Sustaining Community–University Partnered Sustainability Research: A Typology Grounded in Community Partners' Goals and Motivations

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Abstract

Community–university partnerships are a critical vehicle for promoting sustainability, and the partnerships themselves can be sustained by ensuring that participants achieve mutual benefits in terms of their respective goals and missions. Although the literature emphasizes mutuality and reciprocity, fewer studies investigate community partners' motivations for participating in community–university partnerships in their own terms. Drawing on semistructured interviews and Q methodology, we identify four distinct perspectives among our community partners, each prioritizing a different set of goals and working from different interpretations of community–university partnerships. One perspective stresses solving practical problems, another focuses on building organizational capacity, a third advocates for recognition of their community's lived experience, and a fourth aims to articulate visions of a sustainable future. These four perspectives suggest a spectrum where some partners prefer a more transactional partnership whereas others work toward a fundamental transformation of how society conceptualizes knowledge and expertise.

Keywords: community–university partnerships, transdisciplinary research, participatory research, sustainability, Q methodology

Since the 1990s, universities and funders have become increasingly interested in serving local communities and regions, and many scholars have taken up community-based research in response to this charge (Curwood et al., 2011; Groulx et al., 2021). The emphasis on more systematic and comprehensive campus engagement in local communities has long been facilitated by a number of factors, including (a) federal programming resources, such as funding and technical assistance in creating partnerships; (b) experiential and active learning tactics, such as service-learning and internships; and (c) recognition that mutually beneficial partnerships between faculty and the community should count not only as service, but also as a legitimate form of place-based research (Bringle & Hatcher, 2002). More recently, engagement models have shifted from a one-way exchange, emphasizing delivery of knowledge and service to the community, to a two-way mode of exchange that prioritizes partnership, reciprocity, and mutual learning between college institutions and their communities (Barrera, 2015; Groulx et al., 2021; Mtawa et al., 2016). Scholars have tended to rethink campus–community partnerships in terms of whole-systems thinking, for instance through experiential learning programs that reconceptualize students as actors capable of changing their surrounding context by participating in complex social–ecological systems (Beard, 2015; see also critique by Lake & Wendland, 2018). As a methodological approach, university–community partnerships that have effective structures for collaboration promote outcomes that allow for equitable inclusion of diverse partners; enhance the relevance, quality, and sensi-

tivity of the research; decrease community distrust of institutions and research; and further local community goals (Curwood et al., 2011).

Building better partnerships between colleges and their communities is at the heart of renewing community engagement (Kellogg Commission, 1999). Some universities have historically emphasized service to the community, particularly religious colleges and land-grant institutions founded with service provisions already established (Bruning et al., 2006). More recently, theorists and practitioners have interrogated the assumptions that underlie service-learning and developed alternative frameworks such as asset-based community development that refigure the role of the university and community in university–community partnerships (Lieberman, 2014). For the purpose of this study, we define university–community partnerships similarly to Curwood et al. (2011): A "university–community partnership" can be described as a collaboration between institutions of higher learning and community organizations for the purpose of achieving an identified sustainability goal through community-engaged scholarship that ensures mutual benefit for (a) any campus administrators, faculty, staff, and students *and* (b) community leaders, agency personnel, and members of the communities. The key notion here is mutual benefit or reciprocity, since robust community engagement is typically associated with "thicker" relationships that can be transformative for researchers, students, and partners alike (Clayton et al., 2010). These features distinguish university–community partnerships from other sorts of town–gown relationships, such as service-learning, characterized by thinner or more transactional relationships.

Motivations to Partner

Because university–community partnerships are defined by the mutual benefits provided to both campus and community partners, good accounting of the diverse benefits produced through the partnerships is the first step toward evaluating partnership practices and ensuring their long-term sustainability. Often but not always, campus and community partners pursue shared goals, for instance in the coproduction of place-based knowledge (Groulx et al., 2021; Loh, 2016). Knowledge is coproduced because partners bring different expertise to these collaborations; community partners might provide knowledge concerning stakeholders, their needs, and the best approach to meeting those needs, whereas campus partners might provide disciplinary theories or methodologies to design intervention plans, implement those plans, and evaluate outcomes (Plummer et al., 2022). This arrangement is not without its critics, however, with scholars having acknowledged for decades that higher education institutions are sometimes perceived as treating communities as "pockets of needs, laboratories for experimentation, or passive recipients of expertise" (Bringle et al., 1999, p. 9). Alternatively, collaborations focus on honing and leveraging the community's existing strengths, where it is the role of the university partner to link microstrengths to the macroenvironment; to provide external assistance only after gaps in knowledge and resources have been identified; and to help build new connections of people, institutions, and associations (Hamerlinck & Plaut, 2014). In any of its varieties, "co-production aims to reshape relations between the researchers and the researched" (Durose et al., 2021, p. 1; see also Hemström et al., 2021). Similar to coproduction, colearning partnerships function to promote mutual benefits to help overcome a lack of community resources (Mosier & Ruxton, 2018). Ultimately, universities and communities entering into new partnerships require a great deal of participation to land on an arrangement that honors the community's goals and priorities, and so techniques like those developed in the literature on community-based participatory research can ensure that partners' roles are accountable to the broader communities served by the partnership (Tinkler et al., 2014; Wallerstein et al., 2020).

Even when campus and community partners share some of the same goals, they often bring additional goals to the collaboration. Even if campus and community partners share none of the same goals, organizing the collaboration so that it supports their respective goals may keep the partnership mutually beneficial. In either of these cases, the relationship lacks reciprocity when one party's unique goals are granted such priority that the other party gains little from the partnership and their contributions, epistemic or otherwise, are taken for granted or exploited. In practice it is ordinarily community partners who suffer from these inequitable relationships, with scholars prioritizing academic research goals, institutional clout, or the delivery of community-

engaged curriculum without ensuring that their partners derive equivalent benefits (Moore & Ciotti, 2021). Leaders of effective university–community partnerships create an understanding work environment that allows room for supplemental or conflicting agendas. Several other variables have been found to affect the building of the collaboration, including lack of symmetry between partners, different perceptions of partnership, role conflicts, culture of the community organization, institutional context, professional views, and an imbalance in decision-making power (Strier, 2011).

In order to avoid these conflicts and asymmetries, partners must at minimum understand the diverse goals that motivate campus and community partners to participate in university–community partnerships. Knowing that the goals may be different is not enough; it is necessary to anticipate unique goals and ensure that they are appropriately prioritized in carrying out the collaboration. Case studies of successful initiatives point to the generation of useful or practical insights to support partners in pursuit of their particular missions; often these insights reflect novel innovations that partners attribute to the collaborative nature of the endeavor, or at least to the excitement and energy that new undertakings are capable of inspiring (Mosier & Ruxton, 2018). Such knowledge coproduction might solve (or at least ameliorate) pressing problems in the community, or contribute to anticipating challenges down the road (Bieluch et al., 2017; Groulx et al., 2021). Even if not directed to a particular problem, community–university partnerships can strengthen not only the relationships between researchers and their community partners but also the relationships among community organizations themselves, building community capacity for the long haul (Simon et al., 2018). Such collaborative strength can be especially valuable when some residents face barriers to participating in deliberation and collective decision making, as partnerships can help to elevate their expertise, motivate perspectives that have gone underappreciated, and reduce stigmas toward particular residents (Goddu et al., 2015; Lee & Van Zandt, 2019). Even for inclusive communities, partnerships might still generate a number of more instrumental outcomes that are important to community partners, for instance by securing funding or by shedding light on the work that an organization is doing and thereby increasing its recognition and credibility (Bengle et al., 2021; Hartman & Khan, 2018). Of note among these instrumental benefits are the organization's own learning goals, as partnerships promote continued learning and improvement within the organization, enable practitioners to maintain qualifications relevant to their field, and help to train a future workforce available for hire (Olabisi et al., 2022; Zimmerman et al., 2019).

Although it is possible to discern these different goals or motivations from case studies of community–university partnerships, community partners' own goals are rarely the central focus of qualitative or quantitative studies of the praxis of community engagement or collaborative research. Our study works toward a richer understanding of community partners' goals in order to better recognize the reasons that organizations engage in university–community partnerships and ensure that these partnerships produce mutual benefits. We pose these questions through a mixed-methods study of different community organizations from the Miami Valley Region of Southwestern Ohio. Specifically, we posed two interrelated research questions:

1. What outcomes motivate community organizations to engage in university–community partnerships focused on sustainability work?

2. Do community organizations fall into logical groups that suggest distinct perspectives or motivational schemas?

These particular questions respond to two tendencies in the scholarship of university–community partnerships. The first is the aforementioned tendency to understand community partners' motivations primarily through the contrast with university partners' goals; the literature is rife with examples of how and when university partners prioritized outcomes such as journal publications or student learning, yet failed to imagine alternative outcomes that could directly support the community partners' goals and mission (Bell & Lewis, 2023). The second is the related tendency to describe community partners as a monolith, under the assumption that different community organizations share similar motivations, and although these motivations must be distinguished from faculty motivations, they need not be distinguished from one another. As we describe in the next section, mixed-methods approaches that draw on Q methodology can shed light on the distinct

perspectives that abound between community partners and suggest that different community organizations are likely to prioritize different outcomes when working in collaboration with universities.

Method

To answer these questions, we conducted semistructured interviews including a goals-sorting activity over a 6-week period in spring 2022. After securing approval from our university's institutional review board, participants were recruited based on recommendations from university faculty with extensive histories of partnering with community organizations in the region. Additional organizations were identified based on their involvement in regional conservation networks, but care was taken to construct an invitation list that included both environmental organizations and organizations focused more squarely on social and economic sustainability. Invitations describing the scope and purpose of the interviews were sent to a total of 18 community organizations, with 14 agreeing to participate, including 10 nonprofit organizations and four municipal offices or agencies connected to local and regional governance. Given the continued risks associated with COVID-19, all interviews were conducted and recorded using Zoom. After the 14th interview, the researchers agreed that no new themes were emerging from the conversation. Although no precise estimate exists for the number of participants required for Q-methodological analyses, experts in the method recommend fewer participants than statements in the Q-set (16 in this case), provided the sample is strategically recruited to ensure the inclusion of diverse viewpoints (Ramlo, 2016; Zabala et al., 2018). We therefore concluded that 14 interviews was appropriate for the qualitative methods as well as the quantitative analysis of the particular goals-sorting activity described below (Aldiabat & Le Navenec, 2018).

All interviews were conducted by the first author and explored participants' experiences with, and evaluation of, previous research partnerships, their ideals regarding the process by which partnerships are carried out, and the character traits or virtues of university partners from the community partner's point of view (see the Appendix). To avoid leading with abstract questions about the goals or outcomes that partners value in these collaborations, the interview opened by asking about past projects, and then probed about the outcomes of those projects and whether the community partner found those outcomes valuable. These questions were asked before the introduction of the goals-ranking activity to avoid influencing participants' reflection on their goals and to determine whether the prepopulated goals included in the activity were comprehensive of the goals expressed by participants.

After these initial questions, the participants were asked to complete a goals-ranking activity based off Q methodology, an analytical approach invented by William Stephenson (1953) that investigates distinctive subjectivities or perspectives within a population. In this context, the methodology can determine whether different community organizations prioritize different goals or outcomes and discern how participants see connections among the various goals. An initial review of the literature on community-university partnerships, summarized in the Motivations to Partner section above, identified 40 goals that researchers have found to motivate community organizations. Because the authors believed that the ranking activity should sort only 16 statements to avoid overburdening participants, these 40 goals were distilled to 16 statements by grouping related goals and crafting statements that captured most of the content of those groups.

Given that the interviews were conducted via Zoom, the sorting activity was facilitated using a shared document in Google Docs that participants could access and edit during this phase of the interview. Statements were provided as text boxes that could be dragged and dropped into a diamond-shaped template that guided participants into identifying their highest priority, high but not highest priorities, and so on until disclosing their lowest priority (at this point, participants were reminded that even their lowest priority might be important to them, just less so than the other goals). The diamond template requires participants to sort statements into tiers; they are told that the row where they place a statement matters, but where they place a statement across a row does not matter, and so for instance that two statements in the second row are similarly important to one another, less important than participants' very top row, and more important than the statements placed in lower rows. Q-sorts were later translated

into raw data (e.g., the two statements in the second row assigned a value of "2") and analyzed using the R package qmethod (Zabala, 2014).

After the sorting activity, participants were asked to explain why they ranked their top goal as the most important, and depending on how much time had elapsed in the interview, to further elaborate on their second row of goals. They were then asked about the extent to which their previous partnerships have achieved these goals, whether their goals had changed over the course of their partnerships, and whether their partnerships have seemed mutually beneficial for both their own organization and their university partners. Next, they were asked to reflect on the collaborative process of these partnerships and the characteristics or virtues of a university partner that they would hold in high esteem. Interviews concluded with an invitation to add anything about community–university partnered sustainability research that had not been covered over the course of the interview. The total duration of interview conversation times, excluding the sorting activity and instruction time, ranged from 13 to 52 minutes, with a median duration of 29 minutes. Participants completed the Q-sort in roughly 10–12 minutes for a total median duration of approximately 40 minutes.

All interviews were professionally transcribed and qualitatively analyzed based on emergent themes. Both authors independently reviewed three interviews that the first author judged to cover the widest range of perspectives and recorded themes speaking to community partners' goals, success and failure conditions regarding the collaborative process, and university partners' character traits (both positive and negative). The authors shared initial impressions and developed a preliminary set of codes that they then deductively applied independently to the three transcripts using the content analysis software Dedoose. Then the coded transcripts were compared and disagreements over the applicability of codes were reconciled by further clarifying the meaning of each code in the codebook and combining or splitting codes in instances where a broader or narrower concept enabled consistent application (Ahuvia, 2001; Neuendorf, 2018). Once both authors agreed that the codebook provided sufficient guidance to apply the codes consistently, the first author proceeded to code all 14 transcripts, periodi-cally meeting with the second author to describe any challenges in interpretation. Most if not all challenges concerned that specific language used to denote a code, and not the underlying concept, so all revisions to the codebook at this stage involved changes in terminology and not content.

Results

First, we present the findings of the interview analysis to describe the outcomes that motivate community partners to engage in university–community partnerships focused on sustainability research. Second, we present results from the Q-sorting activity to suggest a typology of four distinct groups of community partners in this context.

Outcomes Motivating Participants' Engagement in University–Community Partnerships

Participants expressed a wide range of valuable outcomes prior to the Q-sorting activity, including 15 of 16 outcomes included in the sort—thus aligning with prior literature reviewed above. The average participant invoked five distinct outcomes, with discussions ranging between 1 and 10 outcomes. Table 1 summarizes these outcomes and reports the number of participants who expressed desire for that outcome prior to the Q-sorting activity. Nearly two thirds of participants spoke to the importance of innovation in the service of useful or practical strategies to anticipate, prevent, and solve problems that are facing the community. One partner noted that "they can draw upon the research and information gathering that . . . students have put together to make informed decisions," or that, as another participant put it, "they were looking for what were the best practices, effective strategies." Another explained that "sometimes it helps to have an outside researcher come and see some of the things that you're doing, because they have background, and then . . . things might pop up for them that if you're in the weeds every day, you won't see."

Approximately one third of participants stressed during the opening question that they valued partnerships that generated accessible information, elevated the community's expertise and reinforced their credibility, and helped to dismantle barriers to community members' participation in decision making. It is worth noting that, although these goals came up less frequently in the opening question, they were

Table 1. List of Outcomes Expressed by Participants, Ordered by Number of Participants Who Expressed the Value in the Opening Interview Questions

Labels	Descriptions (A successful partnership with university researchers is one that . . .)	#
Practical	. . . produces more useful, practical, or cost-effective strategies for advancing your mission	9
Solutions	. . . develops and implements plans for solving pressing problems in the community	9
Anticipates	. . . anticipates and prevents problems that might arise within the broader community	8
Innovation	. . . generates innovative solutions to challenges confronting the organization	6
Relationships	. . . establishes, sustains, or expands relationships among individuals and organizations in the community	5
Elevates	. . . recognizes and elevates the existing expertise in the community	5
Accessible	. . . creates and shares information in formats that are accessible to the broader community	5
Barriers	. . . identifies and addresses barriers to community members becoming involved in local decision-making	4
Credibility	. . . increases the reputation, perceived credibility, and recognition of the organization	4
Students	. . . trains students to take an active role in improving their community	4
Perspectives	. . . shares the perspectives of community members who are often excluded from community efforts	3
Funding	. . . secures the necessary funding for accomplishing the organization's goals	3
Energy	. . . brings new energy to the organization by engaging in new and exciting projects	2
Learning	. . . promotes learning and continued improvement within the organization	2
Stigma	. . . reduces stigma towards certain neighborhoods or groups	1
Qualifications	. . . maintains and stays up to date on qualifications in one's profession	0

often highly ranked after the goal–sorting activity, which may suggest that that activity conveyed that these goals were germane to the discussion and worthy of discussion as research outcomes. For instance, those who did express the value of relationships as outcomes tended to emphasize it, with one participant detailing a project wherein "we help neighbors grow their own food, get resources, have educational workshops, and try to build community through that. [The university researcher] focused on how to help us." Another participant offered, "It's more like do you get the sort of specific strategic guidance you were looking for, like a specific deliverable you were looking for? Maybe not, but do you build relationships? Yes."

Others discussed the importance of outcomes that are accessible to members of the community, with one participant stating that "oftentimes research is done on the community instead of with the community,

and so making sure that the results are given back to the community so that they can use it . . . is important." The importance of elevating existing expertise in the community was often evoked with discussing efforts to identify solutions to community issues. For example, one participant expressed the belief that "the community teaches us. . . . They're the ones that know their community best, so therefore they tell us what they need and then we try and help them with that." Furthermore, individuals emphasized the importance of addressing barriers (e.g., "We all work together to build a stronger and more resilient regional food system, regional economic system, regional social system"), gaining credibility (e.g., "If you want to go for a big USDA or NIFA grant or something, it really helps to have a research partner on board. . . . It gives your study credibility that we just don't have as a non-profit institution"), and student training (e.g., "There's certain perks to working in this industry in general, just getting out into the parks is nice, so I think these are attractive opportunities for students that are engaging or considering that type of career").

Typology of Community Organizations Working on Sustainability

As noted, participants were invited to sort 16 statements derived from existing research (Table 1) into a grid, positioning the statements so they indicated whether the participants placed higher or lower priority on achieving the stated outcome in their research partnerships. The structure of the sorting activity is based in Q methodology and facilitates recognition of distinctive perspectives among the participants. Effectively, the method investigates the extent to which variation in how participants rank outcomes (their Q-sort) can be grouped into some smaller number of "ideal types" that approximate the perspectives of participants associated with that ideal type. Settling on the number of groups then involves the consideration of multiple quantitative and qualitative factors where one weighs tradeoffs between fewer, potentially oversimplified, ideal types and more, potentially unwieldy, ideal types. The goal is to settle on the number of ideal types—to extract some number of factors— that provides more fidelity to the diversity of perspectives than a simple averaging of everyone's rankings but doesn't introduce so much detail that the resulting typology is too complicated to use in practice.

Initial consideration of a scree plot of Eigenvalues suggested that each additional factor extracted beyond the fifth factor provided diminishing returns toward explaining variation among the participants' Q-sorts. An analysis based on three factors explained 41% of the variation across the Q-sorts; an analysis based on four factors explained 51% of the variation; one based on five factors explained 60%. Qualitative considerations were then weighed to determine whether an analysis based on three, four, or five extracted factors coherently organized the perspectives of participants. For each analysis, we considered the statements deemed characteristic of each factor within that analysis, which represent where participants who are associated with that factor placed relatively greater (indicated by an Eigenvalue greater than 1) or less (indicated by an Eigenvalue of less than -1) emphasis on an outcome as compared to the average participant. An analysis is more coherent when its characteristic statements appear conceptually similar or related and less coherent if its characteristic statements appear unrelated. We also considered which participants would be associated with (or "load onto") each of the factors and reflected on whether the grouping of participants suggested by this quantitative analysis would parallel similarities in their responses across the overall semistructured interview. In light of both sorts of qualitative considerations, we selected the analysis based on four factors to best account for the distinctive perspectives among the participants. Table 2 provides the Eigenvalues for all statements according to the four-factor analysis, with statements considered characteristic of that factor indicated in bold.

We deploy the following labels for each of the four factors in an effort to capture what distinguishes each group: (1) problem solvers, (2) capacity builders, (3) far-sighted visionaries, and (4) community advocates. Problem solvers place comparatively higher priority on innovation and solutions. The term "problem solvers" reflects these organizations' emphasis on solving pressing problems in the community, as well as problems within the organization that may be inhibiting programming efforts. Capacity builders place comparatively greater emphasis on relationships and funding, and though credibility falls just short of the typical quantitative threshold to consider

it characteristic, triangulation with interviews suggests that credibility is desired. The term "capacity builders" reflects these partners' strong interest in engaging with university researchers who are in decision-making roles and capable of contributing to executive procedures (e.g., grant writing). Far-sighted visionaries place comparatively higher priority on the outcomes new energy, innovation, practical, and funding. The term "far-sighted visionaries" reflects their emphasis on imaginative and intentional practices to improve organizational programming. Community advocates place comparatively greater emphasis on the outcomes accessible, elevates, and barriers, while placing lower priority on solutions. The term "community advocates" reflects these organizations' emphasis on facilitating impactful research that may be used to advocate on behalf of community needs.

To determine whether a participant belongs to a particular grouping, factor loadings were calculated as the multiplier for the desired level of statistical significance divided

Table 2. Characterizing Statements for Motivational Frames

Outcomes	Problem solvers	Capacity builders	Far-sighted visionaries	Community advocates
Practical	0.80	0.27	**1.07**	0.81
Solutions	**1.45**	0.57	0.00	**−1.84**
Anticipates	−0.63	−0.62	−0.71	−0.59
Innovation	**2.03**	−0.58	**1.07**	0.10
Relationships	0.22	**1.09**	−0.35	0.36
Elevates	0.78	**−1.26**	−0.36	**1.54**
Accessible	0.43	0.50	−0.36	**1.20**
Barriers	0.00	0.45	**−1.79**	**1.42**
Credibility	−0.93	**0.99**	0.35	0.00
Students	−0.87	0.11	−0.72	−0.71
Perspectives	0.38	0.62	0.02	0.59
Funding	−0.20	**1.71**	**1.79**	0.00
Energy	−0.75	0.13	**1.06**	−0.30
Learning	−0.73	−0.75	0.71	0.00
Stigma	0.03	**−1.09**	**−1.78**	−0.88
Qualifications	**−2.00**	**−2.14**	0.01	**−1.72**

Note. Outcome statements with Eigenvalues greater than 1 or less than −1 are generally considered characteristic for a factor and are indicated in bold. The intersection of Credibility and Capacity Builders is bolded despite exhibiting an Eigenvalue of less than 1 as respondents frequently emphasized the importance of credibility through lengthier elaborations

by the square root of the number of statements in the sort (Watts & Stenner, 2012). At $p < .05$, 13 of 14 participants loaded onto one of these four factors; the one remaining participant was unable to load significantly onto any distinct factor. Interestingly, the typology cuts across the area of sustainability in which the participants work. Problem solvers included community services leaders, city program directors, parks services, and water-protection services. Capacity builders included conservation specialists, farmland restoration specialists, and community services leaders. Far-sighted visionaries included food equity specialists and community health services leaders. Community advocates included city program directors, food equity partners, and energy specialists.

Community Organizations' Rationale for Engagement in University–Community Partnerships

The four factors emerging from the Q methodology were used to group individuals based on the desired outcomes that motivate their engagement in partnerships with university researchers. Interviews were then analyzed to provide qualitative insight into these organizations' participation in, and hopes for, university–community partnerships. This analysis suggests that each of the four groups is motivated differently, and that these motivations inform variation in the type and extent of their partnerships with academics. It further suggests that, depending on the motivation of a particular community partner, their expectations for the conduct or character traits of an "ideal university partner" will differ. Specifically, community partners' understanding of university engagement varies from more transactional in nature to more transformational, with those in the latter category seeking university partners who can rethink the role of academic institutions in a more egalitarian society.

Problem Solvers

The most common perspective among participants, representing five of 14 participants, was that of a community problem solver. In terms of ranked values, problem solvers ranked *innovation* and *solutions* as among the most important goals for sustainable partnerships. As mentioned in the previous section, this type of participant was interested in solving problems in the wider community and within the organization itself. For example, one participant offered:

> If a partnership with university researchers can make us more effective in our work, that's a really important reason to work with university researchers. . . . They might have access to research tools, databases, journals. . . . Or be able to take more of a broad view, like look comparatively across communities at what people are doing that's effective.

Similarly, another participant from the problem solvers group stated that "I would expect the university to be doing research that was new, cutting-edge, exploratory, something that hadn't been thought of before, or looking at problems in ways that hadn't been looked at before. . . ." These quotes exemplify how problem solvers, compared to other types of partners, are primarily motivated to collaborate with university researchers for strategic guidance to increase the likelihood of achieving programming objectives. When asked about the traits that they look for in a university partner, problem solvers are most interested in academic researchers with relevant knowledge or expertise. For example, one participant explained that "when we seek out [a collaboration], it's usually because there's a specific need to understand something that we don't have the capacity for." Problem solvers appeared to prefer collaborations that allow partners to "put their heads together" to come up with new solutions. Overall, interviews with problem solvers emphasized the desire to work with academic researchers who operate similarly to professional consultants.

Capacity Builders

The next most common perspective among participants, representing three participants, was that of a capacity builder. In terms of ranked values, these participants were defined by *prioritizing relationships, funding,* and *credibility* more highly than others. As one participant put it:

> There's a level of legitimacy to the project, to our organization, our initiative, that would be lent to us by having respected institutional partners who, even if they weren't primary financial contributors, by collaborating with us, I believe they would lend a tremendous amount of

weight to our initiative, simply be-
cause we're new and nobody really
knows us.

The participant discusses the role of the collaboration in building trust among community members, and this sentiment is echoed by other participants categorized as capacity builders. Across various capacity builders, there was an appreciation of how enhanced credibility can influence the level of funding and relational support offered at the local community, state, and national levels. Compared to others, capacity builders emphasized the importance of collaborating with academic researchers who mobilize scientific knowledge to produce shared outcomes. For example, one participant expressed concern over proprietary information with research and stated, "It'd be great to be able to . . . publish some data . . . on our website that went along with the research project. . . . Research can't be just for the good of one individual researcher." Interview analysis revealed that capacity builders emphasize rather dependable gains from partners instead of flexible, creative, or empathetic characteristics, as evidenced by a participant's input: "We work together [to] meet both of our missions, but again, [it's important] having those goals for that interaction defined and then having ways of measuring whether we're helping each other."

According to both problem solvers and capacity builders, the purpose for collaborating with universities is largely related to overcoming resource limitations (e.g., insufficient funding, gap in specialized knowledge). Without the assistance of the university, the research described during interviews likely would have been impossible for the organization to carry out alone. This point was especially emphasized by newer organizations; for example, one capacity builder participant described how a university partnership was essential, as it lent a "level of legitimacy to the project, organization, and initiative" that allowed "citizens to, over time, trust" their organization. For both sorts of partners, partnerships are more transactional in nature, similar to the relationship between a client and consultant, and aspiring toward ideals such as reliability and transparency.

Community Advocates

Also represented by three participants was the perspective of a community advocate. In terms of ranked values, community advocates rank the outcomes *accessible, elevates,* and *barriers* more highly than others. As one participant stated,

Every community member has their own expertise . . . they know what they need and they maybe don't know the steps to get there. That's where the city or a community project . . . at the university can help. . . . Work with them to figure out how to get the solution that's needed.

Similarly, another community advocate participant emphasized interest in stakeholder engagement, in which someone was hired as a community engagement representative to "talk to community members to figure out exactly what they want to see through the project" and to identify potential barriers to achieving the goals of a given project. Compared to other types of partners, community advocates appear to operate from an almost entirely bottom-up perspective. This orientation is supported by the finding that community advocates did not place emphasis on the scholarly expertise of their university partners. Multiple interviews with community advocates indicate that the interest in partnering with a university is heavily dependent upon how much of the desired outcome directly benefits community members as opposed to benefiting either the organization or (especially) the university. For example, one participant expressed that because university partners are "looking for student learning outcomes, they [scholars] can easily just be like, 'Well, the student is learning through this, so we've done our due diligence,' . . . but in this case . . . it's not meeting clients' expectations." Community advocates tend to express distrust toward academic institutions and correspondingly value university partners that they find sincere and unlikely to be motivated by self-interest.

Far-Sighted Visionaries

Finally, represented by two participants, was the perspective of a far-sighted visionary. In terms of ranked values, these participants were both defined by prioritizing the outcomes *new energy, innovation, practical,* and *funding* more highly than others. For example, one participant emphasized the following:

Where we're going from a young emerging non-profit to a grow-

ing blossoming one, but we're still young and small. We don't have a ton of resources, and so funding is very important obviously, to continue to improve the quality of our programs and expand. . . . We're in an exciting growth and development phase. . . . We need support because it does take a lot of time to engage students for whether it's classes, research, the experiential hands-on learning on site, volunteering, all that . . . so I'm hoping . . . we can expand and increase that engagement for the benefit of, not just as a UD missionary, but the community and their needs we serve.

A different far-sighted visionary discussed the importance of bringing attention to "new and exciting [practices] that bring energy to the organization and allow us to expand our program," as a way to avoid stagnation. Further, these partners expressed a strong desire to be inclusive of all aspects of sustainability critical to the local region that was coupled with an appreciation for "hands-on learning" opportunities that contribute to mutually beneficial partnerships. For example, one participant described their ideal research partner as "actually trying to implement programs or projects that the students worked on . . . through their research project . . . I would like to see projects and ideas come to be a reality." Far-sighted visionaries reported greater interest in academics who exhibit a great deal of intentionality about the purpose of the partnership and consistently dedicate themselves to those purposes.

Participants representing both far-sighted visionaries and community advocates collaborated with universities in a way that challenges the traditional knowledge hierarchy by placing greater emphasis on the contributions and returns to the community. Further, the way the participants with these perspectives discussed the role of the university signaled that, because the university is located within the community, university resources (including skilled researchers) ought to be dedicated to producing knowledge for the larger community. For example, when asked to describe their ideal university partner, one community advocate participant stated the following:

> They're deeply embedded in the community . . . and able to develop

deep relationships and trust. And within that trust, I believe their intentions to want to walk with the community and not be like a superman or superwoman, but they acknowledge that strong people don't need strong leaders.

Although some community partners may depend on universities for programming assistance, others emphasize the perspective that the university has a responsibility to offer such services because it is part of the social charge of higher education institutions.

Discussion

These findings suggest that community organizations focused on sustainability work are motivated to partner with university researchers for a variety of reasons. University researchers must recognize these different motivations to generate impactful and inclusive collaborations with community partners and the stakeholders that they serve. Problem solvers were motivated by innovative solutions for pressing problems in the community, whereas capacity builders focused more on building relationships, establishing credibility, and securing support. Capacity builders already possessed relevant sustainability knowledge but were looking for assistance to increase engagement with community stakeholders. Community advocates stressed the importance of elevating community expertise and overcoming barriers to community participation, partly by generating more accessible information. Meanwhile, far-sighted visionaries emphasized the importance of working with university partners who bring new energy and resources to expand as well as continue ongoing programming. Although all four types of community partners described ideal partnerships as ones operating with a two-way exchange of information (Groulx et al., 2021), this vision was strongest in community advocates, who above all emphasized responsibility of the university partner to share critical information with stakeholders and, at times, completely yield ownership to stakeholders.

Closer examination of characteristics of the four types of community partner indicated that in addition to varying motivations for joining a collaboration, community partners differ in how they understand university–community partnerships more generally.

Problem solvers and capacity builders described collaborations in terms of a university providing expertise or at least scholarly resources necessary for programming. Community partners of this mindset appear most interested in collaborations where the primary role of the university is to fulfill a need by providing knowledge and resources. Though we have followed the convention of using "community–university partnerships" and "university–community partnerships" interchangeably, it may serve as a useful heuristic to describe *these* arrangements as "university–community partnerships" to signal that university capabilities are centered. These partners largely endorse the traditional institutional arrangement where universities are fountains of knowledge and university partners are specialized experts who deserve a great deal of epistemic deference. Certainly, many of the research projects described by community partners, for instance studies of water quality or of ecological restoration, fit the mold of scientific study where university partners bring theoretical and methodological insights that can be of tremendous service to the missions of nonprofits and municipal agencies. These expectations should be respected, and they can be codified through memoranda of understanding and other more formal arrangements where outcomes are explicitly specified in advance. There is an important place for partnerships that are more transactional than transformative, and norms that attach to transactions—such as transparency and fairness—are more appropriate to these practical contexts.

In contrast, the way far-sighted visionaries and community advocates discussed collaborations indicated that the most critical knowledge was already held within the community, and the primary role of university partners was to elevate this knowledge and render it more influential in collective decision-making. Community partners of this mindset worked to center the community's lived experience and expressed a lack of interest in working with scholars who acted separately from the community. Therefore, it is suggested that successful collaborative partnerships with community partners of this understanding operate as a function of civic interdependence, in which resources are shared, not controlled, and greater consideration is given to the outcomes desired by both partners (Barrera, 2015). It might be more apt to term these arrangements "community–university partnerships" to signal heuristically that it is the input or epistemic contributions of community partners that lead the way in knowledge coproduction. This terminology can subtly signal resistance to the power dynamic that is implied when listing the university before the community, which is in direct opposition to these partners' reasons for engaging in community–university partnerships. The broad aims of this transformed power dynamic often entail outcomes being more difficult to specify in advance, and though partners should enter the process with forethought on the roles and responsibilities of different members, it can be counterproductive to specify outcomes in terms of an agreed-upon transaction. Here, partnerships are sustained through the facilitation of an inclusive process, with clear checkpoints where goals can be discussed, evaluated, and reimagined. Although we recommend that institutions of higher education work with communities to identify and articulate the perspectives that are distinctive to their particular place, our findings reinforce the literature showing that partners' expectations include both transactional and transformative arrangements. Institutional policies that ensure best practices should differentiate between these types of partnerships and appeal to norms appropriate for sustaining each on its own terms.

Conclusion

Our study suggests that the literature on community–university partnerships has identified many of the goals that community partners bring to these collaborations, but also that further research is needed to survey these goals more comprehensively and systematically. Further, interviews with community partners coupled with a sorting activity reveal distinctive perspectives that tend to place relative priority on particular clusters of goals. In our study, four perspectives emerged, representing partners who emphasized solving practical problems, building capacity within their organization, advocating for underrepresented community members, and coconstructing a vision to orient collective action. Analysis resulting in these distinctive perspectives corroborates others' findings that community organizations may enter into partnerships with a variety of aspirations. Partnerships are most likely to generate mutual benefits and reciprocity if each partner's distinctive focus is made explicit and continually discussed.

An analysis like ours can inform better partnership practices by introducing an initial typology of perspectives that can better enable university partners to recognize the unique goals and motivations that community partners may bring to their collaborations. At our university, faculty do enter into partnerships with an appreciation that their own motivations are not necessarily shared by community organizations, and that partnerships must achieve mutual benefits by generating outcomes that might matter more to their community partners. Although each partnership should begin with a frank conversation about the outcomes that will sustain each partner's participation, entering that conversation with a preliminary understanding of a fuller range of perspectives can facilitate mutual understanding and recognition. Higher education institutions looking to facilitate transdisciplinary collaboration could work with their community partners to codesign a study along these lines and produce their own typology grounded in their particular place. At some institutions, coproducing knowledge through such a study can better position community-based researchers to advocate for evidence-based reward structures that encourage "thick" reciprocal relationships. More generally, such research helps us reflect and deliberate on the outcomes that qualify a partnership as mutually beneficial, moving beyond a contrast between university and community motivations toward a vocabulary that foregrounds the goals of community partners, whatever they may be.

Declaration of Interest

We have no known conflict of interest to disclose.

Author Note

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Appendix. Community–University Partners Sustainability Research: Interview Protocol

Review the consent form and in particular the purpose of the interviews: The literature on community–university partnered research emphasizes the importance of partnerships generating outcomes that support the personal and professional goals of both community organizations and university actors. Different community organizations bring different goals to these collaborations, and this research will contribute to a better understanding of what makes these partnerships valuable to them. Your interview responses will inform programming at the University of Dayton so that we as an institution can support more equitable partnerships, and it may also serve as the basis of scholarly articles to share insights with the broader research community interested in equitable community–university partnerships. If it's alright with you, we'd like to record our conversation for ease of transcription and analysis.

Interview walkthrough: The interviews consist of three stages; first, I'll ask you about your prior experience partnering with colleges or universities. Then, we'll focus on the goals that you have for these partnerships, both to this point and heading forward. Finally, I'll ask you to reflect on the outcomes and processes that qualify a partnership as successful in your eyes, as well as the character traits of partners that you hold in high regard. All told, interviews usually run 30–45 minutes.

Question 1	To begin, have you or your organization worked with researchers from local colleges and universities? What sorts of projects have you collaborated on?
Probing 1.A	[Listen for some of the outcomes of these collaborations] It sounds like one of the outcomes of this project was X. Were there any additional outcomes that you found valuable?
Probing 1.B	[If the organization hasn't collaborated] Are there any projects where you think there would be value in collaborating with local researchers? What would valuable projects produce?
Question 2	Next, I have a small activity that will help us to understand how different organizations assign value to different outcomes. Each of these sixteen statements expresses an outcome that some partners have reported as important goals for equitable partnerships. Over the next ten minutes or so, please place them into this grid, with the outcomes at the top representing the ones that you find most important, the ones at the bottom representing those you find least important (though not necessarily unimportant), and any that share a row as having roughly similar importance. I'm happy to help to clarify any of the statements, and you'll have the opportunity to discuss outcomes that are important but that aren't captured by these sixteen statements.
Probing 2.1	[Ask about the outcome they placed highest and what it means to them] [If time permits (e.g. total time to this point is less than 20 minutes), ask also about the second row of responses]
Probing 2.2	Thinking about the *outcomes* of successful research partnerships—we'll circle around to process shortly—are there any goals that you have for research that isn't included in the grid?
Question 3	When thinking about your past partnerships, do you believe that the partnership achieved the goals that you brought to the collaboration? Where did you find success? Were you ever disappointed?
Probing 3.1	[If total time to this point is less than 30 minutes] Did your goals change over the course of the collaboration? Do you think your partners' goals changed?

Probing 3.2	Have you found your past partnerships to be mutually beneficial for both you and the university researchers with whom you've collaborated?
Question 4	Now these outcomes are the result of your and your partners' collaborative process. Have you found the process of working with university researchers to be conducive to achieving your and your organization's goals? Why and why not?
Question 5	What would you like to see in a university researcher to make you feel confident about partnering with them? Your "ideal university partner" as it were.
Question 6	That covers the questions that we prepared heading into our interview. Is there anything that you'd like to add about community–university partnered sustainability research that we haven't discussed?