

Approaches to Evaluating the Outcomes of Faculty Outreach, Part I: Needs, Opportunities and Challenges

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1 Introduction

Like many universities, the University of Colorado Boulder supports faculty in sharing their work beyond the confines of campus. CU Boulder uses the terms ‘outreach and engagement’ to describe this work, and defines these as:

the ways faculty, staff, and students collaborate with external groups in mutually beneficial partnerships that are grounded in scholarship and consistent with our role and mission as a comprehensive, public research university (Outreach Definition, 2010).

While the term “outreach” is well established, “engagement” is a more recent term in describing how universities meet their commitments to society. As traced by Sandmann (2008), this term emphasizes bidirectional reciprocity in universities’ work with communities, rather than one-way extension of university resources from “gown to town.” In this report we treat both concepts as describing a spectrum of university-community relationships; we use the term ‘outreach’ for simplicity.

One mechanism by which the university supports outreach and engagement is the Faculty Outreach grant program. About 40 of these grants, typically ranging from \$5000-\$8000, are awarded each year through a competitive process that is overseen by a faculty committee and administered by the Office of University Outreach (OUO) in the Division of Continuing Education. While each individual grant is modest, the overall university investment over time has been significant. Many of the projects develop into sizable and sustained efforts over time, fostering meaningful and lasting relationships in the community and statewide. And, while these projects by no means represent the full extent of faculty and staff involvement in outreach across the university’s departments and institutes, they do constitute a diverse subset that is representative in many respects.

Anecdotally, we know that these modest awards have indeed benefited the university by increasing visibility for CU programs, generating scholarly products and relationships for faculty, enhancing courses and pre-professional learning experiences for CU students, and attracting external funding to support ongoing work—but there is to our knowledge no systematic documentation of these good outcomes. We know even less about the benefits of these projects to the community and state. This situation is by no means unique to CU; Stoecker et al. (2010) cite a “distressing lack of research studying actual outcomes.” In addition to documenting outcomes, OUO also wishes to encourage faculty to think in a scholarly, evidence-based way about their outreach work, using evidence to optimize its value to external audiences in ways that are consistent with faculty’s own needs, capacities and values.

To explore these issues, the OUO commissioned our research unit to explore the potential for evaluation of the outcomes of Faculty Outreach grants. We view this study as a form of needs

assessment, and have approached it by examining the needs, opportunities, and interests of faculty who have been awarded Faculty Outreach grants. The funded activities are quite diverse, including artistic performances, curriculum and professional development for schools, learning and mental health clinics, youth and community development, and scientific or economic data-gathering relevant to community issues. Some projects address the general public, while others target particular groups such as schoolchildren, teachers, policymakers, and rural communities. Given such diversity, we quickly recognized that a one-size-fits-all approach to evaluation would not work—yet we still hoped to observe some patterns or commonalities across outreach projects that might help the OOU decide how best to encourage and support faculty in documenting the outcomes of their work and using evidence to improve it.

Our study had the following objectives:

- to identify the range of needs and opportunities related to evaluation that are offered by outreach projects of different types;
- to ascertain the interest or willingness of faculty and their campus collaborators to participate in evaluation if the opportunity or expectation arose; and
- to determine what resources and support would be required to implement more extensive evaluation of outreach projects across varied types.

This study focused on the potential for evaluating outcomes for *external audiences* as the intended beneficiaries of outreach. A complementary study by Ken Howe and Chad Nash has examined linkages between faculty outreach work and their professional advancement.

We pursued two approaches to these research questions. First, we carried out an interview study with outreach teams involved in a set of projects that are diverse in discipline, design, and objectives. This study focused on determining the needs, opportunities, and interests of faculty outreach teams for evaluating their work, taking an inclusive view of what “evaluation” may mean for varied project types. The results of that study are reported here.

Second, to explore how these issues play out in practice, we worked with three multi-year funded outreach projects to design and carry out evaluation “demonstration projects.” These provided further insights on the opportunities and challenges for evaluation, and offer concrete examples for others of both possibilities and pitfalls. The results of these studies will be separately reported as Parts II-IV of this report (forthcoming).

As Stoecker and coauthors (2010) point out, assessing outcomes of university engagement with the community—in any form—is an inherently challenging task. Community impact, they note, is simply “not as important to document, from an institutional perspective, because the achievement, or lack of achievement, of community change does not directly impact the institution’s resource base in the same way that student outcomes do” (p. 180). There are methodological challenges as well: time frames to observe real community impact are long, while funding cycles to support such follow-up and publication are short; to document real change is time-consuming and expensive. Finally, they emphasize, theories informing the civic engagement of higher education have historically taken a charity model rather than a social change model. As they provocatively state,

If one is emphasizing service to individuals rather than action for change, then one’s documentation efforts will be necessarily limited and even assumed. If the focus has been tutoring for the past semester, then the tutor must have helped the tutees because now they

can read better. But if the focus is social change, an outcome that must matter is if there have been changes in the policies or institutions that prevented those who were tutored from getting a decent education to begin with. (p. 182)

Yet, they argue, without this knowledge, “universities and colleges can not make legitimate, fact-based claims about their role as citizens (p. 1983).

Our report does not address this philosophical dilemma, nor do we advocate for a particular approach to outreach and engagement. Yet as we have talked with and thought about outreach teams, we have been repeatedly confronted with the questions of why and how it will be valuable to know about these outcomes: what difference does knowing make?

2 Study Design and Methods

The study was conducted using qualitative methods. We first reviewed funded and unfunded proposals for Faculty Outreach grants for the 2010-11 and 2011-12 grant cycles, and reports for funded 2010-11 projects. This data set included 143 documents representing 99 projects (68 funded, 31 declined). It provided an overview of the nature and range of outreach projects, their distribution across colleges and departments, and the extent and nature of evaluation ideas and data included in proposals or reports.

From this review, we developed an interview sample based on projects funded under single- or multi-year Faculty Outreach grants in 2011-12. We selected projects from a broad range of disciplines and outreach project types, focusing on well-established outreach projects where outcome evaluation might be appropriate or useful, and where reports suggested that the outreach teams could be thoughtful about the outcomes for their external audiences.

Faculty listed as the grantee were contacted by e-mail. They were invited to include collaborators in the conversation; several did so. Collaborators participating in the interviews included research and instructional faculty, staff, and students; in many cases, these were essential personnel who had significant intellectual ownership of the project as well as carrying out much of the day-to-day work. In referring to the interviewees, we sometimes refer to “faculty” for simplicity but intend inclusion of all members of the outreach teams. Thirteen of 15 teams invited accepted our invitation; one turned it down and one was not scheduled because the project was not yet underway. Ultimately, our data set included 17 interviews with 21 individuals who held funded OOU grants in 2011-12, representing 12 projects. Three project teams took part in a separate component of our work to design and carry out “demonstration project” evaluations, and multiple conversations with these teams were recorded. While these conversations centered on planning the demo projects, they often (as expected) raised specific issues relevant to this study, and we used those data in both capacities.

The study design was submitted to the CU Boulder Institutional Review Board (IRB) for human subjects research and designated as Exempt; all interviewees signed a consent form. The semi-structured interview protocol (Appendix A) addressed issues such as how faculty developed the idea for their outreach project, what audiences they hoped to reach, desired outcomes for those audiences, the potential role of evaluation in reaching or measuring these outcomes, what types of evaluation tools would be interesting or valuable to them, and the relationship between the project and the resources offered by OOU. Interviews were carried out in a highly conversational manner, and questions were removed and added over time as issues began to emerge as more or less important. Interviews were carried out in person, typically at a faculty

office or conference room, between October 2011 and March 2012, and ranged from 45-90 minutes in duration, with most about 50 minutes. Interviews were digitally recorded, then transcribed. The transcripts were then coded by major themes and subsequently by common features of programs as they relate to evaluation. Quotations included in this report are selected because they are illustrative of common themes and provide context to the analysis.

3 Results: Faculty Motivations, Benefits and Costs

In this section we include some general observations about outreach that were common across the data set. These included faculty motivations to do outreach, the professional costs and benefits to faculty of doing outreach, and their perceptions of general benefit to the university of outreach. These perceptions strongly shape their perceptions of evaluating outreach, as will become evident in later sections. In the next section, we describe patterns of difference in outreach teams' needs, interests, and opportunities for evaluation.

Across projects, faculty and other outreach team members expressed high commitment to their work. They were articulate about the problems they were trying to solve and about the personal satisfaction they gained from interacting with their audiences and from feeling that they offered something useful.

It gets me out of my little box. That's why I love doing it. I can go in and get excited about doing it because it's outside my box. It's an area—though I say I'm spread thin—I love doing this every year. It connects me. That's the part that's a positive part.

Despite the general sense that they were giving more than they got, faculty did report some professional benefits from their outreach work. For science and engineering faculty, granting agencies often required them to demonstrate the “broader impact” of their work, and outreach activities were one way to do so. Faculty reported value in learning to communicate about their work to non-specialists:

Giving this style [of] talk, it's very different. You have to think about each word you're saying, and whether you think the public knows it. ...So you have to think about your language, and can you better explain it. And I think that helps.

Faculty also described using outreach awards to develop methods or gather pilot data that led to larger, external grants, awards, publications, presentations, and collaborative projects. One faculty member offered a good example of his mix of motivations:

Why do I do it then? I could get away without doing it. But actually, maybe I couldn't. Because a lot of the outreach projects have been preliminary work for bigger proposals. And I like doing it because—I believe I need to do it, because it's an extra way to get students involved, and I think that's a mission that's important here.

Faculty offered a variety of rationales for how outreach work benefited the university. Some argued that outreach was an intrinsic function of a state-funded institution. “Personally, I think this is what we should be doing, having just more faculty reaching out to different areas,” said one faculty member. “I think CSU does a better job than we do, that's been my experience.” Another articulated linkages among multiple benefits:

Not only do we get some good PR out of this, but we don't *have* to, because it's also good for faculty, because they're integrating their research and helping people in maybe a more direct way than they might through normal research activities. And of course, any

version of this, almost all versions of this have some kind of student involvement, that just—it's easy to say that's giving students an opportunity to do something with real benefit and giving them real experience. (emphasis in original)

Outreach projects that engaged CU students in meaningful ways were seen to have strong learning benefits for students. Faculty described successful undergraduate research projects, masters theses, and career preparation for graduate students as performers, clinicians, and practicing professionals. For example, a music educator described what future music teachers gained by conducting middle school instrumentalists:

There's an investment that takes place that's not always the case in the practicum experience. They're not that one step removed, they're in the thick of it. So they've got to deal with being prepared, but also the challenges: "Okay, what *are* you going to say to this student that's not practicing the part? You're the teacher now." So, the challenges that are associated with teaching too. And with them also getting a lot of administrative experience, too—kind of behind the scenes. They kinda take on a leadership role, so that's part of their, I think, identity development as a teacher. (emphasis in original)

An engineer spoke of the importance of teaching engineering students to think broadly about their career opportunities, and of building skills to support 21st-century careers:

We want engineering students to come out of here not coming out presuming they have to go build high-rises in Denver or elsewhere, that this is the only market they can reach. We talk about the other 90% of the world that requires engineers, so we want to train them to be more comfortable working in international environments and community development programs. [The other 90% of the world,] they're not looking for high-rises; they're looking for real solutions to problems, sanitation, that sort of thing. ...It's the outside-the-classroom education. ...It transfers that level of knowledge that's available because there's a need and you should do it. (engineering)

Some perceived reputational benefits to the university from outreach. Some mentioned that their projects had garnered positive publicity. Programs that targeted K-12 students and teachers were thought to aid in recruiting undergraduates to CU or to particular fields, although no one had more than anecdotal evidence of this. Faculty also thought their interactions with the public helped to dispel myths about the university:

People are learning about things first in the paper. But I think if you're out and about, it's easy to diffuse these things in talking to people that are there and know what's going on, rather than having the story spun by someone else. Once you get further away from Boulder, they know less and less what we do.

Commented another faculty member,

We know that CU has a reputation as being kind of, for better or worse, a party school, right? So, [parents] see [the undergraduates]. They come and we expect them to dress like teachers and we expect them to have a plan—so they see like, "Oh, these guys are committed to their education." So I think it maybe helps that PR piece as well.

The primary cost that interviewees described was time. "It's time-consuming. It is. Because there's a lot that goes on in the background... there's all the gearing up, and then keeping the balls in the air, making sure that everybody's doing what they need to be doing. So, it's a heavy-duty time commitment." While all faculty could articulate their outreach work as relating at

some level to their research or teaching, many viewed outreach as an optional service activity that was rewarding but not central to their professional role.

In the department for the end-of-the-year review, it's something that's good, but it's not gonna really, you know, push anybody into the next higher category. Everybody's happy it's happening, but nobody really minds if it doesn't. ...If that hasn't traditionally been a part of somebody's field, they're not gonna voluntarily make more work for themselves.

While we have focused so far on faculty, equally important in some outreach projects were team members with non-tenure-track faculty or staff appointments. In several cases, these people were key to implementing the project and to improving it over time—thus they were often quite receptive to the possibilities for evaluation. This is partly due to a role difference: unlike faculty, their jobs often centered more squarely on education and outreach, and less (or not at all) on research. They also often had personal and professional traits of what Weerts and Sandmann (2008, 2010) have called “boundary spanners”—people who broker university-community engagement through their ability to build and hold the trust of community members. As we have noted before (Laursen, Thiry & Liston, 2012), such individuals can play major roles not only in university outreach but also in the education and professional development of students.

Others of these non-faculty team members saw their outreach work as above and beyond their regular duties. One instructor described her program's capacity as limited by the time she could donate: “It's not the university's job to provide salary for high school outreach programs, it really isn't. ...It's a labor of love and it's an indication of our belief in the program.... But, on the other hand, it would also be nice to figure out if society would value it somehow enough to pay for it.” These time demands, and the constant scramble for resources to sustain programs, put most outreach projects at some risk of faculty burnout. When we asked faculty if someone else would pick up a project if they stopped, most could not name an obvious successor.

2 Results: Differences among Outreach Projects

As we spoke with outreach awardees about the possibilities for evaluating their outreach work, we noticed patterns of difference in their needs and opportunities that also related to design features of their project. For example, those running a one-time arts performance for multiple audiences had different evaluation opportunities than those running an intensive workshop for a small group of teachers, or a multi-week afterschool experience for children. Some faculty were already familiar with possible evaluation methodologies, while others were not. Thus certain external features seemed both characteristic and explanatory in understanding any project's needs and opportunities surrounding evaluation.

These project features included factors such as team members' level of knowledge, skill, and ability related to evaluation methods; the nature of their interaction with project audiences, including the number of participants, intensity and duration of interaction; the goals or intended outcomes of the outreach project, and project funding sources. Ultimately, three main project types emerged that reflected distinctive evaluation needs and opportunities for projects. Here we briefly describe the broad features typical of each type of outreach project, then below we present a more extended analysis of the evaluation needs and opportunities of each.

Type 1: Outreach related to faculty expertise but not strongly integrated with faculty scholarship

These projects are typically funded exclusively by OUO; many are conducted with K-12 audiences. Often these projects are teaching-centered, motivated by a desire to share subject

matter expertise and technical resources with an external audience who is seen to need it or benefit from it. Because of these teaching-oriented goals, these projects generally have extensive interaction with small audiences, and their desired outcomes for external audiences tend to center on audience learning and affective outcomes. These projects span many disciplines, but at CU they are common in the sciences and the languages. While project outcomes are identifiable and interesting to many outreach teams, they typically do not possess strong knowledge, skill, and abilities related to evaluation.

Type 2: Outreach strongly integrated with faculty scholarship

These projects are typically part of a larger project that may be supported by multiple funders. They generally have extensive interaction with small audiences. Typically located in disciplines with a tradition of applied work, such as clinical, education, and engineering fields, these outreach projects are characterized by a strong reciprocity in their interaction with the external audience. Faculty offer useful services, experiences or knowledge, and in turn gain something specific and useful to their scholarly work by interacting with the public. For example, social scientists or education scholars may use their outreach project to engage human subjects or test an intervention model, and at the same time offer a service or intervention that is of value to the subjects. Because they have designed their work to include data-gathering about subject responses, faculty on such teams tend to possess strong knowledge, skills, and abilities that are relevant to evaluating project outcomes. In other cases, such as engineering projects, the intended project outcome is not a human experience, but a designed structure, process, or data set; while human interactions may influence the project's success they are not seen as central to its goals. Therefore evaluation of such projects does not involve measuring people's responses. In each case, because projects are strongly linked to faculty scholarship, the desired project outcomes are well characterized and are likely to be documented in scholarly products or in annual reports to an outside funder.

Type 3: Outreach presented in one-time events or event series with different audiences

These projects include performances, public lectures, exhibitions, and participation in community events. They appear to be most common in the performing arts and sciences but are not restricted to these disciplines. Many are funded exclusively by OUO. The desired outcomes often focus on exposing or introducing audiences to new concepts, experiences, or resources, and on affective outcomes such as inspiration and enjoyment; such projects typically seek broader reach but expect less profound impact on audiences. Because of the relatively short duration of interaction with the audience, extensive evaluation of audience outcomes is not always appropriate or feasible. Faculty typically have a background outside the social sciences, and thus do not necessarily possess knowledge, skills, and abilities related to evaluation.

Based only on this brief description, our reasons for distinguishing these types may not be evident; they are based on common evaluation opportunities and challenges discovered during our interviews, as will become clear in the discussion below. These types are neither mutually exclusive nor necessarily exhaustive: Some outreach programs may have characteristics of more than one of these types, and as a result have multiple options for evaluation. Other projects may fall outside any of these types, and evaluation issues for these can be assessed on a case-by-case basis.

As an exercise in applying the typology, we assigned every funded 2011-12 projects to a type. About 80% were readily classified; another 10-15% sat on a border between two types; and a

few could be argued to lie outside or at the edges of the scheme. If all 40 projects are forced to fit, about 25% are Type 3 and the rest are evenly split between Types 1 and 2. The interview subset was similar to this ratio, with Type 3 slightly less represented.

2.1 Type 1: Outreach related to faculty expertise but not integrated into faculty scholarship

As noted above, projects of Type 1 showed some similar characteristics in their motivation, audience, and format. Here we discuss the typical patterns for this project type with respect to faculty interest in evaluation, their needs related to evaluation, and the opportunities they saw for project evaluation. We developed additional insights about evaluating Type 1 projects through our work with two demonstration projects, and will report separately about those efforts.

2.1.1 Faculty Interest in Evaluation

Faculty who lacked evaluation expertise and who did not conduct research directly linked to their outreach project expressed a range of levels of interest. As we discuss below, they were generally less interested in evaluation than leaders of Type 2 projects. Some were generally open to expanding evaluation of their outreach projects, while others argued quite cogently that evaluative data would not be useful to them. Some saw the potential utility of evaluation data in furthering their project—for example, as evidence of the validity of their outreach approach in a “Broader Impacts” component of a grant proposal. Others felt strongly that evaluation would expand the scope of their project beyond what felt comfortable, interesting, or feasible to them.

It changes the scope of the outreach project a bit. It escalates it. Again, I’m not wanting to *not* show outcomes for the money I’m receiving. Yet, we’re not really funded to go have student time... that takes money to do that. So to honor my commitment to the outreach grant... (pauses) it’s not that I don’t want to measure outcomes. But it is a tall order with the resources.

As this quotation shows, many faculty immediately raised issues of resources for evaluation. We tried to assess their interest level independent of the resource issue by asking whether they would be interested in carrying out evaluation on their project if additional funds were available (for example, an extra grant expressly to carry out a one-time evaluation study). Some faculty thought this approach might have merit, while some expressed disinterest, preferring instead that any additional resources be invested directly in their projects, helping them to reach more participants: “If we got \$5000 more, it wouldn’t be to evaluate! (laughs)”

2.1.2 Evaluation Needs

For faculty leading this project type, a common concern was the potential for substantial workload increases not accounted for in their project budgets. They pointed out that their own time was already not compensated; while their investment was personally valuable it was not highly valued in university reward structures. Therefore they worried that spending time and resources on evaluation would compete with doing the outreach work itself. Most did not view evaluation data as enhancing the outreach by making it more scholarly; when we put this possibility to them, the counter-argument was that this was not the kind of scholarship they wanted to do.

Even when faculty were open to expanding and improving their project evaluation, they raised several concerns about the resources needed for evaluation:

- Uncertainty about the resources needed for evaluation: Some thought the time and money requirements could be minimal and others thought it could be extensive.
- Costs of evaluation in relation to the overall outreach project grant: Faculty were generally concerned that the costs to conduct evaluation could interfere with doing the outreach itself. Said one, “That’s a tall order when basically what I get funding for is the outreach grant itself.” Another noted, “We try to collect some of that information, but the coordinator works 15 hours a week—so much of that goes to just sustaining the initiative.”
- Lack of knowledge about evaluation techniques: Generally, faculty conducting this project type did not have transferable knowledge, skills, and abilities related to evaluation. Some worried openly about expectations that they would have to develop this expertise, as in this quotation.

So I guess from a faculty perspective—[it is helpful] to have a menu of choices, ‘Oh, I can do a teacher survey, I can do all of these things, and all of them are reasonable approaches with some scientific soundness or methodological soundness.’—Great! But I’m not trained in educational outcome assessment.

- Lack of knowledge about IRB human subjects approval: Faculty assumed they needed human subjects approval (in fact most would not), but many had not done this before and were wary of the IRB process. Again, they raised concerns about committing time to an activity that they perceived as less central than the outreach itself, and that seemed especially time-consuming given their lack of expertise.

While outreach teams had many concerns about the value and feasibility of evaluation, most did have a good sense of the outcomes that they would find important to measure—a key starting point for any evaluation effort. They could describe likely outcomes for participants, based on their own observations and anecdotal information such as thank-you notes or personal conversations with participants. Some had done simple evaluations at the end of an event, such as a feedback form, though most had not analyzed these in any systematic way. Some inferred outcomes through attendance records, arguing that participants must find it valuable if they keep coming back, or ask the presenters to return. We have gathered these evaluation ideas and approaches garnered from the interviews (along with other possible approaches) in Appendix B.

However, respondents were generally much less clear on how they might go about measuring or documenting the project outcomes once identified. Several brainstormed with us potential evaluation options, but were unsure of:

- Which approaches may be most appropriate for their project, and how to choose
- How evaluation should be focused—on the effectiveness of the project (summative evaluation) and/or how to improve the project (formative evaluation)
- Which or how many levels of evaluation should be conducted (teachers, students, community members, internal CU participants, outcome vs. process-focused, etc.)
- OUO’s expectations for evaluation. Faculty did not know what evidence and information the OUO was specifically looking for in terms of evaluation.

Respondents expressed uncertainty about which aspects of their project to evaluate. For example, ongoing outreach projects directed toward K-12 schools might have several valid

options for evaluation ranging from the simplest possible measurement of teachers' perceptions about the project, through student or teacher learning gains, to long-term, costly approaches such as student retention or persistence to graduation and careers. While clearly some of these approaches are easier than others, respondents were unclear which of these types of outcomes would be feasible or valuable to measure, or which would "count" in the eyes of OOU.

2.1.3 Evaluation Opportunities

Because these projects were generally teaching-oriented, interviewees could, as educators, generally define desired outcomes. As in any educational evaluation, it was easier to think of ways to measure some desired outcomes—such as specific learning objectives—than others (e.g. critical thinking, increased interest).

In general, Type 1 projects had enough contact with their participants to recognize evaluation opportunities, e.g. times when they might administer a survey or hold a focus group. Most kept participant lists and records of their activities with the participants and thus could document at least basic parameters such as time spent and how it was used, and attendance; some (but not all) had contact information that could be used to follow up with participants. We were surprised to find that a number of outreach projects had made more effort to evaluate their work, or at least to gather formative feedback from participants, than they had documented in the annual or final reports that we read.

Projects varied in the extent to which they could draw upon existing literature or models for evaluation: some more unusual projects would require novel approaches, while others might make use of prior work. For example, some ongoing K-12 teacher professional development programs were based entirely or partly on previously developed models that had been subject to extensive evaluation. Faculty leading these projects could adopt or adapt procedures and assessments from existing evaluation models, selecting specific aspects of the pre-existing evaluation procedures rather than a full-scale evaluation that could easily dwarf the outreach project itself. Moreover, the outcomes of teacher professional development projects are necessarily sequential, depending on a chain of events: teacher knowledge increases, teachers become more effective, and students' knowledge is increased. In such cases, outreach teams might be able to evaluate the first component in this chain, then infer potential subsequent outcomes based on results from more thorough projects where evaluation has taken place at every step.

2.2 Type 2: Outreach Integrated with Faculty Scholarship

Type 2 projects were characterized by strong integration of faculty scholarship with outreach. For these faculty, their ways of working in the discipline were very tied to a problem in the community, so their outreach worked both ways: they could help to solve a problem, and they could get research material from that interaction or community. Interviewees used phrases like "seamless integration," "organic," "built into what we do," and "participatory" to describe the relationship between their outreach and scholarly activities. Thus for this type of project, evaluation was nearly a solved problem—although this was not generally apparent from the outreach reports we reviewed initially. As a group, these projects surfaced interesting issues about communication between the projects and the OOU, and about how to use faculty time efficiently while still documenting the outcomes of the outreach funding they received.

Several of these projects clustered in the social sciences, where faculty designed projects that both provided something useful to external audiences and supported their own needs to interact with research subjects in clinical, educational or community settings. Their methodologies and data sources were often similar to those for program evaluation, and their outcomes were well-specified—therefore the notion of evaluation was much more familiar ground than it was for most faculty leading Type 1 or Type 3 projects.

For engineering projects, the deliverable was typically a community-based data set, structure or process. For such projects, the facts of implementation could be documented and technical success evaluated by traditional scholarly means such as peer review; further program evaluation did not seem useful. We did not carry out a demonstration project for any Type 2 outreach project.

2.2.1 Faculty Interest in Evaluation

We found faculty leading Type 2 projects to have varied levels of interest in evaluating their outreach projects. Because their outreach was integrated with their scholarly work, these faculty generally indicated a high level of confidence in their knowledge about their project outcomes, as evidenced in this quotation: “I think we’re pretty comprehensive in our outcome evaluation, actually. We have a way of assessing least one indicator for each of our priority mission domains.” Such faculty were willing to share outcomes data with the OUO, but were understandably not interested in doing additional evaluation work specific to their outreach award:

There are lots of things I’d like to do more of if I had more resources to do it, but I don’t know that expanding our outcome evaluation is one of them. I think we’re doing pretty well in that. I’d like to expand the range of services and the link with the undergraduate program, and those kinds of things.

Moreover, sometimes it would be difficult for them to separate outcomes specific to their Outreach funding from those of the project more generally (e.g. when the work was supported by multiple funding sources).

Most faculty involved with Type 2 projects felt that their scholarly products best demonstrated the effectiveness of their work. However, we noticed that their annual reports did not always include a digest of relevant outcomes or documentation of scholarly products—thus the impact of their work was not always made evident or public from an outreach perspective. Some Type 2 teams saw the potential use of evaluation data when they were ready to “go national” with a tested model intervention or to seek new funding sources to “keep it going.” Again, given their expertise in methods suitable for evaluation, they emphasized that they would be the best judges of when the project was ready for that type of work, and of how to carry it out.

2.2.2 Evaluation Needs

Overall, faculty leading Type 2 projects expressed few needs for resources or expertise with respect to evaluation. They were familiar with IRB procedures and this was not a barrier for them. They did not object to the notion that they had an obligation to report outcomes to the OUO, but they did seek to have freedom to communicate their project outcomes in forms they found appropriate, rather than being constrained to document aspects not of interest to them. They did articulate other needs with which the OUO might offer assistance, which we include in Section 6.

2.2.3 Evaluation Opportunities

These faculty generally had good information about the number and nature of participants reached through their work, and the outcomes for those participants. They could not always separate the impact of the Faculty Outreach grant from that of their other (funded or un-funded) work, but they could explain what the OUO funds provided and how it enhanced the overall work. For example, one awardee noted that OUO support for a graduate assistant to coordinate and do intake for clinical appointments enabled her clinic to serve more clients, but that additional number of clients could not be separately quantified. Another awardee noted that his project was well grounded in scholarship and he had the expertise to measure outcomes, but not yet the opportunity. In this case, early evidence suggested positive outcomes but at this stage, he was most interested in formative evaluation to refine the design of the intervention. His team would first have to make the necessary refinements, then reach participants in appropriate numbers to develop a well-designed summative evaluation.

Because generating evaluation results specific to OUO would be resource-intensive, faculty whose ongoing outreach project overlapped with their own research suggest instead two potential evaluation opportunities related to their projects:

- Use of results reported in scholarly works (e.g. conference presentations, articles). We noted that a digest of such results was uncommon in OUO annual reports.
- Summary or copy of annual reports from larger projects with multiple funders that are complemented by funded outreach grants.

Because these projects were driven in part by scholarly needs for human subjects, interactions or study sites, as well as by a sense that faculty had useful expertise and services to offer, these projects were much more likely to be described as engaged scholarship, built on the mutual benefit of the project to scholar and community, and the direct input of community members into the scholarly work. With some interviewees, we discussed the possibility that they might share their expertise on scholarly engagement with other colleagues at CU, if interest was felt to be sufficient (through e.g. a workshop on community engagement through scholarship).

2.3 Type 3: Outreach presented in one-time events or event series to different audiences

Type 3 projects were distinctive in having generally larger audiences, but briefer interactions with them. They offered an artistic or learning experience, information or exposure to something new. Because audience members were generally volunteers who spontaneously took part, projects did not have records of participation beyond estimates of attendance, nor ways to follow up with audience members. Many of these projects were in the performing arts, but examples from other fields might include lecture series, facility tours, information booths at a community event or festival, and similar “one-off” educational activities. These project features place limits on the nature and methods of potential evaluation, and in some cases may beg the question of evaluation altogether. To develop our thinking about evaluating this type of project, we carried out one demonstration project of Type 3, which will be reported separately.

2.3.1 Faculty Interest in Evaluation

Faculty leading this type of outreach project were generally not highly interested in formal evaluation. Such projects most often measured their success through attendance and anecdotal feedback: “I get enough anecdotal feedback and just positive feedback each meeting that I don’t

feel like we need to do much more evaluation. I feel like we're on the right track and we're providing something that meets the needs of many students." Another interviewee reported that the effectiveness of their event series could be measured through good attendance: If people are showing up, then the project is successful. This is a legitimate perspective when an activity is voluntary and attended by audiences for their personal pleasure or growth.

2.3.2 Evaluation Needs

In cases where faculty did express some interest in evaluating their outreach work, they expressed concerns about resources and expertise similar to those raised by faculty leading Type 1 projects. Their needs included:

- Expertise on evaluation techniques: Generally, faculty conducting this project type did not have a social science background, and thus did not have transferable knowledge, skills, and abilities related to evaluation.
- Information on how to select evaluation approaches and assess their feasibility: Because these projects had limited contact with often large numbers of people, it could be quite difficult to collect data and especially to define and measure lasting or long-term outcomes. Attempts to collect this information could be time-consuming and faculty were not convinced that this would be either feasible nor valuable.

Perhaps more strongly than for Type 1 projects, for this group the feasibility of evaluation was strongly tied to views of the value of evaluation: If they could not imagine a way to gather useful information, they did not see how the effort could be valuable. For instance, some were skeptical that the kind of information that could be gathered in the brief encounters with audiences would be useful to them, dismissing the brief demographic or satisfaction surveys often stuffed inside concert programs as data that "fundors always want you to get but doesn't tell you anything." For arts projects especially, it was hard to imagine how to measure impacts on audiences that were primarily affective or aesthetic:

I feel like there is in science [projects such as] Science Discovery or whatever, you really have the before and after tests. It's just easier to do it in a way that we all can think of. It's just not what I think of first. ...It's hard sometimes. I mean, I am always thinking, 'Why *wouldn't* [audiences] want it?' (emphasis in original)

Moreover, the notion of evaluation was often assumed to mean quantification, which those from arts projects in particular resisted: "We don't have these statistics, so I feel like we can't present that to a board of people who really don't know what the arts are." These ideas reflect real concerns about feasibility, as well as a lack of information about expectations and options for evaluation.

2.3.3 Evaluation Opportunities

Type 3 projects could relatively easily document the numbers of participants, duration of their interaction, and the activities that participants experienced. Getting at project outcomes was seen as rather more difficult—not only due to the generally short duration of interaction, but also due to the nature of participant outcomes, which were often primarily affective (interest, enjoyment, appreciation, exposure to something new). A single dose was expected to be enriching, but not life-changing or permanent. Someone attending a public lecture may find it stimulating and may learn something interesting or new, but we would not expect it to change her behaviors, or for her to remember it several weeks or months later.

Despite some lack of interest in evaluation, faculty nevertheless identified several valid options for evaluating projects of this type, including:

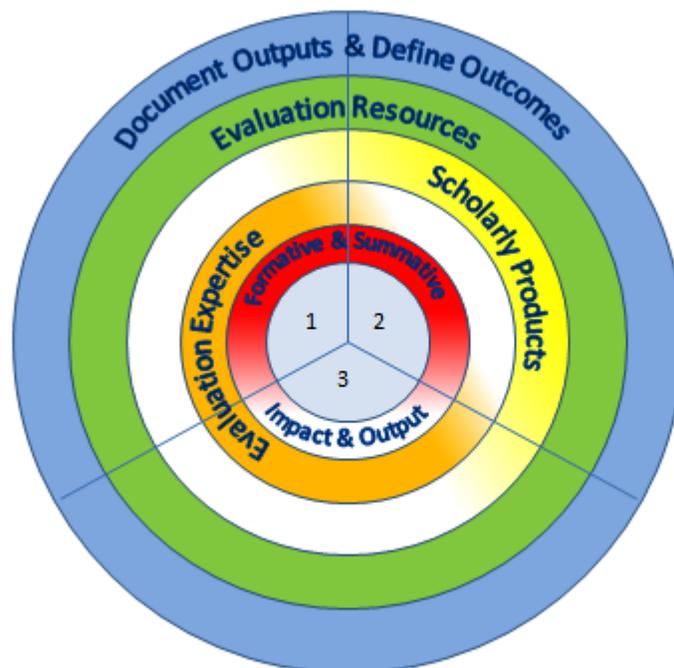
- Onsite evaluation of programs, using short hard-copy surveys
- Follow-up evaluation of community impacts using surveys (internet, postcards) or short interviews
- Evaluation of student outcomes (undergraduate and graduate) for those who participated in the project as performers or leaders
- Formalizing and organizing informal anecdotal evidence: oral comments, participant letters (participating students & faculty, audience). We observed that in general Type 1 and Type 3 outreach teams are undervaluing the text data they already have, because they are unsure of what to do with it. When gathered systematically, this material can be treated as data and used as evidence of outcomes and opportunities for improvement.

Our report on the demonstration project with CU Contemporary Dance Works will offer an example of how we drew upon several of these approaches, and an assessment of their success.

3 Evaluation Options and Faculty Needs

In an attempt to summarize our findings, we have organized the typology discussed in Section 4 into the graphic portrayed in Figure 1.

Figure 1: The Evaluation Compass for Outreach

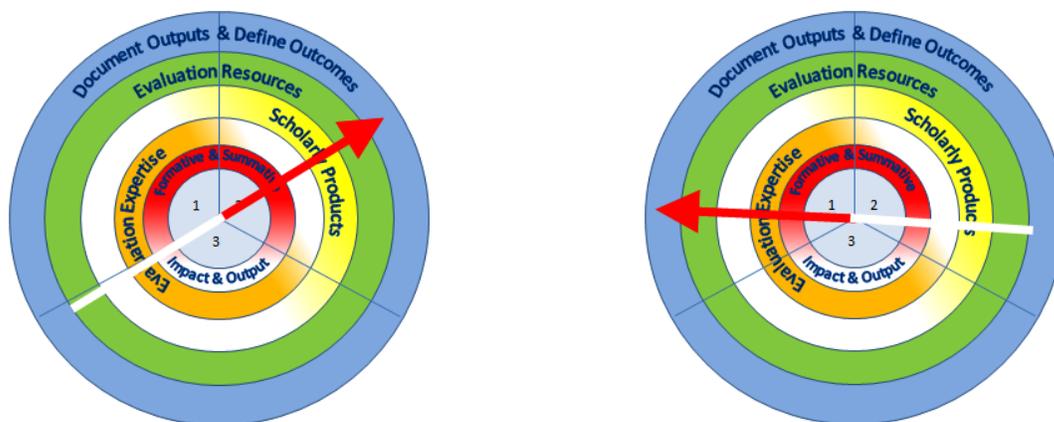


The central portion of the compass represents the three project types, each with their typical characteristics. Some projects may share characteristics of more than one type and thus sit on the border between types. Key issues related to project evaluation needs and opportunities are portrayed in the concentric outer circles, and the shading of these shows that some issues are common to all three types, while others are more typical of certain types. For example, project

Types 1 and 2 present opportunities to address formative and summative evaluation questions about project outcomes, while Type 3 projects might practically focus on outputs or impacts rather than outcomes. Project Types 1 and 3 share a need for evaluation expertise, while this is not a strong need for Type 2 projects. Scholarly products are most likely to emerge from Type 2 projects. The need to document project outputs and define audience outcomes—and the need for additional resources in order to carry out meaningful measurements—is common to all three.

As Figure 2 shows, for any particular project, the needle of the compass represents the alignment of project features with the evaluation interests, needs and opportunities of that project. “Taking a sighting” is the first step for a project in identifying the potential for further evaluation of outreach outcomes. Like a real compass, this compass does not tell an outreach team how to get to its destination, but it can give the user confidence in defining a direction to start traveling.

Figure 2: The Outreach Evaluation Compass in Action



(a) A Type 2 project can address formative and summative questions through data gathered for research and is likely to generate scholarly products.

(b) A Type 1 project is less likely to generate scholarly products, and will need additional evaluation expertise to address formative and summative evaluation questions.

4 Non-Evaluative Faculty Concerns and Needs

While interviewees widely expressed their appreciation for the support, encouragement, and problem-solving help they had received from the OUO, our interviews revealed some common concerns and needs in implementing outreach grants that were not related to project evaluation.

- Liability concerns: Some faculty were concerned about liability issues associated with their projects including: transportation and safety of CU students, work completed by CU students (e.g. construction), and transportation and safety of community participants, particularly juveniles.
- Release concerns (videos, photos of participants, etc.) Some projects such as performances use video and photography and include student participants. Faculty were unsure of the university policy on use of such material and how to secure appropriate releases, if needed.

- Knowledge on IRB procedures and requirements. Faculty were unsure whether and what types of evaluation activities would need IRB approval.
- Experiential learning. Faculty were interested in giving credit to CU students for participating in certain types of outreach projects, but found establishing a service learning course to be onerous. They were interested in knowing about other models for engaging students.
- Public relations and advertising. Across project types, faculty indicated a need to promote their outreach projects through advertising (one-time event or event series) or publicity for ongoing projects (e.g. clinical services). Faculty were interested in additional money beyond the outreach grant for advertising, and help in preparing and submitting advertising to campus and other venues. We noted that some faculty were quite savvy about this, and had sought and received help from the OUO with advertising, while others did not seem to be aware that they might get help in this respect. This was one of the few areas where some inequity was reported.
- Grants and fund-raising: Faculty were interested in identifying funding sources that might help to sustain their activities. While confident about their knowledge of traditional grants for academic work, they wondered if OUO could assist them in identifying potential community partners and non-academic funders and/or in working with the CU Foundation to identify funding sources.

5 Recommendations

Here we suggest some implications of our findings. We identify some potential approaches that OUO might pursue in standardizing reporting, communicating its expectations for evaluation, and supporting (if desired) increased effort to evaluate Faculty Outreach awards. We also suggest some ideas (our own and our interviewees') of ways that OUO might assist in meeting other needs that outreach teams articulated.

5.1 Documenting Outputs

We see potential in some standardization of reports to more systematically gather basic data about the net impact of outreach projects. While basic data would necessarily focus on outputs (work done) rather than outcomes (the results or value of that work), such data would document for external constituencies the number and nature of Colorado citizens affected by the outreach grants. It might also be helpful in balancing the portfolio of projects funded from year to year. Such data can be particularly effective when reported against inputs—the number of projects and departments/units involved, and the number of dollars invested. It seems possible that these figures could argue for a good “bang for the buck” in supporting outreach.

5.1.1 Reporting of Participant Counts

The numbers of people affected by Faculty Outreach projects will be impressive when totaled across the breadth of projects supported. Faculty Outreach awardees might be asked to provide standard counts of all project participants (audience, faculty, students) and the number of contact hours with participants. As long as awardees understood this expectation in advance, collection of these data should be relatively simple but effective in documenting the cumulative impact of all funded projects each year and over time.

Documenting both participant numbers and contact hours should be a reasonably fair indicator of time and effort expended. Some projects have extensive interaction with a small number of participants while others may have limited interaction with a large number of participants, so communication should be carefully framed so as to communicate the value of both “broad” and “deep” types of projects (both are well represented in recent award portfolios). One way to do this is to minimize the emphasis on numerical estimates on outreach grant applications, so that applicants do not perceive that grant evaluation is based on numbers alone, nor are tempted to over-promise, but nonetheless to alert faculty to what they will be asked to document in their annual or final report. Such reporting is standard practice for many other types of grants as a way to monitor the overall program outputs (if not outcomes) and could easily be built into an online reporting system, such that the data can be imported to a spreadsheet file to obtain aggregate numbers. We suggest count categories along these lines:

Number of people inside CU who actively participated in the outreach

- Undergraduate students
- Graduate students
- Faculty employed within the tenure system
- Other personnel, including non-tenure-track faculty and staff

Number of people external to CU who participated in the outreach

- K-12 students
- K-12 educators
- policymakers or community leaders
- members of the public; split into adults and youth if relevant to the project

If desired, the report narrative could request additional information about the particular roles or activities of participating individuals. Also relevant to these figures is whether or not the work was wholly supported by OUO, or leveraged by other funding sources. The simplest approach would be to ask awardees to report any additional funding sources supported the work, and the approximate dollar value of this support, but not to require them to attempt to separate the net numbers of people affected by funding source, which is unlikely to yield consistent estimates.

5.1.2 Reporting of Scholarly Results and Products

Scholarly presentations and publications, outside publicity, and community recognition are types of factual information that can be readily documented. This can be extended to student products such as undergraduate research posters, masters theses, and capstone projects. The use of outreach work in grant proposals (and of course grants awarded) is also easy to document. Again, the ways in which expectations for documenting scholarly outcomes are communicated will shape faculty perceptions about how scholarly projects are valued relative to others. Interestingly, while we might expect faculty to perceive that scholarly approaches would outrank public outreach in academic value systems, one scholar leading a Type 2 project worried that her project was “not outreach enough.” It appears that worries about this cut both ways.

For projects that are embedded in faculty scholarly work, explicitly asking them to extract findings into a separate outreach report would be an effective way to document outcomes that

generates little to no extra work for faculty, yet offers the OUO some concrete examples that can be shared with internal and external constituencies. We imagine that in most cases, OUO will not want its own copies of lengthy academic reports, but might rather specify, for example, that faculty provide a 1-2 page digest written in accessible language. Ideally, this digest will be also useful to faculty in other ways, e.g. in merit review or FRPA processes, as well as to the OUO for publicity purposes.

5.2 Supporting more Substantial Evaluations

The suggestions above are approaches to documenting the collective outputs of Faculty Outreach grants (with the caveat that these projects do not represent the sum total of university activity in outreach). But these approaches do not address the outcomes of these projects—the value added by this activity. We heard a mix of perceptions about what the OUO and faculty outreach committee expected in the way of evaluation. Some faculty reported what they called “pressure” to carry out comparative studies involving pre/post testing of outcomes for treatment and control groups—clearly well beyond a reasonable scope for projects of this size. Others—as we noted in our discussion of Type 3 projects—understood the valued evaluation measures to be quantitative only. Others were aware of no expectation for evaluation; in fact, they would have liked more feedback on their proposals (which had nonetheless been successful year after year): “We’ve never had any feedback. We’ve never got anything back from them; what they don’t like, or what they do like, or what we might change. That could be valuable.” Thus, whatever approach is chosen, good communication about expectations will be important.

Overall, we view our findings as indicating a rather wide range of interest and opportunity for evaluating outcomes of outreach projects. Given the diverse projects supported by this program, we are confirmed in our initial impressions that one size does not fit all for evaluation. We do not see that outcome measures could be standardized easily, beyond the documentation of participation and products that we suggest above. For some projects, outcome measures may be useful, and for others, output measures may suffice. Moreover, we were impressed by the high commitment and creativity of those with whom we spoke: while we endorse a goal to make outreach work evidence-based and indeed to elevate it as a faculty and staff activity, we would not support any evaluation approach that deterred faculty from seeking to do the work itself.

Nor do we see good potential in a toolkit approach, though we have considered it. While some faculty did suggest this—‘just give me the tools and tell me what to do’—such an approach underestimates the complexity of the evaluative task and the need for tools well-suited to the task. As we discovered, faculty could think of approaches to evaluating their work, but they did not feel confident that they could wisely evaluate and select approaches, and they did not want to waste their time on “wrong” methods. If OUO’s goal is to raise faculty understanding and values around using evidence in carrying out their outreach work, an experience of poorly designed evaluation will do no good in achieving a change of beliefs and culture.

We (and some interviewees) do see some potential in offering examples and models, such as our forthcoming reports on three demonstration projects carried out to evaluate three multi-year funded outreach awards. One potential function of these demo projects is to serve as examples to spur thinking about evaluation approaches appropriate for different project types. Perhaps they can also help to shape conversation about the appropriate breadth and depth of evaluation expected for outreach projects. In addition to the demo project reports (forthcoming), we have listed a number of specific evaluation approaches, including some simple but clever evaluation

strategies reported by other projects as vignettes in Appendix B. Additional examples could readily be gleaned from some of the more exemplary reports.

A broader question, however, is just what these examples are intended to stimulate. Is it the desire of the OUO to encourage more projects like the demo projects we implemented last year? If so, thought will need to be given to how to support them. It is clear that both expertise and funding will be required. Outreach teams will need consultation and advice about designing such projects; most will need to carry them out collaboratively; and they will need ways to support the person-hours to do the work. This was evident in all three of the demo projects: in addition to faculty time and E&ER expertise and time, all three projects made use of considerable additional person-time from graduate students and postdocs. While the upshot in each case was that we carried out a more substantial evaluation than might have been possible on E&ER resources alone, it was also clear that these teams, at least, preferred to invest the time to do it well, if they were going to do it at all.

At present, we see two possible approaches to meeting these needs. Competitive mini-grants or supplements to support evaluation might be offered to funded projects interested in pursuing more in-depth evaluation. This has some advantages: it is relatively inexpensive, it focuses the resources on those who want to make the effort, and it provides information about the extent and depth of faculty interest. Over time, such projects would add to the body of examples and ideas and would build evaluation capacity among outreach teams. The main disadvantage of this model is that it does not solve the problem of providing expertise. While it is possible to offer some professional development to raise capacity on campus,¹ and likely there would be some takers, it is not realistic to expect most outreach teams to develop good evaluation skills through this mechanism alone.

In-house evaluation expertise may be the most efficient way to assist faculty in the long term. This model is more expensive, but could solve multiple problems at once and draw upon a broader range of funding sources. From our work on campus, we know that other outreach groups would welcome evaluation consulting and/or implementation services; often they could contribute external funding to support these services. Likewise, we are aware of faculty seeking help in evaluating undergraduate and graduate education projects, especially as they pursue external funding. An in-house evaluator would have no trouble keeping busy, and a person with good consultative and collaborative skills would have good potential to help shift beliefs and attitudes over time.

We do not assume that supporting more extensive evaluation is a given. While we believe the demo projects will offer very useful concrete examples, based on our work with them, and on the findings reported here, it is also reasonable to conclude that the demo projects are larger and more complicated examples than can be supported routinely by the OUO or reasonably requested of faculty. If this is the case, clear communication about the expectations for evaluation will be especially important.

¹ For example, iSTEM supported a mini-workshop on evaluating teacher professional development at its fall 2011 symposium, led by Sandra Laursen, E&ER, and Susan Lynds, CIRES Outreach. It was well attended by campus STEM outreach professionals. However, we are unaware if any of the attendees made use of the approaches or tools that were shared.

5.3 Encouraging Engaged Scholarship

The “engaged scholarship” model that many of the Type 2 projects exhibited has gained traction on many campuses, and language in the Flagship 2030 reports (2008) suggests that CU likewise seeks to support this type of engagement. As Stoecker et al. (2010) argue, these community-based projects offer the greatest opportunity to document real and lasting outcomes.

We found that faculty leading such projects felt secure in their ability to carry out their scholarship, but they did share some issues and concerns around the community-engaged aspects of their work. One interviewee provided a useful metaphor for thinking about community engagement:

I don't think that the systems have been established, and that's why I think the outreach program is so important. Because—I think it's like the avenues, the highways, the roadwork hasn't been laid down that makes it easy for faculty members to travel from campus to the community. I think a lot of faculty members would be interested in doing that, and see the value for their own scholarly work. But... it's one thing to walk the road, walk the bridge, from the university to the community. It's another thing to actually having to build the bridge piece by piece, and that's a barrier for most faculty. Most faculty members, particularly early in their career, just simply don't have the bandwidth to do. To the extent that programs like the outreach program exist, they help to build the bridges that faculty members can walk across, or meet the community in the middle, which is ideally how it works.

Statements like this suggested to us that it might be interesting to gather these “engaged scholars” as a group to swap notes and ideas. They might be able to share solutions to common problems, or consult with younger scholars just beginning to “build the bridge.” We could imagine value from a lunch meeting or reception where these people could meet and share information about their own work, perhaps a discussion series or workshop focused on peer-to-peer sharing of work and brainstorming solutions. Issues of potential mutual interest that were raised included ownership and authorship in community collaborative work; fund-raising; advice on networking and partnering with other organizations and professionals in the community (including practical details such as preparing a memorandum of understanding); growth and sustainability of a community-based project, especially after a relationship of trust has been built. Perhaps such a group might eventually choose tackle the potential for long-term evaluation of community outcomes that Stoecker et al. (2010) espouse.

A small number of interviewees expressed a vision for integration across campus of community-engaged work. We quote one respondent in detail because of his thoughtful rationale:

On the Boulder campus we do a terrific job when it comes to interdisciplinary research. We have wonderful institutes and centers that foster and nurture that interdisciplinary. [When] we look at teaching and education, the examples are much fewer. I think we need to experiment with and find innovative ways to deliver interdisciplinary education, particularly undergraduate education. Because, we have this model that tuition follows students... there really is no incentive for any college on the Boulder campus, material incentive, to offer courses to students from other colleges, or other departments. I think to find models that work, that support interdisciplinary courses, will make it much easier to do service learning, to do community outreach through service learning, [or] any way that cuts across the problems—the way that we try to do it with [our project], but I think in a

very small way. I think if we can institutionalize more innovative ways of doing that, I think it would greatly strengthen the impact that CU Boulder would have on the communities they work with locally and elsewhere in the state, and country, and even internationally.

(continuing) What I'm trying to say is that it would be very useful to think of community engagement through service learning, or other ways. Service learning course is one way in which community outreach can help. To think of it as an engagement that requires preparation across a number of phases, that you start early on and stay on this curriculum. And the same with instructing. We have instructors in our program who are very interested in community engagement, but don't have necessary preparation to work with community partners, particularly if those partners come from a different cultural or socio-economic background than they do. It doesn't apply only to students. Again, something that the campus maybe would do more of is offer support to instructors to make them feel more confident, to prepare them better to engage with community partners of diverse backgrounds. Very practical things.

If such a vision is one that furthers OUO goals too, helping to form and support a collaborative group on campus may be a productive approach or at least a laboratory for learning more about the possibilities and challenges.

5.4 Meeting Other Needs of Outreach Projects

As noted in Section 6, outreach teams identified other issues or challenges where OUO might be able to assist by providing information or resources that could lower barriers to carrying out their outreach projects. Since many of these issues cut across projects and colleges, a "one-stop shopping" strategy may be valuable, so that faculty do not iteratively solve problems that others have already solved. Some of these are simple needs for information that could be met by gathering information on the OUO web site; others could be met by arranging gatherings or networking events. Potential solutions for meeting the needs listed in Section 6 include:

- Liability guidelines and procedures: This information could be obtained from the Office of Risk Management and provided on the OUO web site, with contact information provided for questions about specific situations.
- Video/photo release guidelines and sample forms: This information could be obtained from University Communications and shared the OUO web site.
- IRB procedures: The OUO web site could provide information about IRB specifically related to outreach projects. We spoke with Claire Dunne at the IRB office about this and can prepare a short statement summarizing her advice. Claire agreed to check such a statement for accuracy, and suggested that she be the main point of contact for faculty with further questions.
- Advertising and/or publicizing outreach projects: Again, the OUO web site could gather information about commonly used university and local publicity venues, and about if, when and how the OUO can assist with design or cost. PR approaches should be identified that can address both specific events and ongoing services, such as mental health clinics.
- Grants and fund-raising: This need seemed particularly acute for projects involving community partnerships, where potential funders might include local and state funding

sources targeted to community services (rather than more traditional academic funders of research and education). It may be worth considering an event to connect a subset of these faculty with well-networked individuals in the community and/or with the CU Foundation, or to offer help to individual faculty in making such connections.

- **Experiential learning:** A standardized solution for offering credit for service learning (e.g. a one-credit course or add-on) would be useful to several faculty. Ideally, this option would be available across colleges; at a minimum, a successful model in one college could be shared with others who wished to pursue a similar approach in another college. Ideas about other models for engaging undergraduates could also be listed, e.g. UROP, practicum courses, the Learning Assistant program. One interviewee was aware of a model at another university to support alternative teaching assistantships for graduate students that were not tied to specific courses but rather to ongoing outreach programs.
- **Collaborative work:** There is opportunity to increase the inclusiveness of language around the Faculty Outreach program. On some teams, the clear leader in practice was not a tenure-eligible faculty member. While there may be reasons to provide incentives to tenure-stream faculty to participate, there may also be opportunities to recognize and value the work of other types of outreach professionals on campus. We are aware of the desire of some non-faculty to serve as PIs on outreach awards. The opportunity for this designation may mean more to them professionally than it does to some faculty.

6 Conclusions

Rather than reiterate the findings, we conclude with a few overarching thoughts:

- The quality and diversity of outreach projects is a strength of the Faculty Outreach program. Decisions about evaluating them should take care to preserve these assets.
- Some projects would benefit from outcome evaluation, and some would not. Some faculty are interested and some are not. Faculty autonomy and interest will necessarily shape what is desirable and possible. Non-faculty collaborators may emerge as leaders in this domain.
- Developing the habit of mind to gather and use outcome evidence in conducting outreach will require a cultural change. It will not be rapid, but there are opportunities to begin.

7 Acknowledgments

We are most grateful to all of our interviewees for their time and thoughtfulness. Their creativity and commitment were inspiring. Rebecca Crane provided assistance and insights in early stages of the project. We thank Linda Molner Kelly and Anne Heinz for helpful conversations.

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9 List of Appendices

Appendix A - Outreach interview protocol

Appendix B - Evaluation strategies for outreach projects

Appendix A: Outreach Interview Protocol

PRE-RECORDING

- Review purpose of interview: Interview with recipients of Outreach Office mini-grants to gain a deeper understanding of their projects and their relationship to OUO especially with regard to evaluation activities. Any questions?
- Review confidentiality and consent form
- Verify permission to record.
- Turn recorder ON.

PROJECT BACKGROUND

- Tell me a little bit about your own background and research interests.
 - Probe for existing level of experience with research and evaluation.
 - Probe for prior experience with outreach and engagement activities.
 - Probe for personal motivations for participating in outreach.
- Now, let's talk about [Name of Project] itself. How did you get the initial idea for the project?
 - Then what happened?
 - How has your project evolved over time?
 - Probe for intentional changes and improvements. What was their decision-making process around these changes?
- I'd also like to know a little bit about the relationship between your project and the CU Outreach office (under Continuing Education).
 - At what point in the process did you seek Outreach funding?
 - Probe for: e.g. Did they have the project in mind and then seek out funding sources? Were they inspired to develop the idea because of the availability of Outreach funding? Is Outreach funding a contribution to a project that was already ongoing?
 - What part of your project does this funding support? Is your project wholly dependent on Outreach funding?
 - Why does partnering with the Outreach office make sense for this particular project?
 - Has the partnership with Outreach had an influence on the shape of your project?
 - Probe for impact, if any, of Outreach evaluation and reporting requirements on evolution of project.

PROJECT GOALS AND OUTCOMES

- Tell me about the major goals of this project. (Or, if they have already talked about project goals, reflect and refresh - check that I understand them correctly and ask if there are any other goals they haven't mentioned.)
- What is the primary audience you are aiming to reach?

- Have you run into any obstacles trying to reach this audience?
- What kinds of outcomes are you hoping to see for this group of people?
- What have you seen so far in terms of whether they are achieving these outcomes?
 - What evidence do you have of this achievement?
 - What do you observe?
 - What do they tell you?
 - Listen for both anecdotal evidence and descriptions of things they've measured.
 - Probe for thinking around evaluation, how reliable their current methods of measuring activities seem to them, whether and in what ways the feedback they receive feels useful.
- Have you noticed any outcomes you didn't expect? What has surprised you?

- Who else also benefits from your project?

Probe similar issues as above: Obstacles reaching this audience, outcomes hoped for, outcomes observed, how outcomes are measured, unexpected outcomes.

- What would this project look like if it were a success? How would or do you know that it was successful?

EVALUATION

- What have you done around evaluation so far? (Or, if evaluation methods have come up previously, "It sounds like you've done the following things around evaluation so far: x, y, z. Are you using any other evaluation methods we haven't talked about yet?")

- What have you measured or what are you planning to measure?
- Where did you find or how did you develop the tools you are using to measure these things?
- What thoughts have you had about other types of evaluation you might want to try?
- What are some of the obstacles to trying these evaluations?

- What have you learned from your evaluations, so far?

- Probe for ways that knowledge gained from evaluation has been translated into programmatic change. What changes have they made? What changes would they like to make in the future?

- What role does evaluation play in helping you reach the project goals we've talked about?

THINKING ABOUT OUTREACH AND ENGAGEMENT

I'd also like to talk about your thinking around outreach in general. Traditionally, outreach is thought of as how the university shares its knowledge and expertise with the community, primarily through teaching and research. But one could also think of some ways that working with the community can benefit the university or its faculty and students too. This collaborative

“two-way street” model is sometimes called "engagement" to represent this mutual interaction and benefit.

- Are there ways in which your project is mutually beneficial both to the community and to your own scholarship?
- What value do you see, potentially or through experience, in doing collaborative, engaged outreach work?
- Are there aspects of the higher education setting or CU itself that make this kind of work difficult or easy?
 - What features of the organization support this type of collaboration, or get in the way?

FINAL QUESTIONS

- We've talked about the goals of your project. In addition to providing funding, how could the Outreach office support you in reaching those goals?
- Any advice you'd like to pass on to other recipients of Outreach funding, or to those seeking this funding in the future?
- Anything you'd like to add or emphasize? Anything else I've missed that is important?

(Thanks and goodbye.)

Appendix B: Evaluation Strategies for Outreach Projects

This appendix provides a list of potential evaluation formats that evaluators might consider when evaluating different project types. We also list several evaluation strategies either suggested or implemented by outreach teams across various project types, with short vignettes illustrating their use. While not all of these are scientific approaches to evaluation, they may provide very useful formative feedback and help to guide faculty in determining approaches or outcomes of further interest.

Type 1: Outreach related to faculty expertise but not strongly integrated with faculty scholarship

- Contact hours, number and demographics of attendees/participants
- Document analysis
- Pre/post tests
- Surveys or questionnaires (pre/post/follow-up)
- Participant journals, reflections or debriefings (individual or group)
- Focus groups or interviews
- Formal observations or video (e.g. classroom observation)

Type 2: Outreach strongly integrated with faculty scholarship

- Contact hours, number and demographics of attendees/participants
- Quantitative or qualitative research methods appropriate to the project
- Abstract from scholarly works related to project
- Excerpts from annual report to other funders or from scholarly work related to project

Type 3: Outreach presented in one-time events or event series with different audiences

- Contact hours and number of attendees/participants
- Exit survey
- Postcard or internet-based survey
- Visitor observations or interviews

A variety of “evaluation toolkits” are available online for specific domains of work. We have not reviewed them with any rigor, but we like the philosophy of the toolkit offered by the Evaluation Trust for community and volunteer organizations: “People tend to worry about methods—but getting the questions right, and thinking who you need to involve are more important. You are using everyday skills of making contact, getting people to speak, and listening and taking notes—only in a more planned and rigorous way.” The chart of methods appropriate under differing constraints seems useful for selecting evaluation methods for faculty outreach.

<http://www.evaluationtrust.org/tools>

Evaluation strategies reported in interviews

Informal observation

A number of projects reported altering their programs based on simply paying close attention and debriefing their activities when completed. For instance, one team noticed that by adding refreshments to their event, the event became more engaging for participants.

We had some money left over and we said, Why don't we just provide refreshments? Now we've realized that people hung around a long time just to ask all sorts of questions.

Another team had developed hypotheses about participant impact from observing audiences:

I had some question about whether the smaller kids were going to be able to understand what was happening. The one thing that was clear to me is they were fixed on the play and what was happening, and they were paying attention—and that's the first positive sign, that they were paying attention. Nobody was getting up and running to the bathroom.... So I think we've got good anecdotal evidence that this was a unique way to talk about a significant problem that kids don't get a chance to talk about typically in a school setting, under these kinds of conditions where it's safe.

When projects were small, formative feedback could be gathered quite informally:

If we can get feedback from [the participants] it will be interesting to correlate the feedback among the different participants and see what the perspectives are and how they differ. They'll inform us later on about what we did right, what we did wrong, how we should modify it going ahead. This is our first foray into that level of things, and we'll see how it goes. But if it doesn't go well, it's not going to prevent us from continuing, it's going to inform what modifications we make to move forward.

Anecdotal evidence

Several faculty related anecdotal evidence of impacts of their outreach projects. Many conversed with or received letters from teachers, children, principals, audience members, etc. This information is not really data because it is not collected systematically, but it provides a very useful starting point for outcome evaluation by showing what aspects of the outreach are salient to participants. "Be better about gathering up that anecdotal information for whatever value it has," advised one interviewee.

Tracking and analysis of participation

Simple counts have allowed some teams to describe the broad impact of their outreach project and document some immediate outcomes. An educational enrichment project for middle school students reported:

So, over two years, we had students from 70 different schools, and from 30 different hometowns from around Colorado. ...Yesterday was one of our biggest groups that we've ever had for middle school. We had almost 60 kids come, not counting parents, and I would say from about 25 different schools. So, we're really attracting students from a wide area, not just from a couple schools in Boulder.

And I think if you just look at the numerical data of who's coming and the distribution among different schools, and boys and girls, and you look at the overall performance in the contests, I think between those two things, I think you've got as much evaluation as we really need to say the program's successful. I wouldn't think there'd be anything more that'd be needed.

So, how do we measure whether we're being effective? Well, that's one way. They like what they are getting and they keep coming back for more. They tell their siblings and so their siblings come too. So, in that sense, we can believe that we're providing services to at least one group of kids who are looking for something they can't find in school.

Audience surveys

A Type 3 project team brainstormed several approaches, noting some difficulties with each.

Another possibility would be to have them fill out a questionnaire when they come, because I feel uneasy about having them fill out something at the end because some of [the presenters] might have worked really hard to prepare a talk. We could hand out clickers and have them respond right away, but it might be embarrassing. And the other way would just be to send out a questionnaire to everyone on our e-mailing list, just see what people think. We won't get much of a response probably, but we might get 40 or 50 responses, who knows.

Process evaluation

One interviewee noted, "At least do what we call process evaluation. I think every grant should be able to do that and give an accounting of exactly what happened, how many kids were involved, or how many agencies were impacted, or what—which is a start. In some cases they could do some kind of quasi-experimental study around it."

The actors always closed every workshop by talking about [a and handing out little small bookmark flyers with that number on there, and explaining to them what it is. The way it worked with the students—and I did manage to finally pull up [the data]—(looking at computer) in ten weeks of touring the actors did 56 performances, and conducted 152 workshops. 11,594 students watched the performance, 3,518 students participated in workshops, 85% said they were more likely to report bullying, and 87% wanted us to return to their school. This was not highly scientific surveys that were done; this was 'Heads down, raise your hand'—that kind of stuff.

Scientific designs

One Type 2 project team suggested study designs that could be carried out that would have some validity even within the constraints of the project design, such as the absence of a matched comparison group.

There are designs we could use that don't require a control group, [where] we could use some kind of a regression discontinuity, or interrupted time series kind of analysis. But it means we would have to know ahead of time and be collecting some information ahead of time, and just see what happens after this event, that kind of thing. But short of that, I think the [less formal] things are valuable. They're not going to get you an article in a journal demonstrating the effectiveness of this strategy. Evaluation is a process, and you start with relatively simple things, which we think we can do. And then you add.

Another Type 2 project leader articulated the extensive data-gathering carried out for her clinical work. This level of data collection and analysis was only possible because the clinic was also supported by research grants and integrated into a scholarly project, but it is a model for demonstrating how different domains of outcomes can be addressed by different evaluation tools.

We have a couple of different domains in which we evaluate outcomes. They are consistent with the core mission areas. One is with respect to student training. That is the number of students that we can provide education for within the context of our clinic, and that's both at the graduate and undergraduate level. At the graduate level, the

students take a formal practicum course, and they get a grade for that. I evaluate their clinical performance on a weekly basis, in terms of observing their treatment sessions that they have, reviewing their documentation, those sorts of things.

(continuing) We have sponsored a number of community education lectures, or clinical workshops for professionals. We do feedback and evaluation at the end of those; we use self-report questionnaires that assess knowledge, gains, and satisfaction. That's a training component.

(continuing) In terms of the clinical service component, we do some kind of outcome measurement for every client, and it may vary, depending on what their clinical problem is, what type of measure we use. But some form of self-report tracking of their symptoms over time, and their clinical improvement. And we also have a satisfaction measure that we administer to clients at the end of their course of treatment. Those are important domains.

(continuing) And then in terms of the link with the research scholarly piece, we evaluate our productivity in terms of publications, grants, presentations, that kind of standard academic stuff that's linked substantively to the mission of the clinic. And then talks that we might give to the community. Those are some things.

Common outputs or outcomes identified by the outreach office

One faculty member suggested the outreach office ask for evaluation of specific outcomes.

Having someone available, maybe, to provide consultation around the development of a specific project, and how you would assess outcomes, is probably useful for people who don't do that at all. Or at least to have examples available on the web site, or some sort of thing. Maybe there are some basic metrics that the outreach division develops some consensus about, 'These are things we care about.' I don't know, like really basic stuff—like number of people to whom exposure is increased, or their satisfaction, or self-perception of knowledge gain. Maybe the outreach division decides that one of the outcomes it really cares about is the perception of the university. The outreach division could develop a questionnaire that they ask all outreach efforts to use [at] the beginning and the end of an outreach project. Are there shifts in the way the community perceives the university? Those sorts of things, I think— a lot of it has to be project-specific obviously, but there might be some general kinds of metrics that the outreach division can make available to people for assessing the effectiveness of what they're doing.