Students also address the challenge that funding timelines are not always sufficient to complete proposed projects. Students also cited unclear goals for GSE project completion.
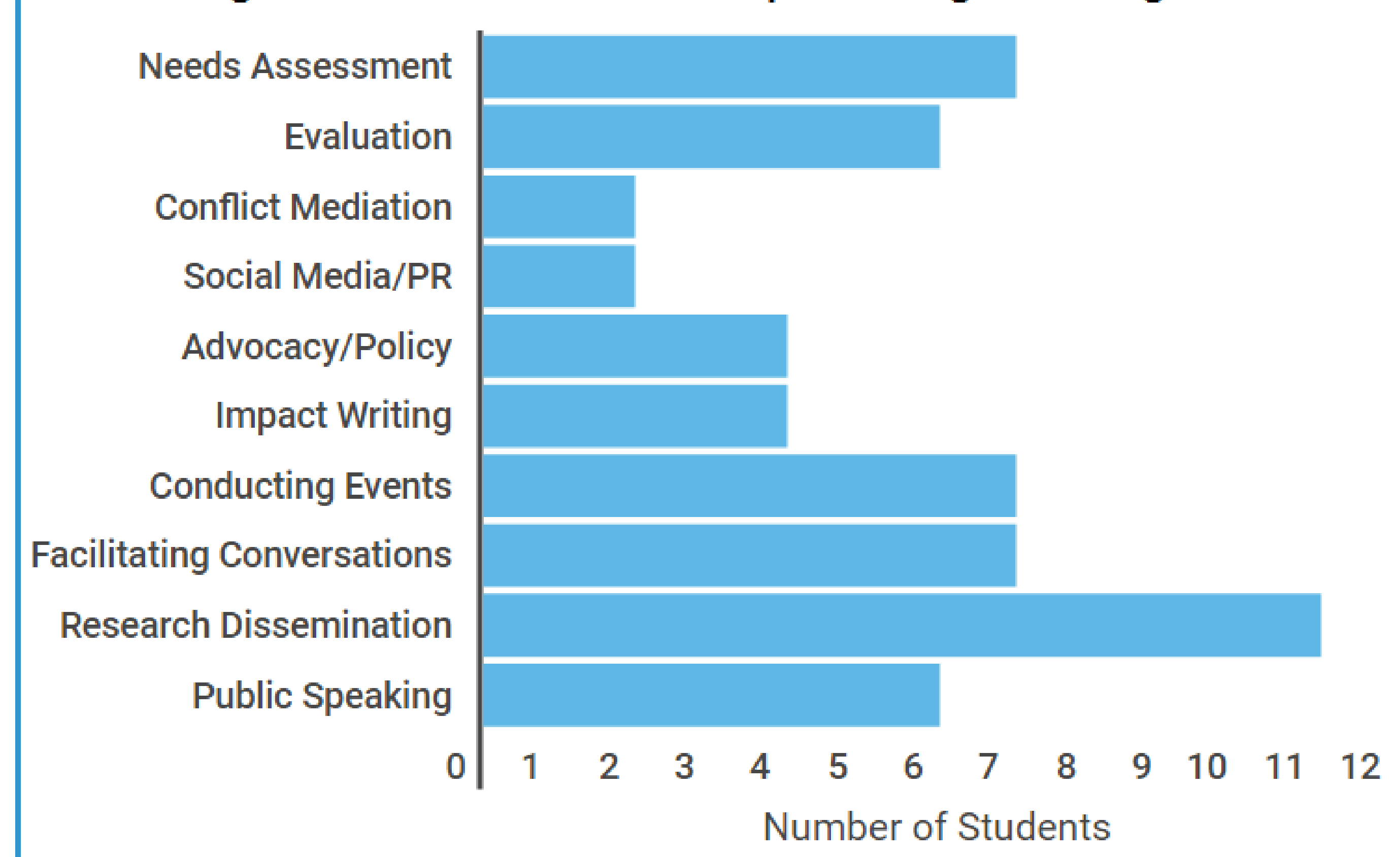
Recommendations

Based on the stakeholder survey, student final reports, and spring 2017 focus groups, we make the following recommendations for program improvement:

1. Increase diversity of student participants, CE mentors, and subject matter

    a. Encourage participation of students and mentors from underrepresented groups.

    b. Encourage projects related to underrepresented groups.

    c. Provide support for projects in regions farther from the campus, such as travel funding from ANR or mentors

2. Build faculty awareness and support of program (e.g. through GSE presentations to faculty groups in seminars or lab groups); incentivize their participation (e.g. as a vehicle to access student funding)

3. Encourage full year funding to best accommodate summer field work, but continue to allow for summer-only projects smaller in scope

4. Improve integration with existing CE projects through better matching of students and projects pitched at GSE Showcase event. Host more networking events such as CE presentations in graduate courses or social mixers.

5. Expand GSE program model to UC Davis

Figure 1: Student Skills Developed During GSE Program

Skill	Number of Students
Needs Assessment	7
Evaluation	6
Conflict Mediation	2
Social Media/PR	2
Advocacy/Policy	4
Impact Writing	4
Conducting Events	7
Facilitating Conversations	7
Research Dissemination	11
Public Speaking	6

and UC Riverside to diversify geographic distribution of GSE activities across the state. Connect campuses through videoconferences and Showcase events

6. Create clear pathways for continuing GSE projects after the student's GSE position ends. Assist students and mentors with finding funding to support continuing work.

Acknowledgements

"I am now convinced with the networks I have created, that I will be collaborating with extension for the rest of my dissertation in some way or another."

"Without the funding support I could not take the extensive amount of time off my academic work to craft these interactive model tools, which I think is invaluable for actually making our research have impact."

"The GSE allowed me focus much more of my energy on outreach... [and] the quality of outreach was better because I had mentor's critiques."

[1] UC Berkeley Agricultural and Resource Economics, [2] UC Berkeley Energy and Resources Group, [3] UC Berkeley Environmental Science, Policy, and Management, * All authors contributed equally