

Colorado State University's Extension Internship Program: Opportunities to Build Bridges

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Abstract

Public universities in the U.S. are striving to improve upon their engagement portfolios through connecting various units in transdisciplinary capacities and better leveraging statewide assets. Students, and specifically internship programs, can provide a great mechanism to facilitate these bridge-building efforts. This article provides a description of Colorado State University's Extension Internship program, its history and evolution, its impacts on different constituents (including students, extension, and faculty/staff), and a critical reflection on where the program currently stands and where it is going. We hope that this is useful to other institutions considering building or growing their own programs.

Public universities in the United States are striving to improve their engagement portfolios by connecting various units in transdisciplinary capacities and better leveraging statewide assets. As Reed and Swanson (2022) highlighted, although Extension historically was the centerpiece of engagement, campus-Extension connections have weakened. Without strong campus-community connections, land-grant universities will struggle to maintain their relevance (Gavazzi & Gee, 2018). The purpose of this article is to describe the Extension internship program at Colorado State University (CSU), its history and evolution, and its impacts on different constituents (including students, Extension, and faculty/staff). We reflect on where the program currently stands and where it is going, and we hope that this is useful to other institutions that are considering building or growing their own programs.

Program History and Evolution

To strengthen university-community connections, train students in community-relevant research, and support a diverse Extension workforce that is more representative of the communities it serves, CSU Extension created its internship program in 2018. Other states have successfully implemented Extension internship programs (e.g., [Cornell University](#), [Oklahoma State University](#), [New Mexico State University](#), and [University of Nebraska-Lincoln](#)), but the CSU Extension internship program adds

value through its more inclusive campus-wide structure and culture (likely because the Office of Engagement and Extension at CSU is located under the president's office as opposed to in one or two colleges) that actively seeks to include faculty and staff from all colleges, centers, institutes, and the Agricultural Experiment Station. Additionally, it seeks to cocreate internship opportunities through community engagement facilitated by county-based agents, and it integrates students in applied research projects.¹

The program is also distinguished from other internships at CSU in that internships are exclusively in Colorado, focused on applied research projects, supervised by mentor teams, inclusive of someone from campus and someone from the field, structured to include significant time in the field, and governed by a committee that incorporates both faculty and Extension agents. Mentor teams, which include at least one faculty member based on campus and at least one regional or county field-based agent, benefit from the program through enhanced connections to campus/field, including key connections to timely research and relationships with stakeholders. Internship opportunities originate from mentor teams who propose specific, community-relevant internship projects. Mentor applications for internship projects include a question about how the applied research project was identified and another about the stakeholder groups with

¹ Of the Extension internship programs we found at other universities, only one, Oklahoma, had an evaluation or impact statement available online. In 2020, Oklahoma's program included four interns (10 total applicants). Weekly "check-ins" were conducted with specialists, but we did not find evidence of strong linkages to faculty or campus. Further, there was no evidence of a research component in the program.

which the intern will work. Internship project development and mentorship at the individual community level allows community members to engage with campus and for student applicants to see how applied research ideas emerge from the community. Due to the program's direct connections with communities, community members often serve as part of the mentor teams, meet with students regularly throughout the internship period, and introduce students to their community.

The program employs a coordinator (originally volunteer support, but now a half-time equivalent) who works with each mentor team/intern to agree upon and sign a memorandum of understanding (MOU) before the internship starts. Part of the MOU discussion includes an expectation-setting process, including facilitated meetings with the intern and their mentorship team. This is a time-intensive process, but one that we have found is critical to setting intern expectations—including expectations around when and how to interact with community stakeholders. Thus, though the coordinator has considered ways to make developing MOUs more efficient, we have maintained this process, as we believe it to be integral to the program's success.

Throughout the internship period, in addition to meeting specific internship goals, students develop an understanding of the complexities of working across state, county, and university constructs and learn how to marry varying perspectives into a common goal. Interns participate in monthly check-in Zoom sessions that provide opportunities for them to learn about other aspects of Extension. In addition, the interns are expected to complete a poster presentation at the end of the summer. These posters are displayed as part of the annual CSU Extension Forum, during which agents come to campus for a week for professional development and networking. In 2020, due to social distancing measures associated with COVID-19, students prepared videos about their experiences in addition to poster presentations. Videos and posters are publicly available [on the internship website](#).

The internship program is overseen by a committee made up of campus-based faculty, Extension specialists, and Extension agents. One benefit of this approach is that if an internship proposal comes in from an Extension agent or faculty member without a corresponding faculty member or Extension agent, respectively, identified, the committee can help make connections. The

success of this approach, however, depends on having diverse committee representation (in terms of Extension program area and region as well as departments/colleges across campus).

Each year, the internship program has grown in popularity, as demonstrated by the number of internship opportunities proposed by faculty/agents as well as the number of students who apply.

- In 2018, the inaugural year of the program, 11 paid internships were awarded in three colleges.
- In 2019, 24 paid internships were awarded in six colleges (~150 students applied).
- In 2020, 32 paid internships were awarded in six colleges (213 students applied).
- In 2021, 59 paid internships were awarded in six colleges (282 students applied).
- In 2022, 81 paid internships were awarded in six colleges (344 students applied).

Additionally, the program has grown in terms of financial support. In 2018, the budget for the program was less than \$50,000 and entirely dependent on volunteer labor. By 2022, due to the growth of the program and its success, the budget had grown to \$424,000 for student salary, housing and travel stipends, and \$37,023 for a half-time equivalent position.

Program Reflections

In order to more fully reflect the changing demographics of the populations served by Extension (e.g., Taylor & Zhang, 2019), land-grant universities need to do more work (a) to ensure that field-based Extension agents have access to a broader range of research conducted across campus for their programs and (b) to increase awareness of Extension among more diverse student populations that reflect the communities served by field-based agents.

Historically, faculty in colleges of agriculture have had the most experience with and knowledge of Extension. However, as the United States has become less rural and less agriculturally dependent, many key challenges experienced by stakeholder groups have come to be addressed outside of colleges of agriculture. For example, Extension offices across the United States are working to be more inclusive of non-native English speakers (e.g., Ingram & Syvertsen, 2005) in nonagricultural environments, an effort that involves creating culturally relevant programs (Walcott et al., 2020).

CSU's existing campus-wide engagement structure facilitated cross-college engagement with

the internship program, making this internship program an example that other public universities might find instructive. As part of the 2021 call for internship proposals, two CSU faculty from the Department of Languages, Literatures and Cultures in the College of Liberal Arts proposed an internship entitled “Spanish in Professional Work Environments.” The goal of the proposed internship was to analyze improvements in professional work environments, with a focus on evaluating the language needs of health care and social work professionals. The faculty members had little to no prior experience working with Extension, so they submitted their application without an Extension mentor. Further, although the faculty members had a sense that this type of work was needed, they did not have a strong idea of where support would be best applied and most impactful for community stakeholders. In the process of reviewing and approving internship proposals, the CSU Extension internship committee suggested connecting the two faculty members with an Extension agent in a rural part of the state. The Extension agent was working with several relevant community partners, including one that provided health resources to underserved, predominantly Spanish-speaking neighborhoods and another that operated health clinics in primarily Spanish-speaking communities.

Although Extension has not historically served these types of community partners, the opportunity to provide this support was welcomed by both the Extension agent and the community partners, who noted that they often create Spanish materials without guidance from subject matter experts. There are important additional considerations when supporting dual languages in professional work environments that all the involved parties are excited to consider and incorporate more fully in their planning and programming. Additionally, the internship program is working to ensure that internship opportunities with historically underserved populations can be co-created at their inception, reflecting true university-community partnerships.

Faculty Incentives for Participation

Across the country, we hear about challenges that Extension agents have in connecting to campus-based faculty, particularly those without Extension appointments. One reason for this disconnect is the lack of overlapping incentives for participation. Faculty are rewarded, in large

part, based on publications of articles in high-impact academic journals. Although faculty with Extension appointments have been found to produce fewer publications (Foltz & Barham, 2009; Miller et al., 2013), there are significant positive returns resulting from journal articles, including salary benefits (Hilmer & Hilmer, 2005). Conversely, although evaluation processes for Extension agents are often critiqued for being nebulous (e.g., Grantham, 1999; Heckel, 1978), agents are incentivized to develop and offer programming that addresses stakeholder needs. Students can serve as important bridges to support mutual reward: Faculty appreciate the opportunity to fund their students and to further research, while Extension agents are excited about the opportunity to support applied research in subject areas/regions that are stakeholder priorities. In this way, the Extension internship program provides a carrot to incentivize collaboration.

A few years ago, for example, a regional Extension specialist was working to support farmers markets, recognizing their importance in supporting beginning farmers and ranchers. A few of the markets had received grants to develop marketing materials in the hope of attracting new customers, but little research or evidence was available to support the efficacy of different approaches. The regional specialist thus worked with faculty in the Department of Agricultural and Resource Economics—including one faculty member with a formal Extension appointment and one without—to conduct a study. Unlike typical collaborations between campus and field, the faculty members, a graduate student, an Extension specialist, and community partners codesigned the experiment together from the beginning to ensure that the research was academically rigorous and met the market’s needs. Results from this work ended up forming the basis for the graduate student’s thesis, supported resource allocation decisions for the market, and were published in a respected journal (Didero et al., 2021).

Following each summer internship, Extension agents (field-based mentors) and campus faculty/staff (campus-based mentors) are asked to evaluate their experience in the internship program. According to the CSU Extension internship annual report, 97% percent of faculty and staff stated that they would recommend the opportunity to other faculty and planned to participate in the program again, and 90% stated that they see more value in engaging stakeholders in research. Additionally, 79% of Extension mentors responded that they

felt more connected to campus, 96% stated that because of their Extension internship project they see enhanced value in engaging stakeholders in research, and 92% stated that they will participate in the Extension internship program again (CSU Extension, 2021).

Support of Campus Administration

Because this program emerged from the Office of Extension and Engagement, it did not have widespread support across the university at its onset. It was difficult to attract faculty to submit proposals—particularly faculty from colleges that were historically less integrated with Extension—partly because of difficulty in getting some deans and department chairs to meaningfully promote the opportunity with their faculty. By 2021, however, the program had grown enough and been successful enough that the Office of the Vice President for Research (OVPR) inquired about how it could lend its support. The internship organizers requested that the OVPR help promote the program by sending an email about it directly to all faculty/staff across the university. Additionally, the OVPR's communications team wrote an article about the program for CSU's campus-wide online news site, [The Source](#). The internship organizers and committee credit the OVPR's involvement with and promotion of the program as major reasons for the growth in both the number of internship proposals—including from faculty previously unfamiliar with Extension—and student applications in 2021.

The OVPR has stated that the two primary reasons for the office's support are (a) fulfillment of the land-grant mission and (b) the increased competition for research grants, particularly those that require integration across research and Extension. The former president of CSU, Joyce McConnell, has communicated to her executive committee that she believes strongly in the value and urgency of the land-grant mission. Accordingly, from the OVPR's perspective, the internship program is a way to support the land-grant mission while attracting external grants. For example, many U.S. Department of Agriculture National Institute of Food and Agriculture programs are integrated meaning that they bring together the three components of the agricultural knowledge system (research, education, and Extension) around a problem or activity (National Institute of Food and Agriculture, 2015).

For the future there is discussion about adding an incentive for faculty to participate

in the internship program as mentors in 2023, wherein those who incorporate funding for the CSU Extension internship program in proposals would receive a one-to-one match from the OVPR. In other words, including \$2,000 for an Extension intern in a successful proposal would result in a \$2,000 match from the OVPR. In addition to the financial incentive, faculty benefit from this arrangement because interns become part of a broader program and learning environment over the summer. The hope is that this may reduce some of the mentorship burden on faculty members as well as support student learning about Extension and applied research beyond their specific areas of study.

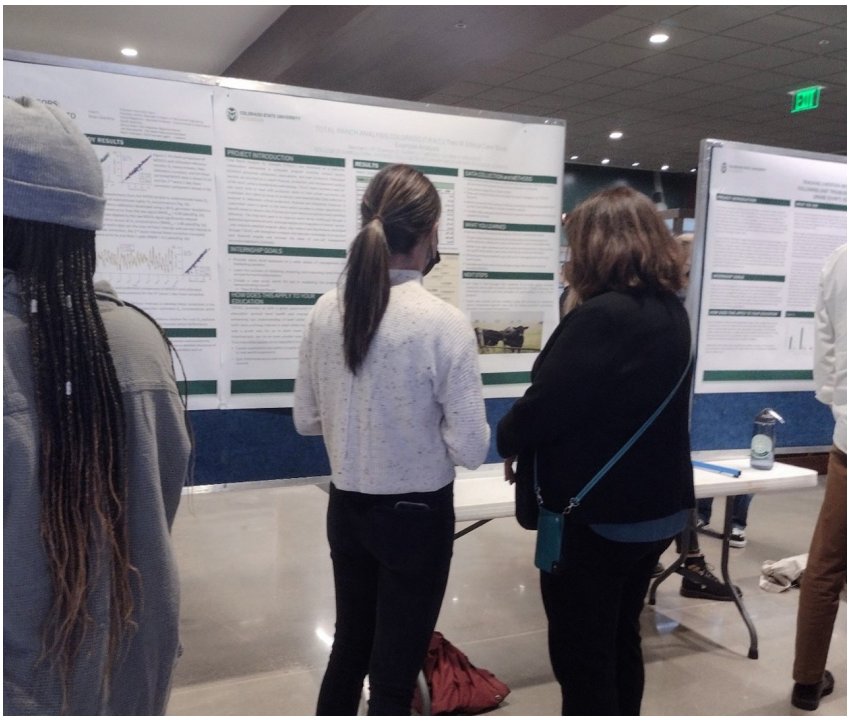
Additionally, when former CSU president McConnell attended the 2021 CSU Extension internship poster presentation session, she engaged with students for over an hour with palpable excitement (Figure 1). Her participation in this session led her to promote the program both inside and outside the university. For example, she discussed the program with the Board of Governors (the governing body for the university), and she has worked with the provost to integrate it into broader "student success" initiatives. As a result, the 2022 CSU Extension internship program has received new funding from the provost (\$100,000).

Thus, although it was not the internship organizers' original plan, starting small, building some success, and then strategically attracting broader university support has been key to the long-term growth and institutionalization of the program.

Students

Another important aspect of the Extension internship program is introducing students to Extension, including as a potential career path. As part of the program, the internship committee conducts pre- and post-assessments of participating interns. According to the 2020 annual report (CSU Extension, 2020), only 17% of the interns reported that they were extremely familiar or very familiar with Extension before their internship. Many students (41%) reported that the internship opportunity was their first introduction to Extension. Although the internship program only started including questions about student demographics—gender, race/ethnicity, and urban or rural background—in 2022, anecdotally, most students who are familiar with Extension either have an agricultural background or participated in 4-H programming in their youth. Accordingly, their

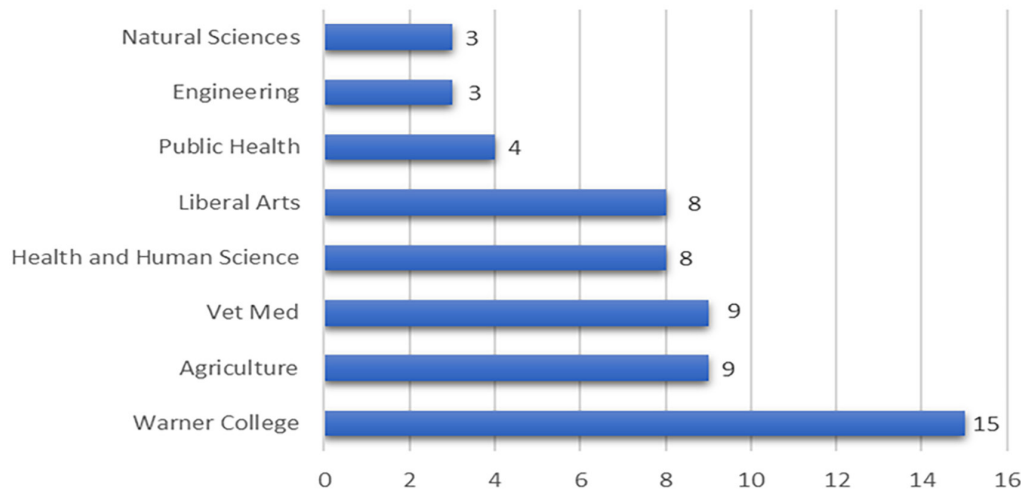
Figure 1. President Joyce McConnell (right) at the 2021 CSU Extension Internship Poster Session



knowledge about the breadth of topics in which Extension participates is limited. In promoting Extension internship opportunities, the internship organizers work hard to ensure that students understand the diversity of experiences available, and the program appears to have been successful in this regard. In 2020, only 26% of student applications were from the College of Agriculture. Figure 2 presents a breakdown of the students' home colleges in 2021.

As part of the post assessment, interns are asked a series of questions related to the internship, including if they are more likely to consider a career in Extension or recommend a career in Extension to a friend. In 2021, 62% agreed or strongly agreed with this statement. Further, 80% reported that they better understand how research can be applied in communities and 77% indicated that they better understand how community needs can be used to formulate a research question (CSU Extension, 2021).

Figure 2. Home Colleges of 2021 CSU Extension Interns



While we have not yet conducted long-term evaluations of the program, the coordinator has kept in touch with several previous interns, who have noted that they are considering careers in Extension. During the summer of 2020, the internship coordinator arranged for a panel of previous interns to discuss career opportunities that leverage their internship experiences with the current Extension interns.

Extension has struggled to reach minority and urban groups at rates proportionate to their presence in the wider population (e.g., Ingram & Syvertsen, 2005; Moore et al., 2014). A growing body of research has explored strategies for better engagement (e.g., Hamilton-Honey, 2017; Sumner et al., 2018). One strategy is for Extension to better understand its audience (Hoorman, 2002), which can be more efficiently accomplished by hiring agents that reflect the racial and ethnic diversity of the populations Extension is trying to serve. The internship program can be a vehicle to build a diverse pipeline of future Extension agents. Interestingly, in 2022, the first year that we asked demographic questions on the student application form, 41% of student applicants identified as non-White or multiracial.

However, increasing the diversity of students in Extension internships—including Native, first-generation, undocumented, and other underrepresented student groups—means that all students cannot be treated the same. Rather, diverse students must be recruited to apply for these opportunities in unique ways, including additional mentorship for both students and faculty/Extension mentors to ensure student success. CSU's Extension internship program is only starting to grapple with these issues. Luckily, it has been able to engage with a faculty member, now with a partial formal appointment in the Office of Extension and Engagement, who was already supporting underrepresented students in other capacities. One of the initial changes that we made to the program is in the language of the MOU that the students and mentors sign, including how we talk about pay. This has allowed us to be inclusive of undocumented students. Additionally, we have worked to add flexibility and support around housing and travel at the based-on feedback from past interns.

Conclusions

The CSU Extension internship program, facilitated by the university-wide Office of Engagement and Extension, includes unique

features that serve to enhance linkages across CSU: It requires mentor teams made up of faculty and Extension agents, creates a diverse Extension internship committee, requires applied research projects that incorporate significant time in the field, and secures participation across all colleges. Additionally, the program works to understand effective incentives for both faculty and Extension agent participation. The funding of students, for example, helps encourage participation by faculty without formal Extension appointments who are conducting relevant applied research.

We have learned several lessons from the program to date. First, having an Office of Engagement and Extension that is university-wide facilitates participation across colleges and disciplines. The fact that the program is university-wide also likely enabled the OVPR to play a larger role in the project than it could have if the program was only in one college. The university-wide scope has enabled the internship projects to cover a broader range of community needs and facilitated a more sustainable funding model. Second, mentor committees including faculty from campus and a county-based agent are key in facilitating campus-field connections. Third, county-based agents play an important role in ensuring that ideas for internship projects come from the community and that community members can participate in cocreating opportunities and supporting the interns once they are in the field. Fourth, there is evidence that the program engages students that are demographically diverse and more representative of communities served by Extension in Colorado. Though the program is too new to know its long-term impact, there is preliminary evidence that it is training a more diverse pipeline of Extension agents. Fifth, considering different incentives for faculty, student, Extension, and community participation is important. Cocreating projects from their onset will help to ensure that these different incentive structures are incorporated into projects and thus that all team members are more engaged and successful.

Looking Forward

As a next step, we are working to find opportunities to institutionalize the program. Some of our ideas include designating an Extension research assistant per college to promote opportunities for applied, engaged research and creating a matching program wherein faculty/research center/county agents who include funding for Extension interns in grant proposals can be

matched on a one-to-one basis by the OVPR or the Office of Engagement and Extension. We believe that this may provide significant return on investment by building CSU's competitiveness in integrated (research-Extension) grant applications to the U.S. Department of Agriculture, National Science Foundation, and others that award points for engaged scholarship. The program also seeks to promote more diversified and sustainable funding by (a) leveraging alumni support for an "adopt an intern" program, wherein alumni can sponsor one or more interns and get periodic updates throughout the summer, and (b) seeking internal university support as follows—provost (25%), OVPR (25%), Office of Extension and Engagement (25%), and participating deans (25%). There are also plans to create a diversity internship committee that focuses on (a) promoting the internship opportunity to underserved and economically disadvantaged students, (b) supporting a culture of inclusion within the Extension internship program, and (c) creating inclusive mentor and intern professional development training opportunities.

We are also working to consider how to integrate community partners more meaningfully and strategically from the onset of internship development. If these internships are to facilitate strong campus-community connections, in part to make land-grant universities more relevant, then centering the community voice in prioritized internships is key. CSU Extension recently completed a [community needs assessment](#) that could be used to identify topics of critical importance to stakeholders. However, it was not undertaken in a way consistent with the principles of community-based participatory research methods (e.g., Hacker, 2013)—for example, it did not include community partners in a participatory manner—and thus it is perhaps not fully usable for this purpose. The direct connections with community stakeholders facilitated through the Extension internships could help fill gaps from the community needs assessments, but adding in this component will take a significant amount of human resource effort.

Finally, moving forward, we would like to expand the program to include not only students from CSU's main campus in Fort Collins but also faculty and students throughout the CSU system, including CSU Pueblo and CSU Global. In addition, Colorado has many institutions of higher education, including tribal-serving institutions and those located in rural areas. CSU Extension professionals are already engaging with these

faculty, students, and institutions in more formal arrangements, and we are looking for opportunities to incorporate them more formally into the Extension internship program in the future.

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