
Vol. 15 No. 2
Spring 2011

*Journal of
Higher Education
Outreach
& Engagement*

a publication of the Office of the Vice President for Public Service & Outreach
and the Institute of Higher Education
The University of Georgia

Journal of Higher Education Outreach & Engagement

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Outreach & Engagement*

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Despite increases over the last two decades in the number of degrees awarded to students from underrepresented groups in science, technology, engineering, and mathematics (STEM) disciplines, enhancing diversity in these disciplines remains a challenge. This article describes a strategic approach to this challenge—the development of a collaborative partnership between two universities: the

historically Black Elizabeth City State University and the historically White University of New Hampshire. The partnership, a type of learning organization built on three mutually agreed-upon principles, strives to enhance opportunities for underrepresented students to pursue careers in the STEM disciplines. This article further describes six promising practices that framed the partnership, which resulted in the submission of nine proposals to federal agencies and the funding of four grants that led to the implementation, research, learning, and evaluation that followed.

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University of Notre Dame

Community-based research (CBR) is an increasingly familiar approach to addressing social challenges. Nonetheless, the role it plays in the attainment of community impact is unclear and largely unstudied. Here the authors discuss an emerging framework aimed toward fostering community impact through university and community civic engagement. They describe how, through application of this framework to initiatives intended to reduce obesity, CBR might be focused for greater effect.

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News About the Journal

New Associate Editor for Dissertation Abstracts. I am pleased to announce that Elaine Ward, Arnold F. Graves Postdoctoral Research Fellow at the Higher Education Policy Research Unit of the Centre for Social and Educational Research, Dublin Institute of Technology, will serve as associate editor for Dissertation Abstracts. Elaine is co-award recipient of the 2010 IARSLCE Dissertation Research Award. IARSLCE is the International Association for Research on Service-Learning and Community Engagement. A call for dissertation abstracts will be announced later in 2011.

New Editorial Board Member. I am also delighted to announce that Barbara Holland is joining the *Journal's* Editorial Board. Barbara is a researcher and consultant holding academic affiliations with Indiana University-Purdue University Indianapolis, Portland State University and the University of Sydney (Australia). She has held executive academic roles at University of Sydney, University of Western Sydney, Northern Kentucky University, and Portland State University, and was Director of the National Service-Learning Clearinghouse for 7 years. Barbara is recognized internationally for her expertise on organizational change in higher education, community engagement, service-learning and partnerships, and has published and presented on these topics extensively including consultations with nearly 100 universities across six countries.

About this Issue

In January 2011, the Carnegie Foundation for the Advancement of Teaching announced the results of their 2010 call for applications for the elective Carnegie Community Engagement Classification designation. The designation recognizes an institution's commitment to community engagement through teaching, research, and public service, outreach, and engagement. One hundred and fifteen (115) colleges and universities received the designation (the University of Georgia was one of these 115), and will join the ranks of only 311 institutions nationally.

In the classification designation letter from Anthony Bryk, President of the Carnegie Foundation, four areas were outlined for continued advancement—by all institutions. Two of the areas, assessment and reciprocal partnerships, reflect the focus of the articles and book reviews in this second issue of volume 15.

Assessment. In this issue, Gary Lichtenstein and his co-authors present a survey instrument they developed to measure student learning outcomes from participating in community-based research courses. The authors invite readers to use the instrument to assess their community-based research courses.

Mary Beckman, Naomi Penney, and Bethany Cockburn, in their essay, propose three guidelines for coordinating multiple community-campus projects related to a particular topic: clear long-term goals and strategies, on-going evaluation with subsequent mid-course project adjustments, and broad commitment.

Reciprocal partnerships. Julie Williams and her co-authors tell the story of the strategic development of a collaborative partnership built on the mutually agreed upon goals of Elizabeth City State University, and the University of New Hampshire. Together, they are working to enhance opportunities for underrepresented students to pursue careers in science, technology, engineering, or mathematics.

Christopher Plein's essay examines how university faculty members' social construction of a community can influence their roles and actions especially when working with rural communities.

Tami Moore, assistant professor of higher education in the educational leadership program at Oklahoma State University-Tulsa, reviews John Forester's book, *Dealing with Differences: Dramas of Mediating Public Disputes* (Oxford University Press, 2009). Forester, a professor and director of graduate studies in the department of city and regional planning at Cornell University, examines how participatory processes work: How do collaborators design mutually beneficial and truly reciprocal relationships? How do they mediate differences? How do they learn from each other? Forester's observations can provide guidance to faculty and community members working together in participatory processes to address issues through dialogue and negotiation.

Mark Brennan, associate professor of community and leadership development at The Pennsylvania State University, reviews Frank Fischer's book, *Democracy and Expertise: Reorienting Policy Inquiry* (Oxford University Press, 2009). Fischer, a professor of political science at Rutgers University—Newark, reflects on the interplay between people with expertise (e.g., university faculty), and citizens deliberating on issues within the context of a democratic society.

Assessment of community-campus engagement, and the cultivation and sustaining of mutually beneficial reciprocal

partnerships promise to be areas of focus for universities over the coming years as higher education leaders continue to champion the civic missions of their institutions.

Trish Kalivoda

Editor

Acknowledgment

My thanks on behalf of the University of Georgia Office of the Vice President for Public Service and Outreach, to the authors; associate editors; editorial board members; guest peer-reviewers; publication assistants Julia Mills, Drew Pearl, Win Blair, and Katie Fite; copy editor Cathy Krusberg; and university librarian, Andy Carter for their dedication, time, and hard work, which led to the publishing of this issue of the *Journal of Higher Education Outreach and Engagement*.

RESEARCH ARTICLES

Development of a National Survey to Assess Student Learning Outcomes of Community-Based Research

Gary Lichtenstein, Trisha Thorme,
Nick Cutforth, and Martin L. Tombari

Abstract

With the goal of codifying student learning outcomes of community-based research (CBR), the authors created a conceptually valid and statistically reliable CBR Student Learning Outcomes Survey. The project began with individual interviews and focus groups with 70 undergraduates and faculty at six colleges and universities nationwide discussing perceived benefits of CBR. Based on analyses of these interviews, five CBR outcome constructs were derived: academic skills, educational experience, civic engagement, professional skills, and personal growth. The survey was piloted online in spring 2009 to students who had experienced CBR from 15 colleges and universities ($N = 166$). Factor analyses revealed strong statistical reliability across survey constructs. The authors invite faculty to use the instrument to assess CBR courses and invite students who have experienced CBR to complete the survey online through spring 2012, as part of a national study of CBR outcomes.

Introduction

As more colleges and universities have integrated experiential learning programs into their curricula, there has been an increase in research focused on identifying learning outcomes of such programs. Studies have identified a range of outcomes related to undergraduate students' participation in service-learning and, to a lesser extent, community-based research (CBR), including increased engagement with academic studies, development of professional skills, and civic engagement.

Although learning outcomes of service-learning and CBR are similar, CBR may have greater strengths in terms of academic engagement and deepening one's understanding of one's major, because identifying research questions and collecting data related to them develops and reinforces disciplinary knowledge in ways that service-learning may not. The overarching goal of the current research is to assess the effectiveness of CBR, begin to identify best practices, and examine the effects of various practices, based on diverse academic factors.

Several constituencies stand to benefit from the systematic assessment of CBR's impact on students. Institutions of higher education will be able to show the extent to which CBR courses are contributing to their institutions' missions and to students'

“Studies have identified a range of outcomes related to undergraduate students’ participation in...community-based research (CBR), including increased engagement with academic studies, development of professional skills, and civic engagement.”

learning and career preparation. Faculty members will understand the impact of their CBR courses on student learning, and will be able to use data to improve their teaching, while also advocating for CBR as a rigorous pedagogy to colleagues. Students will be aware of the contribution of CBR to their learning experience. Finally, community partners will better recognize how their participation in CBR provides critical benefits to students (Gelmon, Holland, Driscoll, Spring, & Kerrigan, 2001).

As a first step toward codifying the effectiveness of CBR, the authors developed an evidenced-based, conceptually

reliable, and statistically valid survey instrument with the potential to quantify student learning outcomes of CBR classes. This article describes the development of the survey instrument. Constructs were based on extensive student and faculty interviews. The five scales that constitute the instrument reliably assess five commonly discussed dimensions of student learning related to service-learning and CBR: development of academic skills, enhanced educational experience, increased civic engagement, development of professional skills, and personal growth.

Literature Review

Outcomes of Service-Learning

Throughout the research literature, proponents of service-learning express enthusiasm about the benefits to students at the college level (Coffey, 2010; Ghannam, 2007; Hart, 2006; Sherman & MacDonald, 2009). However, questions about the cognitive and affective benefits compared to direct instruction, a lack of clarity

about the politics and goals of service-learning, and the challenges of integrating service-learning experiences into the curriculum have led to caution in adopting this form of experiential learning (Eyler, 2000; Polanyi & Cockburn, 2003; Westheimer & Kahne, 2004).

Advocates of experiential learning have urged researchers to document student learning outcomes through the use of multiple methodologies and presentation of solid evidence, in order to provide a basis for replication and further research (Gelmon *et al.*, 2001; Mehaffy, 2009). At the same time, researchers identify challenges in assessing service-learning outcomes (Keen, 2009; Marullo *et al.*, 2003; Pike, 2009). One challenge is that service-learning can take many different forms (e.g., voluntary or mandatory, integrated into coursework or not, involving reflection or not). In addition, service-learning can be studied at many different levels—including effects on students, faculty, community partners, and institutions themselves (Keen, 2009). Even when a specific outcome is identified—for example, civic engagement—the concept can be defined very differently across different instruments, making it difficult to link studies that share similar outcome variables (Keen, 2009; Prentice & Robinson, 2007). Development of academic skills is often cited as a benefit of service-learning (e.g., David, 2009; Higher Education Research Institute, 2002; Vogelgesang & Astin, 2000), but what, exactly, constitutes “academic skills”? In the case of the student who says that service-learning has made her “more comfortable speaking up in class,” do the authors see this as development of an academic skill, social skill, professional skill, or personal growth? Becoming more comfortable sharing one’s perspectives in public settings could be an example of development in all four areas. This illustrates some of the challenge in codifying outcomes of CBR.

Generalizing results of studies also can be difficult, since many published articles looking at student outcomes of service-learning do not distinguish between different delivery types (e.g., courses with a service-learning component versus courses dedicated to service-learning versus service-learning as a cocurricular activity). For example, studies have shown that outcomes of service-learning are enhanced when the service-learning includes a reflection component, or when faculty integrate the service-learning experience into class discussion, but whether such components were part of students’ experience is not always assessed (Conway, Amel, & Gerwein, 2009; Hunter & Brisbin, 2000). Therefore, while studies of student learning outcomes often focus on students’ self-reported changes on variables such as academic skills, civic engagement, and professional skills, such studies often raise

questions about the mechanisms by which students participating in service-learning experienced these benefits (Gelmon et al., 2001; Higher Education Research Institute, 2002).

Although the reported benefits of service-learning are compelling, most studies of service-learning outcomes are not conducted with control populations. It is not always clear whether the benefits of service-learning outweigh the effort of implementing it, or what curricular trade-offs result, if any. In studies with control groups or that compare service-learning with non-service-learning alternatives, results are often mixed (Billig, Root, & Jesse, 2005; Deeley, 2010; Frumkin et al., 2009; Hunter & Brisbin, 2000; Phelps & Dostilio, 2008; Prentice & Robinson, 2007).

Outcomes of Community-Based Research

Often seen as a unique subspecies of service-learning, community-based research (CBR) shares critical characteristics of service-learning, but also has special features that may influence student outcomes differently (Strand, Marullo, Cutforth, Stoecker, & Donohue, 2003). Most particularly, CBR tends to be discipline-specific, and therefore has the potential for direct impact on a student's perception of his or her academic major. Because of the disciplinary nature of CBR, CBR is

“As more CBR experiences and programs become integrated into college and university curricula, it becomes increasingly possible and important to identify...the extent to which [various] features affect student learning outcomes.”

more likely to be delivered within the curriculum rather than as a cocurricular activity, since study design, data collection, analysis, and reporting are objectives commonly integrated into academic courses (Strand et al., 2003).

To date, CBR has not been studied nearly as extensively as has service-learning. A July 2010 ERIC search of *service-learning* and *outcomes* yielded 384 results, while a search of *community-based research* and *outcomes* yielded six. As more CBR experiences and programs become integrated into college and university curricula, it becomes

increasingly possible and important to identify features of program delivery (e.g., whether the course is a stand-alone CBR course or

CBR is a component of a regular course), how the CBR experiences are structured and delivered (e.g., whether reflection activities are built into the experiences, whether final products are produced, and whether final products, if produced, are shared in classes and/or with community partners), and the extent to which these and other features affect student learning outcomes.

Nearly all published discussions of CBR student outcomes are case studies (e.g., Willis, Peresie, Waldref, & Stockman, 2003; Puma, Bennett, Cutforth, Tombari, & Stein, 2009). Although the results are compelling, such studies make it difficult to generalize results beyond the specific experiences described. The authors found only one study that used a survey to assess CBR outcomes (Lewis & Niesenbaum, 2005), yet even this study conflates CBR and service-learning. In fact, the authors were unaware of a survey instrument that assesses CBR specifically along several dimensions of student learning outcomes familiar in the literature on service-learning, using conceptually valid and statistically reliable scales, and that can be implemented across institutions.

The instrument reviewed in this article seeks to fill this gap. The authors believe that the CBR Student Learning Outcomes Survey has the potential to assess learning outcomes at student, course, and institutional levels, providing a common means of evaluating CBR that can focus research efforts across institutions and help identify specific strengths of CBR, including program features that enhance students' experiences.

Survey Development

Identifying Potential Outcomes and Creating Constructs

IRB approval was secured prior to the study. During 2007–2008, Cutforth visited six institutions with active CBR programs. He conducted over 30 individual and focus group interviews with undergraduate students who had experienced CBR. Altogether, over 70 students were interviewed. Respondents were undergraduate students from a wide range of majors, including the natural and physical sciences, social sciences, humanities, psychology, and business. The interviews allowed Cutforth to gain insights into the context in which the students' CBR experience was taking place, including interactions in the classroom and community; how students encountered issues of race, class, gender, and other differences in their communities; and their recommendations for

improving the quality of CBR courses. Students provided varied and specific examples of their CBR experiences, and discussed and reflected upon the short- and long-term benefits they had experienced, as well as challenges. Each discussion lasted from 30 to 60 minutes. Interview questions focused on the extent to which students' CBR experiences contributed to their personal, social, and cognitive development, as well as the extent to which their experiences influenced their thinking about future coursework and career choices.

Each interview was digitally recorded, transcribed, and analyzed. Using the constant comparison technique (Boeije, 2002), five themes were identified. The themes became constructs that constitute the framework of the CBR survey: *development of academic skills, enhanced educational experience, increased civic engagement, development of professional skills, and personal growth*. Each of these constructs is defined and discussed below. Table 1 summarizes the construct definitions.

Table 1. CBR Learning Outcome Survey Constructs and Definitions

Construct	Definition
Academic skills	Cognitive skills related to academic learning
Educational experience	Affective outcomes that enhance the overall college experience, including finding one's passion, enhancing one's interest in one's major, and clarifying a career path
Civic engagement	Cognitive, affective, and behavioral outcomes related to community participation
Professional skills	Skills, behaviors, and attitudes that enhance efficacy in the workplace
Personal growth	Affective outcomes related to understanding oneself, including personal insights and transformation

Academic Skills. *Academic skills* pertains to cognitive skills related to academic learning. Many student comments in the interview phase of the study highlighted the value of CBR in strengthening academic skills. Examples are

- I remember more facts because it is something that you actually witness.
- [Because of my CBR experience,] I know how to write an opening, a background section, a methodology, an analysis, and [a] conclusion.

- I revised my survey for my community partner about 15 times so that has gotten me way ahead of working on my thesis survey. . . . I know what works, what doesn't, what people are hesitant to answer, how to phrase things.

Educational Experience. Whereas *academic skills* focuses on cognitive outcomes related to coursework, *educational experience* focuses on affective outcomes that enhance the overall college experience, including finding one's passion, enhancing one's interest in one's major, and/or clarifying a career path. Several students commented on how CBR broadened and deepened their college experience:

- Once the authors had the patterns and themes and fitted them together, I found that [research] was something that I did enjoy. It made my mind happy.
- Research is something that could interest me in a way that I had not thought of [because] of my narrow definition of research.
- I feel like you are doing research for a purpose. You are not just doing it for the sake of a grade or test; you are doing it because someone can actually use what you are doing. So it pushes you further to want to do the research.
- Do I want to be in the field, hands on doing something; or do I want to be in the background doing research and that sort of thing? . . . [CBR] is feeling out what is right for you, what you can deal with and what you can't.
- CBR gives me an idea of the different things that I could do with my major, doing program evaluations, or research for people under a grant.

Civic Engagement. *Civic engagement* is often touted as a benefit of service-learning and community-based research. In the CBR outcomes survey, civic engagement includes cognitive, affective, and behavioral outcomes related to community participation. Four items make up the civic engagement scale, which probes understanding those who are different from oneself, clarifying one's values, and assessing one's likelihood

of voting. Throughout our interviews, students commented frequently on the impact of CBR on their civic engagement.

- CBR gave me a better sense of the community. We get so zoned into what is happening on campus and you kind of forget that you are in a larger city and there is life outside. . .
- One of the hardest things was the sheer emotion of the things that I experienced. Seeing people in situations different from my own: the kids who are hungry or sick or have never been to the dentist. . . .
- I feel that my background and how I look as the rich white person, my background is very privileged. When I look into the future, I would love to be working with a more diverse group and not stick out like a sore thumb and have to earn people's trust.
- CBR gave me a different perspective on people in general. It is hard to explain, but it changes you talking to people and seeing the difficulties that they face and how they have been able to overcome them or how they have maybe not been able to overcome them yet.
- Sometimes you are a little close-minded and you put stereotypes on other people. But when I sat down and listened to [community members'] stories, I put myself in their shoes and realized that living in the city is completely different from where I grew up. You try not to stereotype someone who is 16 and pregnant. You try not to judge at all and listen and try and learn from what their experience was.

Professional Skills. *Professional skills* refers to skills, behaviors, and dispositions that enhance efficacy in the workplace. Students described many activities related to their CBR experiences that they felt helped prepare them for professional careers. Skills probed include resolving conflicts, running meetings, delegating, listening to others, and working as part of a team. Comments pertaining to development of professional skills were pervasive across student interviews:

- You can't be shy. You have to be able to deal with people.

- To be on the spot and be able to think quickly and come up with ideas and have a conversation has been something that I am getting better at every time I do it.
- You learn very quickly to prioritize. Sometimes you have to push the community partners more than they are pushing you. Even though it is their project, you need to stay on them, especially when you have deadlines to meet.
- There is a huge difference when you are writing an email and you are trying to phrase it to make people like you. [But] you want them to do the work and actually tell them that they have an obligation to do it. So it is hard to find the middle ground.
- I learned that you can rely on other people to get things done.
- It makes you really focus on the fact that you have to work as a group to accomplish the goal. I would never have been able to come up with the survey the authors created without the help of all the group members.
- CBR is learning how to work with people more efficiently, communicate better, which is definitely an important life skill and makes me a good candidate in the work field.

“In class, the professor will hold your hand a little or you can Google something. But [CBR] cannot be found on the Internet or in any textbook. You have to pick up a phone or you have to drive to that organization, you have to keep pursuing it until something becomes of it, because if you don’t do it, no one will do it.”

Many students felt they had an edge in the job market because of their CBR experience. One student remarked:

- In class, the professor will hold your hand a little or you can Google something. But [CBR] cannot be found on the Internet or in any textbook. You have to pick up a phone or you have to drive to that organization, you

have to keep pursuing it until something becomes of it, because if you don't do it, no one will do it.

Personal Growth. *Personal growth* pertains to affective outcomes related to understanding oneself. Students spoke about significant internal transformations as a result of their CBR experiences.

- CBR shaped my thought from, "Let's work in a lab and make lots of money" to "Money is not the most important thing, so maybe your career can be important in a different way." Being involved in the community helped me realize that I want to do something that helps other people, something rewarding, not necessarily money-wise but morals-wise. [CBR] challenges you in a way that nothing else on campus can: not volunteering, not research papers. This forces you out of your comfort zone and seeing that you can live up to the challenges.
- I go to a great university where everyone is sheltered, but now seeing the community and the challenges and difficulties that they face means that I have to do something great with my life and give something back to the community.
- I grew up white, suburban, middle class. [Through my CBR project] I saw a different kind of life, people being exploited, people being oppressed, and it really changed my political outlook, my social outlook, what I fight for in my everyday life, and what I stand for.
- The CBR experience made me question a lot of the things that I had been going along with for a very long time.

Survey Pilot

The authors developed a pilot survey, which was deployed online during spring semester 2009, to students at institutions participating in a consortium dedicated to deepening and expanding the practice of CBR. The pilot version of the survey included 95 items and subitems in four sections and took approximately 15 minutes to complete. The first section identified the ways students experienced CBR (as part of a CBR course, in a non-CBR course

with a CBR project attached, in an independent study, etc.). This section of the survey also asked students to identify activities they undertook within their CBR projects, such as collecting data, analyzing data, reporting in class, or undertaking a reflection activity. Also included in this section was a series of nine items in which students rated their CBR experience as mostly positive, mostly negative, or mixed.

The second section contained 30 items reflecting the five dimensions of CBR noted above: academic skills, educational experience, civic engagement, professional skills, and personal growth. To help confirm the validity of the constructs, they were also assessed in a different way by nine items that followed within the same section.

The third section asked for students' demographic information, including institution, ethnicity, socioeconomic status, and history of volunteer and civic activities.

The last section included two open-ended items. One invited students to provide any other comments about their CBR experiences, and the other asked students to comment on their experience taking the survey. These open-ended items informed subsequent survey development.

The pilot version deliberately contained more items and types of questions than would be included in the final version. In some cases a given question was phrased in multiple ways, in order to determine which version yielded the most statistically reliable response. Some items tapped different dimensions of a construct in order to explore which dimensions, ultimately, would be most explanatory.

The survey was posted online from March 1 through June 6, 2009. A total of 192 respondents completed several items, and approximately 166 completed all or nearly all items of the entire survey.

Respondents were asked to identify their academic institution. Fifteen institutions were identified by a total of 170 respondents. Those institutions represented by more than two respondents included Bowdoin College, Cabrini College, Lafayette College, Macalester College, Princeton University, Rice University, Stetson University, University of Alaska–Anchorage, University of Notre Dame, Western Carolina University, and Whitman College. The authors believe this sample reflects a good range of academic institution types, based on Carnegie Foundation classifications (*see Carnegie Classification of Institutions of Higher Education, available at*

<http://www.carnegiefoundation.org/classifications>). Nevertheless, the sample is limited geographically (representing more institutions in the eastern United States), and is skewed toward institutions that have unusually strong CBR programs compared to academic institutions nationwide.

The majority of respondents (51.5%) were seniors, followed by sophomores (20.1%), juniors (19.5%), and freshmen (4.7%). Women made up 74.5% of the sample. Caucasians made up 76.8% of the sample, followed by Asians at 11%, African Americans at 6.1%, and Hispanics/Latinos at 5.5%, with less than 2% of respondents being Alaska Natives and American Indians. In addition, 6% of respondents identified themselves as “Other.” (Respondents could self-identify as multiple races or ethnicities, so percentages total more than 100.) A proxy variable was created for socioeconomic status (see discussion in “Demographic Analyses,” below). The variable describes a normal curve, ranging from a low of 8 to a high of 26 (mean=19), indicating that the sample population, like college students generally, is skewed toward middle- and upper-middle socioeconomic status.

In this sample, women and seniors are overrepresented, and Caucasians are slightly overrepresented. Broader sampling in the future might result in a different profile of outcomes. However, the authors believe that the distribution of responses on the pilot survey’s demographic variables reflected sufficient representativeness and variability to conduct the item-level analyses that follow.

Results

In the first section of the survey, students reported the academic activities they undertook during CBR. Crosstab analyses showed that several categories could be collapsed, because over 70 percent of those who reported having experienced one type of CBR also experienced another. For example, 92% of those who reported that they had defined a problem/issue also reported researching a problem/issue. Given such overlap, the authors determined it was not necessary to subdivide these research activities (see Table 2).

Consistent with findings in prior research (Conway *et al.*, 2009; Eyster and Giles, 1999), students’ responses in the focus group interviews highlighted the fact that integration of CBR activities into classes, including reflection activities, enhanced their experiences. Therefore, a survey item asked students to estimate the proportion of CBR courses that included some sort of reflection activity. This item correlated $r = .405$ ($p < .01$) with total CBR outcome score and

$r = .338$ ($p < .01$) with the combined (eight-item) CBR experience score, both of which are discussed below. These correlations suggest a moderate association between reflection activities and students' perceived quality of CBR experience.

Table 2. Frequency of CBR Activities Experienced by Respondents

CBR activity	% participating in this activity
Research problem/issue	76
Define a problem/issue	70
Collect data	70
Analyze data	62
Report results orally in class	58
Attend meetings with partners	42
Implement project with partners	21
Report to policy-makers	19
Present at a conference	16
Report to partners	5
Other	4

Assessing CBR Overall Experience

Predictably, students' experiences with CBR will vary. Making sense of CBR outcomes requires accounting for students' impressions of the overall quality of their CBR experiences. A series of five items probed various dimensions of students' CBR experiences, including the extent to which

CBR was integrated into courses, supported by faculty, and appreciated by community partners; whether CBR activities were useful; and whether the student had voice in or control over the process. These items cover most of the best practices identified in the CBR literature (Puma *et al.*, 2009; Stocking & Cutforth, 2006; Strand *et al.*, 2003; Weinberg, 2003).

Response options to these items were "Mostly Yes" and "Mostly No."

"Making sense of CBR outcomes requires accounting for students' impressions of the overall quality of their CBR experiences."

The final item of this section, Overall CBR Experience, asked students whether their experience was positive overall, to which they could respond “Mostly Yes,” “Mostly No,” or “Mixed.” This single item was correlated with responses to the previous five items, which probed more specifically the quality of respondents’ CBR experiences. Table 3 shows inter-item correlations among CBR experience items as well as their correlation with the total learning outcome scores (see *Learning Outcome Scales*, below).

Scores on the five CBR experience items correlated with the overall CBR experience item at $r = .647$ ($p < .01$). This is a strong

Table 3. Correlations Between Overall CBR Experience Item, Combined CBR Experience Score, and Total Outcome Score

CBR experience items	Overall CBR experience item only	Total CBR experience score (all 6 items)	Total CBR outcome score (summed score of all five constructs)
CBR projects were integrated into course content.	.216**	.373**	.186*
Generally, I felt supported in my CBR experiences by college faculty/staff.	.360**	.581**	.373**
Interactions with community partners and community members were generally positive.	.448**	.731**	.455**
My CBR activities were useful to my community partner.	.431**	.704**	.489**
I have had some voice/control over CBR activities I've been involved in.	.394**	.642**	.482**
Overall, my CBR experiences have been positive.	1.0	.647**	.520**

*Correlation is significant at $p < .05$; **Correlation is significant at $p < .01$.

correlation, suggesting that the five composite items largely (but not entirely) explain the result on the overall CBR experience item. These five summed items correlated $r = .602$ ($p < .01$) with the total CBR learning outcome score—the summed total of all items constituting the five learning outcome constructs. This, too, is a strong correlation. The correlation of the single, overall CBR

experience item with the total CBR learning outcome scores was $r = .520$ ($p < .01$). This is a moderately strong correlation, but is nevertheless impressive, considering that the correlation coefficient is depressed because overall CBR experience is only a single item and had only three response options (i.e., “Mostly Yes,” “Mostly No,” and “Mixed”).

Learning Outcome Scales

The survey pilot included 30 learning outcome-related items, each of which was on a 4-point scale: 1 = not at all; 2 = minimally; 3 = moderately; 4 = extensively. Responses to these items were factor analyzed using principal components extraction with an Eigen value of 1 as the cutoff. This analysis was followed by a Varimax rotation. The principal components analysis revealed six factors that explained approximately 73% of response variance.

The first factor corresponded to the five items of the professional skills construct. This construct explained 58% of the overall variance, suggesting that this dimension of CBR is a critical benefit for many students. The second factor reflected four civic engagement items that explained 6.8% of response variance. Four items in the educational experience construct made up the third factor, which explained 6.5% of response variance. The fourth factor was academic skills. Three items loaded on this factor and explained 4.5% of response variance. (Four items on the revised survey constitute this scale; three items were used in the pilot and a fourth was added when the current version was deployed). Personal growth was the fifth factor and explained 3.6% of response variance. A sixth factor explained 3.4% of response variance and was made up of two items pertaining to public speaking skill and confidence. The authors determined that this factor contributed minimally to overall results, and therefore it was dropped from the revised version of the survey.

After removal of items that correlated very highly ($r = .80$ or higher) or that failed to have strong explanatory value (Eigen values less than 1.0), 19 items remained. Four experimental items were added in the current deployment. As a result of these analyses and revisions, estimated time to complete the survey dropped from 15 minutes to 10 minutes.

Scale Reliabilities

The 19 items making up five constructs were analyzed for internal consistency using Cronbach's alpha. Reliability of each

of the five factors and a factor created from a combined total are shown in Table 4.

To summarize, 19 items can be summed to create a total CBR learning outcomes score that has extremely high reliability ($\alpha = 0.95$). The five factors that contribute to the overall CBR learning

Table 4. Cronbach's Alpha Reliabilities for Revised Factors

Scale	Number of items	Cronbach's alpha (α)
Overall CBR outcomes	19	$\alpha = 0.95$
Professional skills	5	$\alpha = 0.91$
Civic engagement	4	$\alpha = 0.86$
Educational experience	4	$\alpha = 0.87$
Academic skills	3	$\alpha = 0.80$
Personal growth	3	$\alpha = 0.94$

outcome variable have reliabilities ranging from $\alpha = 0.80$ to $\alpha = 0.94$.

The authors created unweighted, scaled scores for each of the five constructs listed above and for the scale as a whole. Most of the composite scores were inter-correlated moderately, which is desirable, since it suggests that each factor is assessing a different facet of an underlying phenomenon. As can be seen in Table 5, all scales correlate moderately or strongly with total CBR learning outcomes, indicating that each subscale captures an important aspect of students' overall perceptions regarding the benefits of taking classes that include CBR. Several moderate correlations indicate that each scale is measuring something similar about CBR outcomes, but also something unique. This, combined with the high coefficient alphas previously reported, suggests that each scale can be used to create scaled scores for each of the five constructs that comprise the survey.

Demographic Analyses

The authors analyzed construct data to see whether there were differences based on gender, race, or socioeconomic status (SES). Using analyses of variance calculations (ANOVA), the authors detected no significant differences among any groups on total CBR learning outcomes, nor for any of the five subscale scores. As a result, the authors concluded that the five scales and the combined

total CBR learning outcome scale reflect CBR outcomes that are not biased based on students' sex, race, or socioeconomic status.

In this survey, the authors used three items to determine SES (Donaldson, Lichtenstein, & Sheppard, 2008). Two items are mother's and father's highest level of education, because they are generally

Table 5. Scaled Scores, Factor Inter-Correlations (tailed)

		Academic skills	Civic engagement	Educational experience	Professional skills	Personal growth	Total CBR score
Academic skills	Pearson correlation	1	.528**	.584**	.466**	.589**	.714**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
Civic engagement	N	158	134	144	142	144	117
	Pearson correlation	.528**	1	.625**	.640**	.843**	.867**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
Educational experience	N	134	144	138	132	137	117
	Pearson correlation	.584**	.625**	1	.632**	.690**	.855**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
Professional skills	N	144	138	155	145	146	117
	Pearson correlation	.466**	.640**	.632**	1	.752**	.877**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
Personal growth	N	142	132	145	152	145	117
	Pearson correlation	.589**	.843**	.690**	.752**	1	.911**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
Total CBR score	N	144	137	146	145	154	117
	Pearson correlation	.714**	.867**	.855**	.877**	.911**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	117	117	117	117	117	117

** Correlation is significant at the 0.01 level (2-tailed).

known by students and they have a good track record in the research literature as correlating with income. The authors combined those responses with respondents' self-reported SES to come up with a single SES score. In combining the measures, they weighted mother's and father's education equally (if one was missing, they used the remaining score for both), combined them, and weighted the

result equally with self-reported SES. In this sample, the combined score of mother's and father's education correlated $r = .473$ ($p < .05$) with student self-reported SES, suggesting that different but related information is obtained using the two measures together, rather than one alone. The authors believe that this approach yields a more accurate SES proxy than traditional measures, militates against research bias, and validates respondents' perceptions of their own socioeconomic status.

Summary and Further Research

The goal of this research was to begin to codify student learning outcomes of CBR in order to assess best practices in CBR courses. To do this, the authors developed a survey instrument designed to validly and reliably assess student learning outcomes of CBR at the course, institutional, and national levels. The 19 items (plus four experimental items) that comprise the five CBR learning outcome constructs can be examined independently or summed into a combined scaled score. The constructs include academic skills, educational experience, civic engagement, professional skills, and personal growth.

It is worth highlighting that the professional skills factor explained 58% of the total response variance in our pilot survey. This prominence in the development of organization and leadership skills is congruent with the results of other studies of service-learning (see Eylar & Giles 1999; Moely, Furco, & Reed, 2008).

In addition to shortening and strengthening the CBR outcome scales, other revisions were made as a result of the pilot. The authors added three items to the CBR experience section based on student comments in the open-ended portion of the survey. The first item asks students to rate whether the term provided sufficient time to execute CBR projects. Respondent comments that prompted this addition include

- What detracted most from the CBR experience was the time limitations in dealing with a community partner over the course of only a single semester....
- After the semester ended, our project community partners were still interested in receiving feedback and help from us, but the authors had moved on to different courses....

A second item was added that asks respondents about the workload of CBR. This item was created based on comments such as the following:

- [The] major problem I had with this project was that half of the project was scheduled outside of class and I had to miss another class to do this project—the week before finals.

A third item was added asking students to rate whether their CBR projects, in general, were organized and expectations were clear. Several students offered qualitative comments in this regard, such as

- A little unorganized, directions weren't very clear.
- I like CBR; however, some students may need more guidelines or frequent check-in with their instructor.

Respondents of the pilot survey also commented that the instrument would be strengthened if students had the opportunity to explain the nature of their CBR projects. Because one objective of the survey was to identify a range of CBR practices nationwide, on the revised survey the authors added an open-ended item that allows respondents to briefly describe a CBR project.

The revised survey is currently being used in a national study of CBR outcomes, conducted by Princeton University. The survey can be accessed at https://princetonsurvey.qualtrics.com/SE?SID=SV_1YUKLLiSQIsxLQE (note underscore between “V” and “1”). Any student from any college or university who has experienced CBR is invited to participate. The authors ask that faculty make students aware of this link. The survey will be available through spring 2012 at the URL shown. Princeton will collect the data, perform the analyses, and report the results back to faculty members and institutions whose students participate.

Furthermore, the survey may be used by educators as long as no monetary gain is associated with its use. The web version assesses CBR student learning outcomes for cumulative CBR experiences. The authors have also created a version that can be used to assess outcomes related to an

“In addition, a revised version of this instrument could be used to study outcomes of CBR compared to traditional instruction or other pedagogies.”

individual course (see the Appendix). Interested parties may contact the authors regarding how to analyze the survey.

The national study alluded to above seeks to confirm psychometrics of the current survey and to begin to codify outcomes of CBR that might be related to delivery types and program features. Over time, local and national norms could be established that would allow analyses of CBR outcomes by institution type, region, delivery type, class standing, or other demographic variables. If scale reliabilities hold, the course-based version of the CBR Outcomes Survey could be used diagnostically. For example, if a CBR class had a t-score of 35 (one and a half standard deviations below the mean) for civic engagement, but scaled scores in the other areas above 50, this would suggest that more attention should be devoted to this aspect of the CBR experience the next time the class was offered. In addition, a revised version of this instrument could be used to study outcomes of CBR compared to traditional instruction or other pedagogies.

The authors believe that the instrument they described in this article can help quantify outcomes of CBR and hope that this instrument will help proponents of CBR assess their efforts, better understand this dynamic pedagogy, and assist them in making improvements, ultimately heightening students' learning experiences while conducting course-related research in authentic settings.

Acknowledgments

This article is based on work supported by the Corporation for National and Community Service under Learn and Serve America Grant No. 06LHHNJ001. Opinions or points of view expressed in this document are those of the authors and do not necessarily reflect the official position of the Corporation or the Learn and Serve America Program. The research was approved by Princeton University's Institutional Research Board for Human Subjects (Protocol 3708 for the focus groups and Protocol 4271 for the pilot survey). The ongoing survey has been IRB approved through Princeton University as Protocol 4687. The authors are grateful to Learn and Serve America, the institutions that hosted the focus groups and invited their students to take the pilot survey, and all of the students who answered our many questions. Cassie Gannett, doctoral student in the Morgridge College of Education at the University of Denver, transcribed the focus group interviews. Bobby Hackett, Denise Keller, and Peter H. Quimby provided valuable support and ideas to the research. Deanna Cooke provided helpful comments on a draft of this article.

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Appendix

**COMMUNITY-BASED RESEARCH
COURSE SURVEY**
June 2010

This survey is part of a national study on the outcomes of CBR. Your answers will be very important in helping colleges and universities design CBR programs. This survey will take less than 10 minutes to complete. We appreciate your honest responses to the questions below.

- For each of the following sections, please reflect on A SINGLE CBR COURSE that you have taken. A CBR course might not have had CBR in the title but might have involved collecting data and/or conducting research for a class or community-based organization.
- Research conducted in the community primarily for academic purposes DOES NOT COUNT. Research must have been in the service of a community partner.
- Your responses are anonymous.

I. About Your CBR Experiences

1a. Course Title: _____

Department: _____ Course Number: _____

Instructor(s): _____

Term: _____ Institution: _____

1b. Which description is most accurate for the above course? (Please check only one)

- ☐ CBR Course with project or internship
- ☐ CBR Theory Course, no project or internship
- ☐ Non-CBR course that included a project
- ☐ Independent CBR Project, Thesis, or Internship
- ☐ CBR Internship Only
- ☐ Other _____

2. Please check all of the activities you have experienced in CBR courses:

- ☐ Researched a problem/issue
- ☐ Attended meetings with community partners
- ☐ Interacted with community members and/or partners outside of meetings
- ☐ Participated in a community-based program/project
- ☐ Reported CBR findings in class (orally, in writing, or via technological media)
- ☐ Reported CBR findings to community partners (orally, in writing, or via technological media)
- ☐ Reported CBR findings to policy-makers (orally, in writing, or via technological media)
- ☐ Presented CBR findings at a conference
- ☐ Other: _____

3. Did the above course involve some sort of personal reflection activity (e.g., reflective paper, meeting with instructor, journal-keeping)? Yes _____ No _____

4. Please choose the answer that best fits your experience in this course. NA=Not Applicable.

- a. There was sufficient time in the term to execute my CBR project. ☐ Mostly yes ☐ Mostly no
- b. CBR project tasks and/or expectations were clear. ☐ Mostly yes ☐ Mostly no
- c. The amount of time taken for the course was realistic for the credits I earned. ☐ Mostly yes ☐ Mostly no ☐ NA
- d. The CBR project was integrated into course content. ☐ Mostly yes ☐ Mostly no ☐ NA
- e. Generally, I felt supported in my CBR experience by college faculty/staff. ☐ Mostly yes ☐ Mostly no ☐ NA
- f. Interactions with community partners and community members were generally positive. ☐ Mostly yes ☐ Mostly no ☐ NA
- g. My CBR activities were useful to my community partner. ☐ Mostly yes ☐ Don't Know ☐ Mostly no
- h. I had some voice/control over the CBR activities in which I was involved. ☐ Mostly yes ☐ Mostly No ☐ NA
- i. Overall, my CBR experience in this course was positive. ☐ Mostly yes ☐ Mixed ☐ Mostly no

5. In the space below, please briefly describe your CBR project.

II. CBR OUTCOMES

	My participation in this CBR experience:	Not at All	Minimally	Moderately	Extensively
a.	Strengthened my analytical skills				
b.	Improved my academic writing skills				
c.	Improved my research skills				
d.	Enhanced my understanding of academic content				
e.	Enhanced my understanding of local issues				
f.	Enhanced my understanding of social issues				
g.	Deepened my understanding of others who are not like me				
h.	Helped me empathize with those who have different racial or religious backgrounds than I.				
i.	Enhanced the likelihood that I will participate in civic activities.				
j.	Enhanced the likelihood that I will vote.				
k.	Helped clarify my values				
l.	Increased my interactions with faculty.				
m.	Increased my interest in my major.				
n.	Improved my interest in college.				
o.	Clarified my career path.				
p.	Improved my skills with conflict resolution.				
q.	Improved my ability to run meetings.				
r.	Improved my ability to delegate.				
s.	Improved my ability to listen to others.				
t.	Improved my ability to work as part of a team.				
u.	Helped improve my personal qualities.				
v.	Improved my ability to consider others' perspectives.				
w.	Deepened my understanding of myself.				

Please share any other thoughts about your CBR experience and how it has impacted you.

III. About You

This information is most important for helping us understand your responses.
We greatly appreciate your responses to the following questions.

WHAT'S YOUR ACADEMIC INSTITUTION? _____

YOUR CLASS STANDING IS: ☐ Freshman ☐ Sophomore ☐ Junior ☐ Senior ☐ Master's/Doctoral

YOUR SEX: ☐ Female ☐ Male

RACE/ETHNICITY (Check all that apply):

- | | | |
|--|--|--------------------------------|
| ☐ African American | ☐ Caucasian | ☐ Other |
| ☐ American Indian or Alaskan Native
Islander | ☐ Hispanic or Latino/a | |
| ☐ Asian American | ☐ Native Hawaiian or Pacific Islander | |

MOTHER'S HIGHEST LEVEL OF EDUCATION:

- ☐ N/A or Don't Know
- ☐ Less than High School
- ☐ Completed High School or GED
- ☐ Some college, but no degree
- ☐ 2-Year/Technical/Vocational Degree
- ☐ 4-year/Bachelor's Degree (B.A./B.S., etc.)
- ☐ Master's Degree (M.A., M.S., etc)
- ☐ Professional Degree (Ph.D., M.D., J.D.)

FATHER'S HIGHEST LEVEL OF EDUCATION:

- ☐ N/A or Don't Know
- ☐ Less than High School
- ☐ Completed High School or GED
- ☐ Some college, but no degree
- ☐ 2-Year/Technical/Vocational Degree
- ☐ 4-year/Bachelor's Degree (B.A./B.S., etc.)
- ☐ Master's Degree (M.A., M.S., etc.)
- ☐ Professional Degree (Ph.D., M.D., J.D.)

THINKING BACK ON WHEN YOU WERE GROWING UP, WOULD YOU DESCRIBE YOUR FAMILY'S INCOME AS...?

- ☐ Low ☐ Lower-Middle ☐ Middle ☐ Upper-Middle ☐ High

😊 THANKS FOR YOUR COOPERATION! 😊

Building a Model of Collaboration Between Historically Black and Historically White Universities

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Darnell Johnson

Abstract

Despite increases over the last two decades in the number of degrees awarded to students from underrepresented groups in science, technology, engineering, and mathematics (STEM) disciplines, enhancing diversity in these disciplines remains a challenge. This article describes a strategic approach to this challenge—the development of a collaborative partnership between two universities: the historically Black Elizabeth City State University and the historically White University of New Hampshire. The partnership, a type of learning organization built on three mutually agreed upon principles, strives to enhance opportunities for underrepresented students to pursue careers in the STEM disciplines. This article further describes six promising practices that framed the partnership, which resulted in the submission of nine proposals to federal agencies and the funding of four grants that led to the implementation, research, learning, and evaluation that followed.

Introduction

Federal efforts to promote participation of underrepresented students in the science, technology, engineering, and mathematics (STEM) disciplines in higher education in the United States have been in effect for several decades. The Science and Engineering Equal Opportunities Act of 1980 aimed to create equal opportunity in the STEM disciplines by promoting the full use of human resources in science and engineering. Federal agency programs such as the National Science Foundation (NSF) Alliances for Broadening Participation in STEM (2009), NSF Opportunities for Enhancing Diversity in the Geosciences (2004b), and the National Aeronautics and Space Administration (NASA) Minority University Research and Education Program (2007), among many others, have helped broaden the diversity of student participation in the STEM disciplines (e.g., see reports from NSF's Committee on Equal Opportunities in Science and Engineering, <http://www.nsf.gov/od/oia/activities/ceose/>). Professional science

organizations, such as the American Geophysical Union (AGU), have also called for broadened opportunities for underrepresented students to conduct research in STEM disciplines, noting that “failure to improve diversity could have important ramifications for the economic, social, and scientific health of our fields” (*American Geophysical Union, 2002*).

However, despite increases over the last two decades in the number of undergraduate and graduate degrees in science and engineering fields awarded to underrepresented students (i.e., African Americans, Hispanic Americans, Native Americans, and Pacific Islanders), significant underrepresentation persists in these disciplines. For example, in 2004 African Americans and Hispanic Americans represented 8.8% and 7.6% of bachelor’s degree recipients in STEM disciplines, respectively (*National Science Board, 2006*); however, this is still 4 to 5 percentage points below their representation in the total U.S. population (African American 12.7%, Hispanic American 12.5% for the year 2000; *U.S. Census Bureau, 2008*). Doctoral degree attainment in these disciplines is of significantly more concern. According to this same NSF report, African Americans and Hispanic Americans represent only 4.8% and 4.5%, respectively, of the 2004 STEM doctoral degree recipients; that is, as the educational level increases, there is a decrease in the educational attainment of racial and ethnic minorities (*National Science Board, 2006*). Further, while a few notable nonprofit and educational organizations (*ACT, 2010; Coleman, Palmer, & Peabody 2004; Educational Testing Service, 2007*) continue to raise serious concerns about the nation’s growing educational disparity, it remains clear that

The U.S. continues to suffer from a longstanding underrepresentation of minorities among science, mathematics, and engineering doctorates. This untapped talent has serious consequences for the nation’s ability to compete in a world economy driven by technological advances, as well as for a large segment of the nation’s citizens who suffer loss of opportunity (*National Science Foundation, 2004a, p. 3*).

In addition, a recent report (*National Science Foundation, 2008*) concludes that although some progress has been made in broadening participation by underrepresented students in STEM disciplines, this progress has been “disappointingly modest.”

The U.S. Census Bureau (2008) estimates that by the year 2042, African Americans, Asian Americans, and Hispanic Americans

will compose approximately 50% of the total U.S. population. These estimates further indicate a significant decline and shift in the relative White population from about 70% in 2000 to about 40% in 2100. These demographic shifts, coupled with significant underrepresentation of some groups in the STEM disciplines, are described as two key elements of “America’s Perfect Storm” (*Educational Testing Service, 2007*). Lacking new policies and directions that alter this “perfect storm,” ETS posits that the future competitiveness of the nation is at stake. Further, to respond to what the National Academy of Sciences describes in *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future* (2007) as an urgent need to increase national competitiveness and “ensure that the United States is the premier place in the world for innovation,” it is imperative that all U.S. citizens, particularly those groups currently underrepresented in the STEM disciplines, are encouraged to pursue degrees in the STEM disciplines.

By developing a range of new strategic approaches and opportunities that attract, promote, and expand currently underrepresented student participation in the STEM disciplines, universities can enhance STEM research and scholarship. This article describes one such approach—the development of a model of collaboration between Elizabeth City State University (ECSU), a historically Black university in North Carolina, and the University of New Hampshire (UNH), a historically White university in New Hampshire. We recognize that the ECSU-UNH model is one of a number of approaches that might effectively advance opportunities to enhance the excellence and diversity of students and faculty in the STEM disciplines. What follows includes a description of (a) this partnership model and the respective institutions, (b) federal funding success and student and faculty involvement, (c) partnership principles and promising practices associated with this model, (d) evaluation results of the key federally funded programs, and (e) limitations of this particular partnership model.

“By developing a range of new strategic approaches and opportunities that attract, promote, and expand currently underrepresented student participation in the STEM disciplines, universities can enhance STEM research and scholarship.”

The Collaborative Partnership

Elizabeth City State University and the University of New Hampshire have partnered to broaden and extend the pipeline of underrepresented students interested in pursuing careers in STEM disciplines and to support these students in their educational pursuit. The collaboration is based on three partnership principles by which demographically diverse institutions in geographically different regions of the nation collaborate to expand scientific knowledge, enhance educational opportunities, and, over time, ultimately create a more diverse workforce. This article also describes six promising practices that could guide readers interested in establishing similar partnerships.

Partnership Profiles

Elizabeth City State University (ECSU) is a teaching-focused, community-engaged institution in coastal northeastern North Carolina with approximately 260 faculty members in four schools enrolling about 3,300 students. Roughly 80% of ECSU students are African American and about 15% are White. The University of New Hampshire (UNH) is a land-, sea-, and space-grant, community-engaged research institution in New Hampshire's seacoast region with approximately 900 faculty members, and an enrollment of approximately 15,000 students. Roughly 94% of UNH students are White and about 4% are underrepresented minority students. Although considerably different in size, institutional priorities, location, and racial composition of the faculty and student body, the institutions have complementary strengths in Earth system science and remote sensing. ECSU excels in undergraduate education and student mentoring, while UNH excels in research and graduate education.

Since 2002, ECSU and UNH have built the partnership by focusing on mutual benefits when submitting joint grant proposals to federal agencies, interacting with program officers in federal agencies, and engaging students in authentic, hands-on research projects. We focus further in this article on the promising practices that established and framed the collaboration, resulting in the submission of nine proposals and the award of four funded grants by federal agencies that framed subsequent implementation, research, learning, and evaluation.

Program Activities and Results

Our successful collaboration has included the following activities and results.

- Nine collaborative proposals submitted to federal agencies (the National Science Foundation, National Oceanic and Atmospheric Administration, NASA, and Department of Homeland Security; Table 1) between 2004 and 2009, resulting in four grant awards totaling approximately \$5 million and directly involving more than 25 faculty members. These awards resulted in programs that included over 400 students who participated in summer authentic research experiences, summer research immersion experiences, academic year courses, and/or presentations at professional research conferences. Dozens of science and mathematics public school teachers have also participated in summer institutes and academic year collaborations with ECSU and UNH faculty.
- New and ongoing involvement of UNH faculty members at ECSU and new and ongoing ECSU faculty involvement at UNH. This includes two-way student and faculty exchange; new course development and coteaching courses on both campuses; and periodic UNH-ECSU faculty meetings, joint presentations, and positive personal interactions with one another on both campuses.
- Official federal agency recognition of the value of this collaboration as evidenced by (a) NASA hosting a signing ceremony of an official “Memorandum of Understanding” at NASA’s Goddard Space Flight Center that included university leaders, faculty, staff, students, and program officers and officials from federal agencies such as NASA, NSF, and the National Oceanic and Atmospheric Administration (NOAA) in attendance; and (b) the Office of the Director of the National Science Foundation inviting ECSU and UNH to jointly present to 30 federal agency program officers about the ECSU-UNH model to broaden participation in the STEM disciplines (*Williams & Hayden, 2009*).
- The creation of two undergraduate scholarships by UNH for ECSU students to enable them to pursue degrees in the STEM disciplines and experience a set of opportunities at both ECSU and UNH designed to prepare them for graduate education and careers in science.

- The participation of ECSU students in UNH student research and education opportunities such as the UNH Undergraduate Research Conference, UNH Research & Discover Program, and UNH and ECSU participation in undergraduate research summer programs on both campuses.
- Faculty and student joint presentations at the American Geophysical Union international conference meetings (*Hurtt, Einaudi, Moore, Salomonson, & Campbell, 2006; Mitchell, 2006; Wake, Hayden, Williams, Abrams, & Graham, 2005; Williams et al., 2009; Williams, Wake, Hayden, & Hurt, 2007*) and an invitation from NSF to jointly present at the Minority Serving Institution Technical Assistance Conference and at other presentation venues such as NASA and the IEEE International Geoscience and Remote Sensing Society Symposium.
- ECSU hiring in 2011 a recently retired UNH faculty member who has a long-term track record of external funding success, to further connect faculty at ECSU and UNH. This faculty member has had ongoing connections with ECSU faculty, students, and staff over the last eight years.
- The submission in 2011 of a collaborative proposal to NASA's Innovations in Global Climate Change Education program.

Table 1. Status of Collaborative ECSU-UNH Submitted and Grants Awarded from 2004 to Present

Date	Agency	Proposal Title	Status
Mar 2004	NSF	Watershed Watch	\$1 Million
July 2004	NSF	NE Alliance for Graduate Education & the Professoriate	\$650,000
Sept 2004	NASA	Next Generation-Remote Sensing Explorers	\$583,000
Oct 2004	NSF	Mentoring Students in Earth Systems Science Research	Not Funded
Apr 2005	DHS	New England Center for Emergency Preparedness	Not Funded
May 2005	NOAA	Priming the Pipeline	Not Funded
Apr 2006	NOAA	Collaborative Marine Research Center	Not Funded
May 2006	NSF	Transforming Earth System Science Education	\$3 Million
Sept 2009	NSF	Establishing a Manufacturing Bridge	Not Funded

NSF = National Science Foundation; NASA = National Aeronautics and Space Administration;

DHS = Department of Homeland Security;

NOAA = National Oceanic and Atmospheric Administration

Three Partnership Principles That Undergird the Partnership

Mattessich, Murray-Close, and Monsey (2001, p.59) define a collaborative partnership as “a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals.” The relationship includes a commitment to mutual benefits and goals, a jointly developed structure and shared responsibility, mutual authority and accountability for success, and sharing resources and rewards. Gray (1989) and Briggs (2001) observe that collaborative partnerships are most successful when all members share and advance a common vision. Accordingly, from these definitions and the literature in this area, ECSU and UNH set three partnership principles that are foundational to all ECSU-UNH collaborative efforts:

1. Agree on a clearly articulated vision so that strategic goals are clear,
2. Share responsibility and authority so that each institution is accountable for success, and
3. Share financial resources based on specific work undertaken.

Theoretical Models that Frame the Partnership Principles and Practices

The three partnership principles were established early in the collaboration. Over time, six promising practices also evolved. To more fully understand these practices, the authors referred to theoretical models described in the business literature, including theories about learning organizations and knowledge-generating companies (Bickel, Millet, & Nelson, 2002; Bruffee, 1993; Garvin, 1993; Leithwood, Jantzi, & Steinbach, 1999; Nonaka & Takeuchi, 1995; Preskill & Torres, 1999; Senge, 1990). Elements of these theoretical models help describe how the ECSU-UNH partnership developed, how it functions, and the nature of its challenges. Two key elements of these theoretical models are learning organizations and transformational leadership.

Teaching and student learning is a core function of universities. Faculty and administrators, however, often do not feel fully integrated into universities as a part of a broader learning community—what Senge (1990) refers to as a “learning organization.” Bickel et al. (2002) suggest that a learning organization is

“committed to inquiry, exhibits fluid information exchange across organizational boundaries (external and internal), possesses knowledge management systems that facilitate collective learning, and demonstrates strategic as well as tactical decision-making based upon what is being learned.” Key features of learning organizations are “culture, structure, practices, and leadership.”

Preskill and Torres (1999) note that high-functioning learning organizations have cultures and practices that welcome inquiry and challenge the status quo. Moreover, learning from mistakes is critical to a learning organization’s advancement.

“The learning organization concept can specifically help partnerships realize their promise as a community that generates new knowledge and contributes to innovation.”

Collaborative learning and cooperation are central to the culture, as are sharing new information across boundaries, building trust, and being open about challenges and difficulties (Bickel et al., 2002). The ECSU-UNH partnership is a learning organization that functions as a community of scholars with a shared vision and goals. The learning organization concept can specifically help partnerships realize their promise as a community that generates new

knowledge and contributes to innovation.

Transparency, trust, information sharing, and resources are critical to ongoing work, interactions, and forward momentum (Garvin, 2000) of a learning organization. Both faculty commitment and administrative leadership are required. The administrative team should include a leader who is willing, capable, and properly positioned within the institution to advance and transform a learning organization. Nonaka and Takeuchi (1995, p. 127) describe a type of transformational leader—a “middle-up-down-manager” who serves as a “catalyst-communicator-team leader” crossing boundaries between “what is and what should be.” Further, this individual provides leadership and fosters progress through collaboration and respect for all members rather than simply ordering or demanding compliance (Bickel et al., 2002).

Implementing the Partnership Principles: Six Promising Practices

For the ECSU-UNH collaboration, applying the partnership principles has not always been easy. Being in an effective learning

organization, negotiating a common vision and goals, and sharing responsibility, authority and accountability, financial resources, and rewards have been challenging at times. Critically important to the success of the partnership are six promising practices that characterize this learning community. These practices were identified and agreed to by key partners from each campus. The six practices are (1) institutional commitment and faculty engagement; (2) establishing mutual respect and shared time commitment; (3) identifying an engaged leader; (4) engaging critical change agents; (5) initiating difficult dialogues; and (6) preparing for growth and evolution. These practices overlap in many ways; their synergy and integration form the basis of the ECSU-UNH partnership as described below.

Practice I: Institutional Commitment and Faculty Engagement

Institutional commitment forms the foundation of the collaboration and was developed differently at each institution. Originally, ECSU and UNH partnered at the faculty-to-faculty level. After responding to invitations from UNH, ECSU science and mathematics faculty recognized that partnering with UNH science, mathematics, and engineering faculty would provide opportunities for collaborative research and education projects. This recognition formed the foundation of the initial ECSU interest and subsequent partnership. Several ECSU faculty members joined or initiated grant proposal writing efforts with UNH faculty. After participating in several face-to-face meetings with a UNH administrative leader, the provost and then dean of ECSU's School of Mathematics, Science, and Technology gave his support to the faculty. The dean also encouraged partnership proposals to further joint-funding efforts. The potential to develop a partnership that sought to enhance student support, develop new curricula, and expand research training was highly consistent with the ECSU mission and attractive to its senior administrators.

In 2002, UNH adopted an academic plan (*University of New Hampshire, 2002*) guided by a renewed sense of the institution's land-grant mission, a growing desire to be an "engaged institution," changing societal demographics, and the national imperative to advance student academic participation in the STEM disciplines. In a newly adopted plan (*University of New Hampshire, 2010*), this commitment is further explicated. Diversity became an institutional priority, exemplified by the hiring in 2005 of the first chief diversity officer. Diversity in the STEM disciplines also was established as an area of emphasis for the newly endowed (2002) Joan and

James Leitzel Center for Mathematics, Science, and Engineering Education. The partnership launched in 2002 between ECSU and UNH was an excellent way to translate UNH's commitment to diversity into reality. The UNH senior vice provost for engagement and academic outreach, working closely with key faculty members and the Leitzel Center, provided administrative leadership for UNH's participation.

Much of the day-to-day effort required for writing collaborative research and education proposals was shouldered by faculty members. The UNH faculty members, typically scientists, mathematicians, and science and mathematics educators, were attracted by the team interactions and the opportunity to partner with ECSU faculty members whose strengths lay in undergraduate education and mentoring. This integrated approach of institutional commitment and transformative leadership (*Leithwood et al., 1999*) with faculty engagement and commitment has proven invaluable, particularly given the hard work required to create, nurture, and sustain the partnership.

Practice 2: Mutual Respect, Mutual Benefit

Partnerships such as the ECSU-UNH partnership take years to develop. Mutual respect and mutual benefit are fundamental to the working interactions, evolve over time, and are key characteristics of a learning organization. The partnership's potential grew because, progressively, the partners identified complementary research and education interests and strengths. For example, ECSU excels in mentoring and promoting undergraduate education and in student research in remote sensing through its Center of Excellence in Remote Sensing Education and Research. The UNH Institute for the Study of Earth, Oceans, and Space leads university efforts in externally funded research in the STEM disciplines. Further, the UNH Leitzel Center developed a strategic focus to create STEM educational partnerships subsequently and became the primary UNH home for the partnership. The initial interest in collaborating was further enhanced by a common vision for STEM education and research, which included a desire to broaden the STEM pipeline for underrepresented students (particularly African American students) by pursuing federally funded opportunities. Preskill and Torres (1999) suggest that successful learning organizations build on the intellectual strengths and potential of members.

Prior to the early proposal-writing stage of the partnership, ECSU and UNH spent 18 months exploring common interests between individual faculty members in each of the institutions. This initial period, which included multiple visits and

face-to-face interactions on both campuses, was critical. The duration and range of discussions allowed lines of communication and mutual understanding to be established before any significant financial resources were at stake, and before there was any need to complete specific grant objectives. This time of building collaborations was essential, and was instrumental to the establishment of the partnership's culture and norms, including the assumptions and beliefs about what was important, the roles and strengths of community members, and the rules by which the community would operate (*Garvin, 2000*). Without this inceptive investment, the solid foundation upon which the partnership now relies would not have been developed.

Practice 3: Identifying an Engaged Leader

A designated administrator who provides visionary leadership, while also attending to an array of partnership details, is essential to the ECSU-UNH collaboration. In 2002, the UNH senior vice provost for engagement and academic outreach volunteered for this role. She is responsible for the University of New Hampshire's engagement and engaged scholarship mission and provides leadership for a number of faculty development academies, learning communities, and initiatives.

The critical characteristics of an individual described here as the engaged leader are similar to what Nonaka and Takeuchi (1995, *p. 127*) describe as the "middle-up-down-manager." They note that such an individual is a strategic leader who serves as a "bridge" and "strategic knot" that works effectively across and among top tier (e.g., provost, president, dean) and first tier (e.g., faculty, center directors) individuals. Nonaka and Takeuchi (*p. 128*) further describe this individual as a "catalyst," "effective communicator," and "team builder" who provides "middle-up-down" leadership while engaging others and asserting quiet authority rather than ordering change. Greenleaf (1996) characterizes servant leadership as having similar qualities, and Block (1993) similarly describes stewardship and focus on serving others. For the ECSU-UNH partnership the designated leader familiarized herself with the strengths and interests of each of the primary faculty collaborators, and worked closely with one key faculty leader on each campus to sustain and spread these leadership qualities.

Practice 4: Engaging Critical Change Agents

In a successful partnership, it is important to identify and engage critical change agents who move the relationship forward. In the ECSU-UNH partnership, the critical change agents are a

highly motivated and dedicated set of faculty members and administrators from both universities. Partnerships, however, also need change agents, both internally and externally, to be successful. The ECSU-UNH partnership has benefited enormously from individuals outside the two universities who provide support and counsel. Dr. Ambrose Jearld from the National Oceanic and Atmospheric Administration; Drs. Anngienetta Johnson, Carl Person, and James Harrington from the National Aeronautics and Space Administration; and Dr. Fae Korsmo, Martha James, and Tracy Gorman from the National Science Foundation all serve as critical ECSU-UNH partnership supporters. These individuals helped elevate and support the partnership by identifying opportunities: for the university partners to jointly present and to meet with program officers at their agencies; for the partners to jointly seek funding by responding to specific requests for proposals; for presentations to other national conferences; and for enhanced connections with their deans, provosts, and presidents by coming to their campuses to discuss and learn about the partnership as it evolved.

Practice 5: Initiating Difficult Dialogues

Even with genuine mutual respect and numerous successes, the ECSU-UNH administrators and faculty members had to initiate difficult dialogues—conversations that they would have preferred to avoid, but were essential to achieving success. Participants in difficult dialogues identify the problem, discuss multiple perspectives, encourage careful listening rather than defensive reaction, foster respect when disagreeing, and commit to reaching a resolution. The desire to advance the partnership, rather than simply win a disagreement, frames the most successful resolutions to difficult dialogues. Few participants enjoy these conversations, and some feel more prepared than others to initiate such discussions. Consequently, when the need arises, the person most prepared given the nature of the concern should lead the discussion, and perhaps practice how best to respectfully and honestly engage in the dialogue before the conversation takes place.

For example, for the ECSU-UNH partnership, a difficult dialogue occurred during the development of a proposal that was submitted to NASA. The primary goal for UNH faculty members was to engage large numbers of underrepresented students in the program, while for the ECSU faculty members the goal was to financially support and closely mentor a small number of students. Having an impact on the greatest number of students versus

providing financial support and close mentoring to a small number of students set the stage for competition for limited grant funds. With a foundation of trust, and what Preskill and Torres (1999) describe as culture and practices that welcome questioning and learning from mistakes, a compromise was reached that ultimately made the grant proposal stronger. Resolution of this difficult dialogue represented a watershed moment, the successful conclusion of which advanced the partnership, and resulted in a proposal that was eventually funded by NASA.

Practice 6: Preparing for Growth and Evolution

Successful partnerships grow and mature over time. They are resilient when membership changes. A key to sustaining this partnership is ongoing reinforcement and strategic review of partnership principles. The ECSU-UNH partnership reinforces best practices in a number of ways. For example, we have learned that our willingness to have difficult dialogues enhances, albeit changes, both the tenor and subsequent practice of discussion when we encounter new difficult situations. Rather than starting over, our prior experiences result in a greater ease with the challenge of such conversations. Further, we have benefited greatly from the inclusion of new critical change agents over time. In the start-up phase of the partnership, the primary external change agents—who were critical supporters—were from two federal agencies, NOAA and NASA. In the last several years, however, the addition of new critical change agents at the National Science Foundation opened new doors of opportunity which led to additional interest and involvement of faculty, students, and administrators at both ECSU and UNH. Finally, because the core of this partnership has always rested on the principle of mutual respect and mutual benefit, the partnership has matured, and recently taken on a new dimension. Recently, and for the first time, a highly respected, recently retired UNH faculty member has been recruited by ECSU to serve in a consultant capacity to work with faculty on grant proposals. We anticipate that she will serve as a critical bridge between our campuses to further bridge the cultures of our respective institutions.

The ECSU-UNH Partnership Core Activity

The core activity of the Elizabeth City State University–University of New Hampshire partnership is developing and implementing collaborative projects to enhance the common research and educational goals and expertise of the partner institutions. Central

to this is the preparation and submission of project proposals to federal agencies, including the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA). Teams with representatives from both institutions codevelop and submit the proposals. Between March 2004 and September 2009, collaborative efforts resulted in the submission of nine proposals to federal agencies (Table 1), four of which were funded (Table 2). Additional information and progress on each of these funded projects is available online at <http://leitzelcenter.unh.edu/programs.html>.

Table 2. Brief Description of Each of the Four Funded Collaborative ECSU-UNH Education and Research Grants

1. Watershed Watch: Monitoring the Merrimack and Pasquotank Drainage Basins as a STEM Undergraduate Recruitment and Retention Tool	
• URL: http://leitzelcenter.unh.edu/watershedwatch • Goal: to increase STEM recruitment rates at UNH and ECSU by engaging students in authentic, hands-on research of societal-relevant scientific problems. • Undergraduates learn STEM disciplines via use of geospatial technologies in an integrated, multidisciplinary study of the terrestrial, aquatic, and social components of watersheds. • Key components: (a) an intensive, technology-rich summer research institute held for rising freshmen and (b) a one-semester course in which student research teams design and implement a research or educational outreach project.	
2. Inspiring the Next Generation of Earth Explorers Through Remote Sensing Studies: Remote Sensing Explorers	
• Designed to create and disseminate new curricula in Earth system science and remote sensing across multiple HBCUs via summer workshops for faculty. • ECSU faculty to provide models of successful student research mentoring; UNH faculty to plan, develop, and deliver the summer curriculum. • Originally designed to directly impact more than 1,700 students at 15 HBCUs. Unfortunately, budget reductions at NASA resulted in suspension of the last two years of this three-year grant award.	
3. Northeast Alliance for Graduate Education and the Professoriate	
• URL: http://www.neagep.org/ • Goal: to increase diversity in STEM doctoral programs via graduate student recruitment, retention, and mentoring. • Established recruiting program for prospective underrepresented students nationally with a particular focus on several of ECSU's partner institutions. • UNH faculty have learned from ECSU faculty who have expertise and proven success in mentoring African American students.	
4. UNH GEO-Teach: Transforming Earth System Science Education	
• URL: http://leitzelcenter.unh.edu/geo-teach • Partnership among UNH, ECSU, Dillard University, and Pennsylvania State University. • Project addresses the need for highly qualified teachers in the geosciences via transformation of geoscience education at the middle and high school levels by mentoring and networking pre-service teachers with in-service teachers and authentic Earth system science research. • Earth science graduate and undergraduate students participate in summer enrichment institutes with teachers and continue to build relationships with the teachers during subsequent academic years.	

Evaluation of the Partnership Core Activity

To ensure ongoing programmatic success and continued commitment to the partnership vision, each funded grant proposal undergoes rigorous evaluation. Project teams commit approximately 10% of the proposal budgets to these evaluations, hiring professional external evaluators to ensure timely, targeted evaluation results and reports. External evaluators have been drawn from private companies specializing in program evaluation and assessment (RMC Research Corporation, Portsmouth, NH; Research and Learning Innovations at WestEd, Woburn, MA). The evaluation process begins with the proposal development process (needs assessment) and proceeds through program implementation (formative) until the program’s end (summative).

Evaluation of three of the four grant-funded projects has occurred through a variety of methods, including pre- and post-test surveys, phone interviews, focus groups, site visits, and formal assessment instruments (Table 3).

Table 3. Methods Used to Evaluate Projects Funded by Federal Agencies

Project	Evaluation Method					
	Single survey	Pre/post surveys	Phone interviews	Focus groups	Site visits	Validated assessment instrument
Watershed Watch		X	X	X	X	
NEAGEP	X		TBC	TBC		
TESSE		X	X	X	X	X

TBC: To be conducted

In order to understand how the partnership functions, evaluators have also participated in advisory board meetings and conference calls, and conducted phone interviews with faculty and staff in key programmatic roles. The evaluators have also communicated findings regularly to the project leadership, helped to prioritize program challenges, and offered guidance to reach specific grant program goals.

The ECSU-UNH partnership and grant programs have benefited from the ongoing external evaluations. For example, evaluation feedback has led to (a) frequent and consistent partnership-wide communication through monthly conference calls during planning stages, (b) awareness of the need to explicitly define

and identify roles and responsibilities among faculty and staff, (c) understanding of qualities needed in faculty to effectively mentor undergraduate students, and (d) alternative mechanisms to successfully recruit students into programs.

Evaluation feedback has also directly affected student participants. Through surveys and interviews with students the evaluator (a) ranked the incentives important to students for their participation in summer programs (for example, ranked highest to

“[T]hrough the external evaluation process, the grant project leadership learned which practices were effective and should be kept, which needed to be adjusted, and which could be discarded.”

lowest: meeting other student researchers, receiving college credits, conducting field research, receiving a modest stipend, receiving free tuition, designing a study to answer questions, being mentored by faculty, receiving free room and board), (b) recommended curriculum adjustments to further reduce lecture teaching and provide more time for student research projects, (c) ascertained that freshmen require skill-building with computer tools, and (d) determined

that more than two-thirds of students benefited from specific journaling exercises. Thus, through the external evaluation process, the grant project leadership learned which practices were effective and should be kept, which needed to be adjusted, and which could be discarded. As a result of the evaluation, the overall partnership has improved, at least in part because of the intentional observations, methods, and skillful interpretations of its external evaluators.

Limitations and Opportunities for Future Research

Although we have specifically evaluated individual grant-funded programs and have identified measures of success to guide these programs, we have not systematically evaluated the ECSU-UNH partnership model. Our initial focus was on building and nurturing the ECSU-UNH partnership by collaboratively writing proposals, implementing the grants that were funded, and becoming acquainted with the strengths of faculty on each campus. A limitation of this study is that we did not initially develop an overall evaluation of the partnership model, but rather focused more specifically on evaluating the grant-funded programs.

We suggest to future researchers and other universities that seek to adopt the ECSU-UNH model a well-planned and executed evaluation of the partnership. Such a plan would focus longitudinally on agreed-upon goals for the partnership, systematic evaluation of progress toward these goals, and modification of the partnership goals over time as the partnership matures. Such a systematic evaluation of the partnership would have provided additional data beyond that previously described to guide others and assist our analysis of what works to help further sustain the partnership.

Conclusion

Elizabeth City State University and the University of New Hampshire maintain a strategic partnership to collaborate on externally funded research and education programs and projects to expand scientific knowledge, enhance educational opportunities, and broaden participation in the STEM disciplines. The ECSU-UNH experience can serve as a model for other diverse institutions in geographically different regions of the country who seek to develop these kinds of partnerships. To date, ECSU-UNH's partnership success relies on the enthusiastic commitment of faculty and students engaged in learning and discovery; the ongoing, tangible support of administrative leaders at both institutions; and project funding from federal agencies.

The partnership is a learning organization with a cross-institutional community of scholars who jointly established partnership principles as defined by six promising practices. These practices overlap in many ways; their synergy and integration support a complex working partnership.

To date, the ECSU-UNH partnership has secured more than \$5 million in federal agency grant awards and has involved more than 25 faculty members, more than 400 students, and dozens of public school science teachers. As a relatively new learning organization, the partnership has had a positive effect on ECSU and UNH faculty and has served as a catalyst for new UNH faculty interest in recruiting STEM graduate students from underrepresented groups. The partnership also has enhanced and elevated recruitment efforts by the UNH Graduate School by catalyzing new, more diverse institutional connections. To improve the partnership, formative and summative evaluations of specific programs have occurred over time to help guide these programs. Additional plans are under way to strengthen the partnership as it continues to evolve over time.

Acknowledgments

The authors extend appreciation and thanks to Joan Leitzel, David Hiley, Wanda Mitchell, and Taylor Eighmy for their very insightful comments on this article. They also thank John Aber, Bruce Mallory, and Carolyn Mahoney for their initial support of the partnership, and they extend their appreciation to Lynnette Hentges, Michael Thompson, and Tracey Bentley for their special assistance. Finally, the authors would like to thank all the undergraduate and graduate students who are planning to become scientists, engineers, and mathematicians.

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REFLECTIVE ESSAYS

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Place, Purpose, and Role in Rural Community Development Outreach: Lessons from the West Virginia Community Design Team

Christopher Plein

Abstract

This essay examines how the social construction of community may influence faculty perceptions, roles, and actions in rural community development outreach. Special attention is given to the social construction of rural communities and how disciplinary perspective and popular culture influence these perceptions of community. The essay considers how social constructions are manifested in community development outreach by reflecting on the relevant literature, and the author's own experiences with a long-term university-sponsored outreach program. The essay also considers how these issues related to social construction can be addressed through principle and practice as illustrated through the experiences of the West Virginia Community Design Team. Five suggestions regarding faculty roles in rural community development outreach are presented.

Introduction

In recent years, the role of higher education in providing community development assistance through outreach and engagement has garnered significant attention. Outreach in this context proceeds from the assumption that many communities lack the resources and capacity to address complex issues associated with their changing demographic profile and economic conditions. Colleges and universities often have the resources and capacity to lend assistance to these communities through rural community development outreach, which in turn provides important opportunities for the college or university. Community development outreach provides opportunities to practice applied research and learning by means of service-learning programs, community outreach centers, technical assistance programs, public service units, and other community-based research initiatives (Bensen & Harkavy, 2000; Cox, 2000; Kensen, 2003; Loveridge, 2002; McDowell, 2001; Strand, Marullo, Cutforth, Stoecker, & Donohue, 2003).

This essay examines how faculty members perceive their roles in implementing community development outreach, and how they frame or interpret those places in which they carry out their efforts, especially when conducted in the rural context. It does so by using

the West Virginia Community Design Team to provide illustrations of some of these themes in application. The essay examines how framing or defining a place and its people is often a contested process of social construction. It also emphasizes that regions that have been subject to popular culture interpretation and stereotyping can present compounded problems of preconception and bias among those engaged in rural community development outreach. The issue of identity and role in community development outreach is then explored. Finally, the essay provides five points to consider in understanding role and perception in community outreach.

Setting the Context: The West Virginia Community Design Team

Established in 1997, the West Virginia Community Design Team (CDT) illustrates a coordinated university response to perceived community needs. Deeply inspired by a similar program established in the late 1980s called the Minnesota Design Team (*Mehrhoff, 1999*), the mission of the West Virginia Community Design Team is to assist small West Virginia communities as they identify and think through development challenges and opportunities. This is accomplished by having a team of faculty members, students, and professionals travel to a small West Virginia community for a two-day visit. The team relies on a broad range of disciplinary and professional interests, ranging from landscape architecture, to civil engineering, to health sciences, to social work, to public administration, to community development (*Plein, 2003*). By 2010, 42 Community Design Team visits had been conducted since program inception. Most of the visits have been conducted in rural areas of the state.

The typical Community Design Team visit includes an appraisal of the local political and civic climate, a review of economic and community development options, a survey of streetscapes and building design, and an inventory of community assets and resources. The first day of the visit is dedicated to information gathering and includes community tours, presentations by community groups and organizations, and a town meeting that is structured to solicit citizen input and discussion. The second day of the visit is dedicated to team discussion and development of plans, strategies, and actions that the community might consider. The visit ends with a town meeting where team observations and findings are offered. Team recommendations focus on the immediate and tangible, such as designs offered for landscape beautification, traffic safety, building restoration, or historic preservation. They also

focus on more long-term, amorphous objectives (e.g., economic development strategies and building civic capacity). After the visit, a detailed written report is provided. Team members frequently make themselves available for follow-up efforts (Plein & Morris, 2005).

The West Virginia Community Design Team has been a work in progress for over 13 years, and has grappled with a number of issues in program design and implementation (Loveridge & Plein, 2000; Plein & Morris, 2005).

To address challenges, the Community Design Team has engaged in regular review and reflection through the use of follow-up visits to communities, through planning retreats for the program, and through regular meetings of the steering committee. Such activity has led to refinements in the structure of Community Design Team visit formats, an increase of multi-disciplinary participation, and a greater emphasis on identifying follow-up activities for continued

“The Community Design Team program has learned that a rich and diverse base of community definition and interpretation allows more effective rural community development outreach.”

university-community outreach. Most important, the Community Design Team leaders have learned that the Community Design Team program's success depends on meaningful interaction with community members. To enhance interaction, the Community Design Team program leaders have adopted and refined various approaches to encourage broad and substantive participation by local residents that allows multiple definitions of “community” to be expressed. The Community Design Team program has learned that a rich and diverse base of community definition and interpretation allows more effective rural community development outreach. Establishing an appreciation for differing meanings or framings of community helps to facilitate collaboration by allowing different points of view to be acknowledged. It also helps to promote the consideration of alternative strategies and approaches to community development since actions need not be tied to one predominant vision of the community's current or past identity. An appreciation of multiple meanings of community also serves to remind participating faculty members how their own assumptions and preconceptions about a community need to be taken into account when participating in an outreach and engagement effort.

In essence, the Community Design Team serves a catalytic function for university-community development outreach. The Design Team format brings together community and university members for a short period of time to identify community problems and opportunities, and then engages the group in a collaborative visioning exercise. The process also introduces community members to resources for follow-up activities that may have been overlooked locally or are available beyond the community in the form of state and federal programs, university services, and foundation or philanthropic resources. The team visit can also reinforce existing community networks and collaboration by providing a space for community members to gather and to reaffirm their commitment to shared planning and development efforts. Finally, the Community Design Team model provides an opportunity to introduce faculty members to rural community development outreach.

Rural Community Development Outreach: Measuring Impact

The Community Design Team model is one type of university-community development outreach (Procter, 2005; Schafft & Greenwood, 2003). To measure its impact, the West Virginia Community Design Team program has been subject to considerable academic analysis and review. Much of the analysis has documented the program's evolution, and its application to specific elements of community development ranging from downtown revitalization, to community planning, to civic engagement, to health care service improvement, to disaster relief (Plein, 2003; Plein & Morris, 2005; Shannon, 2003). Evaluative work has included the study of early program experiences and the adjustments made to better match Community Design Team member and community member expectations (Loveridge & Plein, 2000), as well interpreting the barriers and opportunities for faculty participation on team visits (Loveridge, 2002).

Other analyses have focused on community member and Community Design Team experiences. For example, surveys have been administered to gauge perceptions during or immediately after visits (Stead, 1998; Walsh and Schaeffer, 2009). One study focused on long-term impact by interviewing student alumni 3 to 12 years after their service on a team visit (Plein, 2010). There is still work to be done in evaluating the influence of a Community Design Team visit on follow-up activities undertaken by the communities served.

Rural Community Development Outreach: Faculty Perceptions of Community

The focus of this essay is less on the efficacy of the Community Design Team program and more on illustrating how Community Design Team faculty member participants perceive the places they encounter, and the roles they play in rural community development outreach. The use of the West Virginia Community Design Team as a basis of illustration draws from the author's years of observation and participation in the program. Such an analytical approach has gained validity as a means of inquiry—especially in the study of communities, organizations, and professions (*Balfour & Mesaros, 1994; Kensen, 2003*); of faculty roles in higher education and society (*Hall, 2007*); and of university outreach and engagement (*Diener & Liese, 2009; Domahidy, 2003; Schafft & Greenwood, 2003*).

Rural Community Development Outreach: Construction of Place

Community is an elusive concept. Literature on the topic suggests that “community” can be framed in at least three dimensions: 1) community can be envisioned as a sense of place, 2) community can be perceived as a sense of personal identity, and 3) community can be conceptualized as a set of preferred behaviors and associations among those making up the community in which interaction exists or is desired (*Eberly, 2004; Gusfield, 1975; Mehrhoff, 1999; Mitchell, 2002; Phillips, 2002*). These framings tend to be conceptualized temporally, and concentrate on the effects of perceived change on place, personal identity, and social interaction. Gusfield (1975) notes that a driving concern in the study of community is the impact of social change. Mehrhoff (1999) suggests that community “is a complex phenomenon possessing multiple meanings” best understood in context of how perceived changes are registered by citizens, specialists, and other observers (*p. xv*).

The subject of community has more recently been taken up through the postmodern perspective that spans disciplines in the social sciences and humanities. Building on earlier ideas of social construction (*Berger & Luckmann, 1966; Blumer, 1971*), postmodern sensitivity can help the observer appreciate how one's frames of reference influence the interpretation of that which they study. Kensen, Sundgaard, Flessen, Musso, & Sehested (2003) convey that “postmodern discourse assumes that the world is communicated into existence” (*p. 327*). Thus, the defining characteristics of community—its sense of place, the identities of its inhabitants, and

the expectations of behavior and practice—can be constructed in a variety of ways by different actors. It is not surprising that this perspective has been applied to ethnographic explorations of community (Foster, 1993; Mitchell, 2002; Phillips, 2002; Stewart, 1996), and to reflections of the participant-observer in academic engagement activities (Kensen et al., 2003; Banks et al., 1993; Procter, 2005).

Understanding the factors and forces that can influence faculty perceptions is an important starting point for understanding how community is constructed in higher education outreach and engagement. For many academics, their disciplinary training may provide a set of preferred visions and concepts of community, which may not mesh with the interests of the community members who are to be “engaged.” For example, those in the planning field have long struggled with professional planners’ preconceptions (Whyte, 1968). Domahidy (2003) notes that strong adherence to theory among community development professionals allows them to “unconsciously come to hold an idealized vision of the community against which they assess the present and immediate community” (p. 77). Such a disciplinary perspective may be in the foreground of interpretation and practice. Against this, there is a more nebulous backdrop of perception and impression that is created by images encountered through social norms and popular culture. These, too, can have a powerful influence on the manner in which community is constructed by the faculty member engaged in outreach (Mehrhoff, 1999). Together, these forces can reinforce each other and create barriers to a faculty member’s full appreciation for the specific places and people that are the concern of rural community development outreach.

The Concept of Rurality

The concept of rurality can be evocative. Long celebrated as genuine and authentic, rural communities have been idealized and romanticized as a pure type of community—self-sufficient, friendly, and civically engaged. This description has been accepted both in popular culture and in academic circles. For example, Bradshaw (2008) notes, “Place communities such as rural small towns are typically heralded as model communities where social cohesion rules—strong patterns of social interaction based on long-lasting and deep personal relations” (p. 6). Rural communities are also perceived to be at risk, threatened by the forces of progress, modernization, and technology as well as by the economy. This depiction is nothing new, for the rural community has been said to be in crisis for some time. In the 1800s, social theorists began

to document, explain, and ponder the implications of the shift from traditional agrarian communities to market-driven urban communities (Gusfield, 1975). Throughout much of the 20th century, the causes and effects of rural community decline continued to be a source of academic interest (Hoiberg, 1955; Lancaster, 1952; Morgan, 1942; Vidich and Bensman, 1958). Underlying these studies was the assumption of a “loss of community,” or at least a threat to a traditionalistic construction of community. Gusfield (1975) describes this as “a litany of pathos in the descriptive accounts of the past and present as often presented in contemporary sociological writings” (p. 20). This sentiment is expressed by many who lament the passing of “community” (Berry, 1977; Perry, 2002). While much effort is given to documenting the end of the past, there is also a strong urge to retrofit the small community into modern society. Embracing an idealized vision of community and accepting the premise that such entities are at risk may create biases in the manner in which faculty engage and work with communities. This can be mitigated by adopting collaborative practices that more fully involve local residents in community development and design outreach efforts. It can also be tempered by encouraging teams to be multidisciplinary in their makeup.

“Embracing an idealized vision of community and accepting the premise that such entities are at risk may create biases in the manner in which faculty engage and work with communities.”

Faculty perceptions of rural communities can be constructed from sources beyond disciplinary orientation. As Gusfield (1975) notes, the romantic currents are strong among many social theorists who have “accentuated and maintained the myth of lost paradise, a *gemeinshafiliche* Utopia which we have lost in creating a world of rational organization, economic exchange, and specialized functions. The dichotomy of ‘community and society’ is accepted, to the decided derogation of Society” (p. 90). The pull of place, even if imagined, can be strong. Nonetheless, Mehrhoff (1999) notes, “Nostalgia, however, is not a particularly effective form of social analysis” (p. x). There may be a desire to impose a romantic vision on the small, rural community that is rooted in the pastoral. In the search for a new Arcadia, academics may overlook the needs

and concerns of those that they are hoping to engage and assist. In university-sponsored rural community development outreach it is crucial to acknowledge such predispositions, and the challenges involved in converting what might best be called “passion for place” into productive action that can assist communities on their own terms.

Disciplinary orientation combined with the acceptance of popular images and portrayals of place and people can set the context by which faculty members encounter a community and its residents. U.S. popular culture is rich with shorthand sketches and characterizations of regions and their inhabitants that are more the product of generalization and stereotype than of empirical study and reasoned analysis. Stereotyping of a place or region can compound faculty misconceptions about it. Portrayals of the Appalachian region provide a good case in point. The images of Appalachia are powerful. It has been portrayed as distinct from the rest of the country (*Banks et al., 1993; Foster, 1993; Griffin & Thompson, 2002; Shapiro, 1978; Stewart, 1996; Williams, 2002*). The stereotype of rural communities is of once self-sufficient communities overtaken by the forces of modernization and industrialization, now left as castoffs in modern society (*Foster, 1993*). The once vibrant mines, railroads, timbering operations, and factories are now largely gone, leaving a portrait of a postindustrial landscape of scarred mountains, closed storefronts, dilapidated housing, and chronic unemployment (*Stewart, 1996; Williams, 2002*). As a result, Appalachia is portrayed as a region in crisis.

For over 40 years, this image has been reinforced through mass media. For example, images of poverty and distress were popularized decades ago in such periodicals as the *Saturday Evening Post* (*Tunley, 1960*). The images continue to be used. In “Losing Hope in Appalachia,” the *Boston Globe* reported how one county in Appalachia compares poorly to underdeveloped countries in terms of its residents’ health status and access to medical services (*Donnelly, 2003*). In December 2006, the *New Yorker* ran an advertisement for Children Incorporated soliciting donations to sponsor impoverished Appalachian children. The lead caption for the ad read, “You don’t have to leave your own country to find third-world poverty” (p. 41). More recently, ABC television aired a documentary on “The Hidden America: Children of the Mountains,” which played on stereotypical images of the region and its people (*Sawyer, 2009*). A common thread in these depictions is that the region and its people need help. Moreover, they posit

that outsiders can provide the resources and talent needed for Appalachia to overcome poverty and distress.

While such images can draw attention and mobilize effort, they can also undermine a more nuanced understanding of Appalachia, thus complicating meaningful university rural community development outreach. For instance, there has been a recent trend for travel agencies and service organizations to promote travel to distressed places and regions to allow visitors to see poverty and even to help “make a difference” through volunteer efforts. Todd (2008) has ruminated on this rise of “voluntourism,” noting that it reflects a desire by some to engage in authentic activity, but that the end result is somewhat artificial. The acts of assistance are more ritualistic and commodified than they are genuine. It is not difficult to comprehend how these same emotive forces might play on faculty members. There is the danger that outreach efforts to relatively remote locations, such as a poverty-stricken coal camp or a remote mountain hamlet, might appeal more to a faculty member’s sense of charity than to a commitment to collaborative problem solving. The prospect of this also raises the challenge that meaningful engagement needs to be more than an academic version of “voluntourism.” Coordinated university rural community development outreach efforts should anticipate and address these challenges.

The West Virginia Community Design Team Experience in Constructing Community

Acknowledging the social construction of community is central to the Community Design Team approach. The program members recognize that their outreach activities take place primarily in rural communities in the central Appalachian region. While seeking to be as inclusive as possible in engaging participation, the sense of community that is arrived at for the purposes of Community Design Team deliberation is interactive, contingent, temporal, and mutable. Recognizing this, the Community Design Team process attempts to prevent the tendencies of participants to create competing visions of community. Community Design Team leaders use various tools and techniques to overcome what Yankelovich (1991) has described as the dangers of “domination and distortion” that result when a few voices, often those of the privileged, steer the course of deliberation (p. 216). In short, the richness of definitions and constructions depends, in part, on the breadth of participation by representatives of different community interests and perspectives. In the visit, the team’s effectiveness in facilitating discussion and dialogue among local residents, and the

team members' own self-awareness of how they are "encountering" community, is crucial in achieving this objective.

Encouraging broad participation is one of the key responsibilities of the Community Design "advance team," which meets with the community representatives who are organizing and hosting a Community Design Team visit. The advance team (typically the Community Design Team's program coordinator and two or more faculty members) works from an application package provided by community representatives. The package contains information on the community's demographics and economy, along with a discussion of the issues, concerns, and attributes that the applicants consider important. While on site, the team reviews the purposes of the visit; seeks to align expectations with what the team can deliver; anticipates the types of specialists and experts who should be on the team; outlines the general schedule and format for the visit; and attempts to identify fissures within the community. In identifying conflict within the community, the advance team members can work with the community representatives to ensure that the community participants are truly reflective of the diversity of voices in the community. Past experience has shown that schisms left unaddressed in the initial stages of engagement can lead to failure in the overall team visit (*Loveridge & Plein, 2000; Plein & Morris, 2005*). Ideally, a broad base of participation can lead to richer and fuller discussions about community development concerns, visions, and options during the Community Design Team visit.

During the full Community Design Team visit, efforts are made to create opportunities for citizens to offer their views on community. Theorists and practitioners stress the importance of creating a common ground for meaningful interaction that allows respect for differing opinions, the opportunity for respectful dialogue,; and an iterative process to comprehend the issues discussed (*Burkhalter, Gastil, & Kelshaw, 2002, pp. 405–406*). To this end, the Community Design Team program utilizes a variety of approaches. For example, on the first full day of the visit, information sessions are held with community representatives and stakeholders. Typically, various citizens' groups, business groups, and local officials give presentations. It is not unusual for business representatives to define community around the immediate downtown commercial district. There is a concrete and physical framing to such depictions. Community groups, on the other hand, tend to describe community in associational and human terms. Their depictions often focus on demographic change—often the graying and/or decline of the population—or the need to recapture the sense of

“community” characterized by civic life and interaction that once existed in real or imagined terms. Student groups also participate in the Community Design Team process. They often interpret the community from details (e.g., a broken-down school bus shelter, a missing basketball hoop at the local park). When combined with the other presentations, the student perspective provides an inter-generational context that helps to situate the community in terms of its past, present, and future.

The first full day of a Community Design Team visit ends with an evening town meeting, which provides an opportunity for more interaction, expression, and discovery of shared, complementary, and divergent descriptions of the community. Various approaches are used to encourage the community’s residents to share different perceptions of their community among themselves. These exercises include facilitated discussion as well as writing and mapping exercises that focus on current and prospective themes and issues. Because concepts of community are so often constructed from interpretations of the past, residents are asked to conduct a “generations” exercise in which they describe what life was like in the community at certain times in the past. Invariably, recollections differ and definitions of signature events vary, shedding new light on the community’s multiple dimensions. These and similar exercises are recognized as critical to building a foundation for collaboration and action (Burkhalter et al., 2002; Mehrhoff, 1999; Procter, 2005).

Many years of Community Design Team program experience have highlighted the importance of developing tools and approaches that foster discussion, and break down barriers to discourse and understanding

among residents. Through a variety of activities, the process works to ensure that multiple meanings of community are expressed and considered during the visit. The different forums and approaches allow a composite image of community to emerge. Residents are provided ample opportunity to offer descriptions of community,

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and to identify related concerns, issues, and needs. By learning about different constructions of community from local residents during these activities, faculty member participants gain a better understanding of the community as well. Faculty participants are also immersed in the community through home stays with host families during the visit. Spending time with a local family provides opportunities for conversations and experiences that shed further light and understanding for the rural community development outreach process.

Rural Community Development Outreach: Purpose and Role

By considering how communities are constructed, participating faculty members can better appreciate how they construct their roles in rural community development outreach endeavors. This is important. Domahidy (2003) notes that the manner in which faculty, experts, and professionals define a community shapes the manner in which they formulate strategies and solutions to the problems they perceive to exist (p. 79).

Problem Solving

Because communities are often framed as being “in need,” the perception that problems exist to be addressed and solved shapes perceived roles and actions of engaged faculty members. There is a tendency to perceive university-community engagement as problem solving. Indeed, it is the sense that universities need to respond to social ills and community problems that, in part, prompted

“It is best to proceed from the perspective that the university’s mere presence will likely create disruption and uncertainty.”

the Kellogg Commission on the Future of State and Land-Grant Universities (1999) to encourage a “returning to the roots” of the land-grant mission.

Problem solving, however, results in its own consequences and challenges. Defining problems and offering solutions is difficult terrain to negotiate in the context of community engagement. Ideally, engagement

can serve as a catalyst for positive action, but at the same time it may create challenges for others whose preferences and priorities run counter to proposed, or merely identified, courses of action.

Proposing solutions involves choices; solving problems portends change. Proposed solutions can create disruption and conflict. University outreach is not neutral. Invariably, those engaged in outreach must wrestle with dilemmas posed by involving themselves in the affairs of a community. It is best to proceed from the perspective that the university's mere presence *will likely* create disruption and uncertainty. In this way, conflict and disagreement can be better anticipated.

Disciplinary Perspective

Closely related to the issue of problem solving is the manner in which issues and solutions are framed from a disciplinary perspective. Academic specialization and professional expertise pose the risk that problems and solutions will be framed to conform with a specific disciplinary orientation. As Mehrhoff (1999) notes, "As the old saying goes, if your only tool is a hammer, every problem is a nail. The single-focus lenses of academic disciplines, although valuable as heuristic tools, distort the appearance and nature of our communities" (p. xvi). Once problem identification and proposals for solutions move from theory to application, a new set of concerns emerges. Will the proposed solutions reflect the value preferences of the faculty members or the community members? Older models of outreach were predicated on the belief that the merits of outreach were legitimized by the technical

"An interdisciplinary approach brings mere knowledge and experience to the table, and allows for solutions to be framed from more than one philosophical preference."

and objective expertise that faculty members brought to bear on community needs. Contemporary observers often suggest that overcoming the challenges of disciplinary bias calls for a more pluralistic, inclusive, and multidisciplinary approach to outreach. An interdisciplinary approach brings more knowledge and experience to the table, and allows for solutions to be framed from more than one philosophical preference (Domahidy, 2003; Loveridge, 2002; Mehrhoff, 1999; Plein & Morris, 2005).

As a practical matter, and from a community member's perspective, it might be difficult to differentiate between recommendations that are grounded in disciplinary theory, and those that emanate from a preferred set of value choices about

society. Still, some community members may perceive outsiders as seeking to impose an agenda for action and change. Such reactions call for practices that seek to diminish skepticism, and build trust. Perhaps more challenging is the ongoing conflict within the academic community about the proper place of “advocacy” in engagement. As used here, advocacy is a commitment to a specific goal, the willingness to argue for the strategies to achieve the goal, and the willingness to actively assist in working toward the goal. While some argue that there is no place for advocacy in university engagement, others differ. Indeed, there are those who advocate that a key focus of service-learning pedagogy and community-based research should be “social change” that may require challenging the “status quo” (*Strand et al., 2003, pp. 81–85*). Advocacy may necessitate faculty members “playing with boundaries” in order to advance social justice (*Kensen et al., 2003, p. 327*). It may be necessary to help give voice to those who are perceived to be dispossessed (*Banks et al., 1993*). Others argue that all service can be construed as some form of advocacy—whether it is to agitate for change or to maintain existing power arrangements (*Pillavin, Grube, & Callero, 2002*). As more academic disciplines within universities use service-learning pedagogy, we may expect to see conflicts emerge when there is ambiguity in the purpose of the outreach endeavor. The Community Design Team model is a way to mitigate such conflict.

Dealing with Difference

Dealing with the issue of “faculty role” in rural community development outreach also involves the matter of “difference.” Rural community development planners and scholars have long advocated that faculty experts seek to close the distance between themselves and those local residents they assist (*see, for example, Lancaster, 1952; Toner, 1979*) by jointly identifying needs, and developing alternatives for action that enable “valuing indigenous knowledges” (*Semali & Maretzki, 2004*). Service-learning, community-based research, action research, and the community design team model are techniques that can minimize “difference” and can advance mutuality and reciprocity in university-community partnerships (*Bringle & Hatcher, 2002; Hendriks, 2003; Kensen et al., 2003; Schafft and Greenwood, 2003; Strand et al., 2003; Zouridis, 2003*).

Narrowing the distance between faculty “experts” and community members can be difficult. There is a long-standing tension between the idealized role of the “rational professional,” and the more emotive and organic identity of the “virtuous citizen.” Domahidy (2003) notes that it is the difference between “rational”

and “natural” will. The former is the function of the instrumental application of knowledge and logic; the latter is the acceptance of the outcomes of the mutual bonds of civic interaction (*Domahidy, 2003, p. 78*). In university-community development outreach, role and identity must be negotiated. For university outreach to be credible, some level of expertise and competence must be maintained. Playing to stereotype or overcompensating by trying to be more “down home” or “down to earth,” however, complicates the process (*Burkhalter et al., 2002, pp. 408–409*).

The West Virginia Community Design Team Experience with Purpose and Role

Often, the arrival in a small community of 20 university faculty members, students, and professionals “makes waves” by surfacing conflict within the community. The prospect of change harbors uncertainty. Although the ideals of design and planning are aimed at managing change and diminishing uncertainty, the plans that will be proposed, the designs that will be adopted, and the manner in which both will be managed and implemented can cause concern and disagreement. Because of this, the Community Design Team process can be a lightning rod for surfacing long-standing and deep-seated community concerns and controversies. At times, the West Virginia Community Design Team has been the subject of controversy for its perceived association with certain community interests or groups, or with issues that have created conflict in the past. Some have perceived the Community Design Team as an intruder with its own agenda.

Some argue that controversy is necessary to promote an eventual joint understanding of the perceptions, needs, and opportunities facing a community (*Domahidy, 2003; Kensen, 2003; Mehrhoff, 1999*). Some of the most difficult controversies that the West Virginia Community Design Team has encountered have involved perceptions that the team visit would lead to land-use and other regulations. Once, in responding to a survey about a team visit, a resident noted that during the visit “some hard feelings came from [team visit]” because some community members were willing to work for change while others were not (*Stead, 1998*). In another instance, a town official’s criticism made it to the local newspaper. He likened the Community Design Team’s function and recommendations to “Stalin’s Russia,” and claimed that the Team’s findings were “downright dangerous to our economy” (*Corcoran, 2002, p. 7*). Leaders of the Community Design Team have learned that the best way to channel potential controversy is to

clearly communicate the Community Design Team's purposes and processes at the beginning and throughout the process.

Rural Community Development Outreach: The Key to Effectiveness

Advance planning through a community application process is the key process step for effective university-community outreach, particularly in rural community development endeavors. Leaders of the West Virginia Community Design Team have learned over time that careful planning to align expectations between the program and a community's organizing committee—prior to the site visit—is critical. Those requesting a visit are required to submit an application that details perceived challenges and opportunities

“By being ‘on the ground,’ the team representatives can further gauge the scope of issues and concerns that have been expressed, especially in spatial or geographic terms.”

facing the community, identifies key issues and concerns that they hope the team can address, and demonstrates the breadth of involvement by other stakeholders. Knowing the issues is key as Community Design Team representatives begin a dialogue to identify the concerns that are most feasible and salient to address. The application process also asks who from the community the organizing committee says will be involved. The Community Design Team leaders can take steps to ensure

that community-based participation includes a wide spectrum of interests and stakeholders before the actual site visit. An advance visit, involving a few team representatives interacting with a local organizing committee, can further help to align expectations. By being “on the ground,” the team representatives can further gauge the scope of issues and concerns that have been expressed, especially in spatial or geographic terms. All of this information helps program representatives as they assemble teams that can best match the subject area expertise and skills needed for the visit.

Determining a Community's Priorities

Two parts of the application process include identifying the topical issues to address and the geographical locations on which

to focus. Often the two are interconnected. For example, given their disciplinary interests and reinforced by new models and theories that focus on sustainability and renewal, many team members tend to concentrate their attention on the old downtown business districts that characterize many of the small towns where the Community Design Team operates. These are prized public places that hold history and identity. They contain valued architecture and memories. They offer streetscapes waiting for the designer's plan for improvement. At the same time, they are often in decline: businesses have moved away, and residents have gone elsewhere for goods and services. For some engaged faculty members, the exit of businesses means the further erosion of community—the solution rests with bringing them back into the core downtown area to recapture the vitality of the past. For other engaged faculty members, the downtown represents a new opportunity to reinvent community so that mixed and sustainable development might occur; strip development on the outskirts of town might be mitigated, and visitors and others will be drawn to the downtown.

Determining the Geographic Area

Some team visits have focused on the old downtown district—because that was the perceived desire of the local residents. Other visits have focused on strip development, or on the approaches and entrances to the town center. Still other visits have been area- or countywide in focus, and have sought to situate individual towns and communities in relationship to each other.

If those local residents who are hosting and participating in the Community Design Team visit share the team's vision, then the work of the team is credible and may be fruitful in identifying options, resources, and opportunities for future action. If, however, community preferences are different yet the team continues to focus on Main Street, then the design team may steer treacherously close to defining what the community *ought* to be, rather than responding to citizen interests and needs. In some instances, for example, community members have expressed concerns that Community Design Team members wanted to turn their towns into tourist destinations, rather than revitalizing the community's economy with industrial, business, and other development. To illustrate, a community member expressed feelings that the Community Design Team wanted to make the downtown "quaint" with "arts and crafts stores" (*Clayberry News*, 2007).

Summary

The Community Design Team process is meant to help “catalyze” rather than “lead” action—emphasizing that change must come from the community itself (*Loveridge & Plein, 2000*). Experience has taught Community Design Team leaders that careful preparation is needed when working with communities. Careful preparation includes advance visits to the community and the use of multidisciplinary teams. A pluralistic approach to Community Design Team composition means that passion and advocacy, when present, can be diluted by the presence of other team members. Diverse team composition can also preempt recommendations that are too discipline-centric or prescriptive.

Conclusion

Although the issue of subjectivity has long been an epistemological concern in the manner in which scholars conduct inquiry, the issue becomes particularly relevant as academics encounter and engage communities, especially when they participate in rural community development outreach. The author’s long-term participation in the West Virginia Community Design Team leads him to offer five points as a practical guide. The reader should consider these five points in her or his university-community engagement endeavors.

“Community” Is a Social Construction

First, community is a social construction. University participants must acknowledge the ambiguity of community. It is not uncommon to project a set of preferences and desires onto a community regarding what “ought” to be. Because of this, university members may be tempted to judge the current situation against their idealized visions of the past or future—neither of which may be a practical point of comparison or aspiration. In some circumstances, an image or definition of a community may be “prepackaged.” This is especially the case with communities in rural areas or regions that have been subject to treatments in popular culture that portray the location as out of the “mainstream.” University member definitions may not necessarily be consistent or well-founded, but instead may be a jumble of expectations and interpretations framed by emotion, memory, popular images, and professional training. The remedy for subjective construction rests with a pluralistic approach to defining community that involves many voices and participants.

Universities Engage People, Not Communities

Second, universities do not engage communities—university members engage people. No matter how searching and proactive a team's efforts may be, it is not possible to engage all of the stakeholders and interests in a community. Representation will not be equal at meetings; some voices will be louder than others. The sponsors who bring faculty to the community may be seen as aligned with some interests and not others. As Padt and Luloff (2009, p. 240) have observed, "Most leaders see the community through particular sets of lenses reflecting specific interests." This characterization extends beyond local government and elected officials, to include those involved in civic, business, and other interests. Faculty members involved in engagement have the responsibility to pull these all together in complementary ways. At the same time, they must recognize that their efforts will be imperfect.

Faculty Words and Recommendations Have Impact—Both Positive and Negative

Third, faculty words and recommendations make a difference. They can disrupt. Academics are trained to solve problems. Encountering a community will include identifying faults, challenges, and problems. Suggesting that a problem exists may upset some. Proposing the means of addressing and solving problems may upset others. Offering strategies that prioritize specific actions over others will disappoint some and satisfy others. Presence makes a difference. Some interests will be privileged, and some will be prejudiced when faculty visit and engage. From a practical and immediate perspective, faculty members must remind themselves that some will stand to win, and others to lose as a product of community design and development initiatives. Academics must acknowledge this, and should then make conscious decisions on how to promote inclusive and collaborative approaches to problem solving.

Faculty Members Offer Options

Fourth, because actions make a difference, faculty members who are engaged in community development have an obligation to help communities think through options. They must also do their best to help identify the potential consequences of action—or inaction. Offering a range of options allows for the "requisite variety" that decision-making theorists argue is necessary to envision broader consideration of alternatives and possibilities

(Ashby, 1964, p. 206). Most important, options offer a sense of choice and empowerment to the community. Alternative options can be seen as ideas and suggestions to consider. One option or a limited set of options may be viewed as an authoritative prescription.

University-Community Engagement Requires Intentional Administrative Support

Finally, programs like the West Virginia Community Design Team illustrate that higher education institutions can provide a framework for faculty engagement in community development. Doing so presents an institutional opportunity and obligation to create and sustain programming that is attentive to the way faculty members perceive the communities they engage and the roles that they play in outreach. As the Community Design Team process illustrates, these perceptions may be taken for granted, but they can be addressed, and it is often necessary to consider how approaches to doing so can be improved. Proactive efforts by university administrators to remind faculty that community is socially constructed, that it is citizens and residents who are to be engaged, and that both the promise and the fallibility of human nature will shape the way faculty engage community are necessary to make outreach more effective, and, ideally, more rewarding for all those involved.

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Maximizing the Impact of Community-Based Research

Mary Beckman, Naomi Penney,
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Abstract

Community-based research (CBR) is an increasingly familiar approach to addressing social challenges. Nonetheless, the role it plays in attaining community impact is unclear and largely unstudied. Here the authors discuss an emerging framework aimed toward fostering community impact through university and community civic engagement. They describe how, through application of this framework to initiatives intended to reduce obesity, CBR might be focused for greater effect.

Introduction

Though community-based research (CBR) has been used to address social issues for well over two decades, evidence of its long-term impact in communities is lacking. One reason for this absence is the time required for social improvement to become visible. Of interest to us, however, is the lack of frameworks and models to help research partnerships plan for and reach long-term results (*Bosma et al., 2010; Stoecker, Beckman, & Min, 2010; Stoecker, Loving, Ready, & Bollig, 2010*). A literature review conducted by Currie et al. (2005) in the “fields of health promotion, education, community development, science and technology, and research utilization” suggests the need for such guidance. It shows “no generic, comprehensive models of types of impacts that reveal the real-world relevance of research partnerships” (p. 401). Given the ongoing advocacy for CBR as a means for addressing social challenges, it is increasingly important to understand what works and what does not, not only in the short run, but over time.

In this article we describe a framework we are developing to guide CBR toward long-run impact in communities. To explore the potential efficacy of this framework, we will apply it to a CBR initiative that has been associated with results in our local area. Our hope is that this discussion will encourage others to try out this approach as they engage in their own CBR efforts.

The Framework

Each year, the Corporation for National and Community Service calls for applications from colleges and universities across

the country so that they might gain recognition through its presidential Higher Education Community Service Honor Roll (<http://myproject.nationalservice.gov/honorroll/>). The 2010 process asked, for the first time, that applicants identify what are being called “outcomes” of university service and service-learning. This is just one example of the current and growing emphasis on community outcomes among academic and community partners working to achieve community improvement.

In our research and practice, we are finding that those interested in and using the term “outcomes” are generally seeking assessment instruments to document and evaluate results associated with individual research projects. While we want the projects that we are associated with to have a plan for attaining measurable results—the kind of plan that might be developed and documented through logic models, for instance—and to follow through to attain those effects, we are not focusing on this aspect of community results here. Rather, we are attempting to formulate a larger framework in which a variety of projects directly connected to and emanating from CBR might be guided toward greater community well-being. Furthermore, we are proposing not a model, but rather a way to think about projects with a view toward the larger potential, such as ripple effects that outlast the specific research endeavor and contribute to community improvement down the road.

The framework involves three key elements: (a) the identification of a long-term goal and the strategies for action to attain that goal, (b) planned ongoing evaluation and revision of strategies and action over time, and (c) broad participation of various constituents across the professional and lay communities involved in or affected by the issue of concern. These elements, while distinct, have an effect on and are affected by one another, and it is the specific way they interact on any given issue that will lead or not lead to impact in the community.

Long-Term Goals and Strategies

Any planner of projects understands the need for stated goals. As is often said, “If you don’t know where you’re going, it doesn’t matter how you get there.” Those seeking community change know it does matter how you get there. It is often the “how” that ultimately determines if you get there at all, regardless of whether “there” is a reduction in crime, homelessness, or obesity. Articulating those goals is not easy, particularly for long-term efforts. However, the importance of clearly articulating goals and strategies is the reason

we have made it the pinnacle of the diagram presented in this article.

In setting goals, we also want to be able to differentiate among different time frames. To make the distinctions, we are suggesting specific definitions for the terms outputs, outcomes, and impacts. These terms, in particular outcomes and impacts, are used inconsistently across a number of literatures. For instance, in the public health field, Green, Kreuter, and Deeds (1980) refer to outcomes as the effects of a program on long-term measures such as morbidity and mortality, and impact as the immediate effect a program has on knowledge, attitudes, and behaviors. Windsor, Baranowski, Clark, and Cutter (1984) define outcomes as anything persisting after the program or health intervention has ended and impacts as the more immediate effects of a program, similar to Green et al. (1980). The field of evaluation is equally divided. A query to the electronic mailing list used by the American Evaluation Association revealed that impact and outcome were used interchangeably. However, slightly more evaluators considered outcomes immediate and impacts longer term events. Strand, Marullo, Cutforth, Stoecker, and Donahue (2003b) present a conceptual framework for assessing CBR project results specifically. Some of what they have called outcomes, however, have been defined by others as impacts. Similarly, in a related working document (*PAR Outcomes Project*, 2007) on the University of Wisconsin web site, impact is found on a continuum of time from research through action and into what is called the after-effects.

In our usage, we are building on the work of the PAR Outcomes Project (2007), Stoecker, Beckman, et al. (2010), and Stoecker and Beckman (2010). We define an output as the immediate result of whatever action is undertaken. In the case of CBR, the output would typically be the research report or findings from the research in whatever form given. An outcome would be the effect of that research in the medium term. For example, if the research were used to create or improve a program, the new program or program changes would be the outcome. We define impact as an accumulation of outcomes, and ultimately improved community well-being.

Ongoing Evaluation and Revision

It is optimal to embark on any research project with a commitment to checking on and then redirecting the work as the overall project unfolds. Essentially, the framework we are discussing looks not at the immediate end products of any particular research

project itself (outputs), nor at the programmatic, policy-related, or other more medium-term results that could emerge from those outputs (outcomes), but at a much larger, longer term endeavor to which the research contributes when it plays a key role in community improvement. In other words, the end point should not be an output or an outcome, though each individual project might have such an end point as delineated through, for example, a logic model. Rather, the end point would be a larger community effect such as a reduction in poverty or homelessness. The re-envisioning of strategies that would take place over time would thus be aimed at keeping actions, that is, the individual projects' efforts, aligned to this larger impact goal.

Broad Participation

Broad participation of various parties, both in the conception of the goal and in the activities, including research, that follow from it is encompassed in this framework for a variety of reasons. For one, such inclusive involvement is likely to enhance the possibility of reaching the goal (*Baker, Homan, Schonoff, & Kreuter, 1999; Lynn, 2000*). For example, if no one among the researchers is connected with an organization that could act on the results of the study, chances of moving toward the longer term aim will be reduced. Also, the initial researchers will not necessarily participate in the next steps at various points; that is, the researchers most closely tied to the academic realm may not continue in the actions that put the research into effect. On the other hand, those that have the most at stake in the outcomes may be in the best position to assure that the research design results in the acquisition of useful information. They might, as well, be the true "experts" in determining whether the results will be used by those who need the information. According to Bayne-Smith, Mizrahi, and Garcia (2008), "multiple types of expertise are usually required to create community change that will improve the quality of life in marginalized communities. This range of expertise must be obtained from multiple community stakeholders including community residents as well as professionals" (p. 250).

This involvement of diverse collaborators may be the most difficult aspect in the implementation of this framework. Historical factors, different uses of geographic space by groups of different races and ethnicities, and other conditions of the specific context of the work must be considered and negotiated in this process (*Beckman & Greene, 2011*). We are asserting, however, that this is the very kind of engagement that must be worked through for attainment of the long-run impact we are seeking.

Figure 1 depicts a diagram of the framework. An important aspect of the framework, as shown in the diagram, is the influence of each point of the triangle on the others. The goal is at the top, as we believe that the goal is the driver. Goals should be created based on the most current scientific data supported by the experience in the local context and described in measurable terms. The goal will influence and be influenced by who participates in the research, as well as the results of various evaluations.

Inside the triangle frame are the projects designed to move toward the overarching goal. This is where one articulates the strategies for attaining the goals of each individual effort. Here is where the logic model, or other implementation or evaluative model, can track and monitor the research progress of each project toward its individual goals and toward the overall goal. We have located the projects within the triangle because of their dependence on the three legs of the overall framework. Whatever the individual projects may be, they must ultimately address the overarching goal; they each must strive for the broadest possible participation in their conception and implementation; they must also be able to adjust as revisions and evaluations identify areas for improvement in action over time.

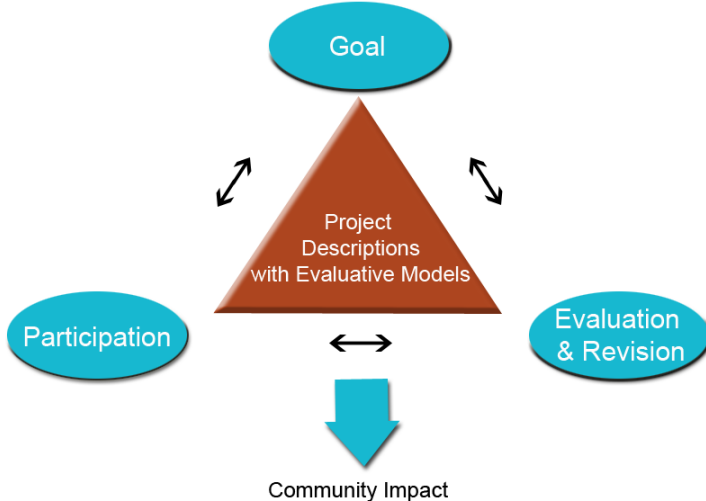


Figure 1. Community Impact Framework. This diagram illustrates the components of the framework and how they interact.

Mini-Grants and Obesity Research

Two authors of this paper have developed and direct a CBR grant program at their university. We wanted to consider how we might use the impact framework we have just described to improve

the chances that the research we fund will lead to more or better effects in our area. One way we chose to explore this was to overlay the framework onto a project that had been funded through our grants. We identified a study focused on obesity that we knew had recognizable results.

In what follows, we first provide information about our granting program. We then present a literature review that led us to the development of the framework. Next, we describe the obesity project and related outcomes, followed by the mapping of the framework onto the obesity-related efforts. We note where the framework does and does not fit what has been accomplished and provide our assessment of the value of the framework for furthering community impact.

CBR Mini-Grant Program

Since 2002, the University of Notre Dame's Center for Social Concerns has been facilitating CBR in a variety of ways. Central to this article is our awarding of three research mini-grants annually.

In spring 2003, the Center awarded its first Rodney F. Ganey, Ph.D. Collaborative Community-Based Research Mini-Grant. Currently, we give three mini-grants annually. The Ganey Mini-Grant program was created to provide research monies to partnerships involving a local nonprofit organization or community representative, at least one University of Notre Dame faculty member, and a Notre Dame undergraduate or graduate student. Recipients of the grants are selected based in part on their plans to use their research to produce measurable, positive outcomes for a community group or organization in the South Bend area.

In keeping with the general understanding of CBR, the question for investigation in each funded project should be one that the local partner's organization or some group within the geographic area is seeking to address. The actual research process should include the community partner as an active participant, with the products of the research, first and foremost, intended to serve the local partner organization or broader community. Desirable also is that projects lend themselves to publishable products for the faculty partner as well as providing students with a meaningful research experience. Examples of research funded thus far include investigations of the economic impact of undocumented workers in South Bend, the mobility rate of children in the local public school system and its relationship to children's pass rates on Indiana standardized tests, and the causes and effects of predatory lending.

The Path to the Community Impact Framework

Over time, the two authors of this paper who are directing the Ganey grant program grew increasingly interested in finding ways of improving the program in order to foster better and greater effects throughout the community. For the purposes of this article, we are not interested in the extent to which individual projects meet their goals *per se*, though we do ask recipients of the grants to report back on accomplishments, and we ask for evidence of preplanning, toward results, through the delineation of a research design. Rather, we are interested here in how our grant program might be contributing directly or indirectly to positive changes in the quality of life in our community.

As our grant program is housed within the University of Notre Dame's community-based education institute, the Center for Social Concerns, we sought guidance for improving our program in the service-learning and CBR literature. Finding little help there—even in terms of documenting results of investigations—we turned to the related fields of public health and evaluation. Though we found interest in related questions, there was little to guide our considerations there either.

Our review of the literature on service-learning between 2005 and 2010 revealed only a small number of articles that focused on the effects of service-learning on and in communities. Furthermore, when the term “impact” was used as a search descriptor, what we found pertained to students and faculty and not to community changes. We found six articles published between 2005 and September 2010 that mentioned impact as it related to student learning of classroom content (*e.g.*, Bielefeldt, Paterson, & Swan, 2010; Frazer, 2007; Paoletti, 2007). Another 12 were found that looked at the “impact” of service-learning on student attitudes (*e.g.*, Dukan, Schumack, & Daniels, 2008; Keen, 2009) and development (*e.g.*, Borden, 2007; Johnson, 2007). Three of the 12 reported on the impacts the pedagogy of service-learning has on teachers (Bollin, 2007; Hart, 2007; Kirtman, 2008).

We identified four articles that looked at service-learning from the perspective of community-based organizations. Blouin and Perry (2009) focus on the challenges inherent in community-based work and how to overcome these barriers when participating in community-university partnerships. Sandy and Holland (2006) describe characteristics of effective partnerships. Kruger, Roush, Olinzock, and Bloom (2010) describe a community-clinical partnership that uses community organizing principles such as

working in a participatory manner to address community issues and engaging in a partnership to build sustainability. In a literature review of the community impact of service-learning, Bringle and Steinberg (2010) found, not studies demonstrating how projects improved organizations or communities in measurable ways, but studies on perceptions of the benefits and challenges for community partners of participating in service-learning projects. We did not find literature that documented measurable outcomes such as increases in organizational capacity or reductions in homelessness or food insecurity.

When looking specifically in the area of community-based research, we found an approach to documenting research results by Strand et al. (2003b) that suggested looking at multiple levels of effect (e.g., did CBR lead to effects on individuals served by organizations and organizations' capacity). Although this was useful for us, it still looked primarily at individual CBR endeavors and did not attempt to assess effects of research from a programmatic perspective as would an organization such as the W. K. Kellogg Foundation or the Robert Wood Johnson Foundation, both of which assess not only the effects of the individual projects they fund, but also how well they, as funding organizations, are doing in reaching their community improvement goals (e.g., <http://www.wkkf.org/knowledge-center/publications-and-resources.aspx>; <http://www.wkkf.org/knowledge-center/knowledge-center-landing.aspx>). The beginnings of a framework that was initially put forward by Stoecker, Beckman, & Min (2010), however, building to some extent on results of a gathering in Paris (*PAR Outcomes Project*, 2007), led us in a helpful direction. It began to focus on community-wide improvement, rather than on the attainment of individual project goals and objectives.

Case Study: The Reducing Obesity Coalition

In order to explore how the framework could guide initiatives to address complex social issues, we identified a Ganey-funded research project that was associated with a series of results in our local community. We will next explain the research project and the effects in our geographic area that have been related to this research.

In 2005, the Reducing Obesity Coalition (ROC) was formed in South Bend, Indiana, as a group of organizations and businesses realized their mutual interest in the goal of reducing obesity in the surrounding St. Joseph County. The coalition decided to undertake a study predicated on the knowledge that access to healthy food is

associated with relatively low levels of obesity and is also frequently lacking in economically disadvantaged geographic areas. Despite the general availability of healthy produce throughout the state, Indiana is ranked the eighth most obese state in the United States (*Trust for America's Health, 2006*). While no county-level data is available on obesity in St. Joseph County, the high prevalence of low-income and minority populations implies that local rates of obesity may be similar to or worse than Indiana's state levels. Because the west side of St. Joseph County's major city, South Bend, has the city's highest rates of low-income and minority populations, ROC determined that residents' access to healthy food in this section of the city was important to explore. In 2006, a ROC research team applied for and obtained a grant from the University of Notre Dame's Center for Social Concerns to undertake the investigation.

A Ganey Collaborative Community-Based Research Mini-Grant was awarded to ROC for a study that would address two main topics: (a) food availability on the west side of South Bend, as measured by the U.S. Department of Agriculture's Food Security Assessment Toolkit (USDA-FSAT), and (b) adult and child nutrition knowledge and practice, and perceived produce availability. The original research questions sought to focus on the level of access to healthy food options by low-income families residing on the west side of South Bend. The study also aimed at assessing the willingness of these consumers to purchase healthier food if they have the option.

In the first of the two intended foci of the study, prices and availability of food were documented in 10 grocery stores using the USDA-FSAT. The USDA-FSAT is used, in part, to establish food stamp allotments by calculating the cost for a family to eat nutritious meals following a grocery list of foods identified by the Thrifty Food Plan (*Andrews, Kantor, Lino, & Ripplinger, 2001*). Eight of the stores were in the target area, chosen for its prevalence of low-income and minority households. Two control stores were chosen for being newer stores located in areas of higher affluence relative to the target area. Store sizes were balanced between small groceries, medium/large groceries, and supermarket/retail, which loosely followed criteria set by other studies (*e.g., Neault, Cook, Morris, & Frank, 2005*) and by the USDA-FSAT. In addition to USDA survey data, anecdotal data were collected about the freshness and quality of items. Findings important in the food availability literature include the number of missing food items in grocery stores and the cost of the Thrifty Food Plan relative to food stamp allowances.

Findings of this part of the study indicated that grocery stores in the target area had more missing food items, including fruits and vegetables, than did grocery stores in the control area. Such food item absence can negatively affect budget and nutrition choices, especially for families with the greatest economic need. Four of the ten grocery stores offered healthy food that was barely affordable to families receiving the maximum food stamp allowance provided to those in the lowest income bracket. None of the grocery stores offered healthy food that was affordable to families receiving the average Indiana food stamp allowance, which is less than the maximum amount, as the average Indiana family did not meet income qualifications for full benefits. Furthermore, Neault and colleagues (2005) argue that because the current Thrifty Food Plan does not follow the USDA's updated food pyramid, the cost of healthy meals is even higher than the Thrifty Food Plan indicates, which could increase the gap between food stamp allowances and actual grocery needs. The discrepancy between need and allowance is a finding of importance to families that rely on governmental assistance to meet their nutritional needs and is a nationwide concern among food availability professionals. Unfortunately, and typical of studies of this type, due to the small sample size (10 grocery stores), no significance testing could be completed.

The second focus of the study was a survey of children's and parents' nutrition knowledge, location relative to grocery stores, and consumption of and interest in produce. In this study, 67 parents and 95 youth completed a survey of various items related to nutrition. Items included questions on nutrition knowledge, including forced-choice questions, such as the number of servings of vegetables a person should eat each day, the families' proximity to a grocery store, and the families' interest in purchasing affordable fresh produce. The parents and youth were selected because they were considered low-income and most (90%) were minorities. Participants were selected from a summer fitness program targeted toward low-income individuals.

Several findings provided important information about the state of the community. Three topics that generated particular interest included questions about children's nutrition knowledge, children's fast food consumption, and parents' interest in affordable fresh produce. On average children scored 72% correct (scores ranged from 63% to 89%) on a simple nutrition questionnaire that included questions such as, How many servings of fruits should you eat in a day? According to parents' report, 93% of children ate fast food at least one time each week (range 0–1, $m = 1.4$, $sd =$

1.3). Finally, parents overwhelmingly (86%) indicated interest in increased access to affordable high quality produce.

Several different groups, including local health coalitions, sought to learn more about the study results. Thus, the investigators and involved Notre Dame undergraduate students gave presentations to local health experts and community members on the USDA-FSAT portion of the study, sparking interest in forming a committee to look into the possibility of starting community gardens, healthy cooking demonstrations, and a farmers' market on the west side of the city. In the end, ROC supported community groups by linking them to resources in the formation of a temporary farmers' market on the west side and additional community gardens the following spring. Several healthy cooking demonstrations by a culinary group and the Health Department were arranged at a local health fair and at the new, temporary west side farmers' market started by community members.

Furthermore, data from the original study were used in several obesity-related grant proposals. One grant, awarded in summer 2008, was used to document available fitness opportunities, including parks, walking and biking paths, workout exercise facilities, and school playgrounds. A second grant, awarded in fall 2008, was a program evaluation of a coach training intervention. A third grant was not awarded initially, but the proposal has been resubmitted by the YMCA to build health-enhancement capacity among leaders in the community. Fourth, a statewide obesity reduction grant was applied for through the Health Department; it was not awarded, but in its place the Health Department was asked to submit and was subsequently awarded a state grant for a school-based health initiative. We specifically mention these last grants because they developed from the interest generated by the results of the initial Ganey grant.

Applying the Framework

The research that began with the Ganey grant has led or contributed to a variety of efforts toward reducing obesity in the geographic area, all of which seem valuable in their own right. Similar types of results can be seen from other studies likewise funded through Notre Dame Ganey grants. Clearly, as anecdotal evidence suggests and our delineation of outcomes related to the ROC study also shows, CBR can lead to positive outcomes in communities.

The results described, however, are not impacts as we are using the term here. An impact is a result of outcomes, or we might say, an accumulation of outcomes and their effects (*Stoecker & Beckman, 2010*). But the outcomes themselves (e.g., the community garden or the farmers' market) are not and do not necessarily result in impact. Impact would be a reduction in obesity, or some broader effect, ultimately an improvement in local well-being. How, then, can we take informative, useful study results, which we are labeling "outputs," as well as the outcomes that actually follow from these, like farmers' markets or nutritional classes, and get to a reduction in obesity itself, that is, to broader social improvement?

When we began to discuss how to apply the emerging community impact framework in our situation, we struggled to identify who or what should be the agents or site of the original long-term vision the framework calls for. We could have looked at any individual project and used it as our starting point. However, as we were most interested in the original Ganey-funded CBR investigation, and because that study emerged from a coalition of partners, it seemed that the coalition itself would be an appropriate place to start. Also, coalitions have been employed increasingly to address public health concerns (e.g., *Currie et al., 2005; Gillies, 1998; Roussel, Fan, & Fulmer, 2002*), though there has been scant attention to documenting effects (e.g., *Ansari & Weiss, 2006*).

Did ROC locate various projects—most relevant here, the Ganey-funded CBR study—within a long-term vision with an explicit goal? That is, referring back to our diagram of the framework presented in Figure 1, could we see the Ganey grant research as one of a number of projects in the center of the triangle? And did ROC plan for and undertake evaluation and revision along the way? Did it foster the incorporation of broad community participation throughout? In other words, did ROC hold the overall framework depicted in our earlier diagram?

Long-Term Goals and Strategies

The initial mission of ROC was to "promote healthy lifestyles for residents . . . through a county-wide collaboration." Clearly, it had a long-term vision but it did not have a measurable goal, and it set forth no coherent set of strategies for fulfilling the vision over time. Soon after forming, the coalition applied for a Ganey grant to study access to produce. The study fit the overall mission of ROC, but the decision to pursue this study was made arbitrarily; it had

no relationship to a systematic, thought-out pursuit of a long-term goal other than generally to reduce obesity in St. Joseph County.

The lack of clearly identified strategies had a number of important implications. ROC could not consider how any specific project would interact with other projects to move toward the goal. If it had had well-articulated strategies and measures with clear linkages, researchers might have perceived a need for baseline data on local obesity in order to determine whether obesity rates declined. Possibly more critical than the original food availability grant would have been a grant to collect BMI data from the school system in order to establish baseline obesity data. Even prior to this, the coalition might have sought to determine how obesity would be measured, as well as other outcomes associated with obesity, such as sedentary behaviors or the built environment in which certain populations live.

Ongoing Evaluation and Revision

Evaluation and action revision were not intentionally built into ROC, although there is an ongoing commitment to research, and spontaneous revisions did take place. In the fall of 2008, a number of aspects of ROC were revisited and revised by a strategic planning committee of volunteers: an advisory board and steering committee were created; the mission statement was updated; five goals and related objectives were created to improve individual and household attitudes toward health and wellness; and operating principles were written to guide participation, the structure and governance of each committee, how decisions are made, responsibility to constituents, and promotion of ROC. The current mission statement is: "To promote healthy lifestyles . . . through the prevention and reduction of overweight and obesity in adults and children." Also in 2008, a decision was made to seek more diversity in membership. An advisory board of community leaders representative of critical agencies was created and its membership crafted to reflect diversity in terms of ethnicity, gender, and occupation. While the group decided it would be important to recruit more males and representatives of minority groups, there has not been discussion of recruiting any lay community members and in particular individuals that might make up the populations involved directly as subjects of studies.

The revisions of 2008 indicate attention to the importance of ongoing adaptation. But the revisions pertained more to the functioning of the coalition than to the projects that sprang from it.

The Ganey grant was written with the intention of using research results to inform public policy decisions and to collect and organize data related to health in St. Joseph County. However, the coalition had not determined specific ways it would address the information obtained through the initial Ganey study. Nor did it consider how it might relate to various other projects that could emerge within its midst—such as the community garden. And without baseline data, it did not have the capacity to offer any data to local gardeners or others also wanting to address the goal; in other words, it would not be able to help them direct their efforts in any measurable way.

Those leading the CBR effort could have attempted to link its work with a longer-term goal, had there been one, perhaps planning for how the information obtained might be used and next steps, or urging ROC to consider such actions. After obtaining results and presenting the data, researchers could have built in additional money to alter the survey following community feedback, and then proceeded to next steps or passed along the project to others. While there is currently a loose plan in place to collect more data, additional planning could certainly improve the process. The goal of this particular plan is to provide information about the area for any subsequent grants.

The four grants that followed from the initial Ganey study, as well as the community garden and farmers' market projects, also might have looked different with this community impact framework in mind. While all projects have flourished outside the direct influence of ROC, they have done so with a lack of direction or identified measurable outcomes. Had they been connected, each project could have conducted its own evaluations to look at who participated, what happened, and how the project was working toward the overall goal of reducing obesity. Additionally, ROC could track and measure its own objectives through coordination with these other projects. An overarching group could survey the community to identify needed new locations and other issues of concern, which could improve community acceptance and involvement. With knowledge of community needs and strengths, ROC could facilitate additional projects that could happen simultaneously with those currently ongoing. For another example, if lay community members wanted cooking lessons, these could be arranged intentionally at garden sites during peak season, or specifically requested vegetables and fruits could be grown in the gardens.

Broad Participation

ROC membership is diverse in that it includes over 60 groups and represents universities; human resource departments in businesses, health nonprofits (e.g., YMCA, Diabetes Association) and other related nonprofits; and for-profits (e.g., manufacturing businesses). The design of ROC, however, was completed by health experts and university researchers only. No nonprofessional or lay community members¹ were part of the first few years of ROC, and only a few males and minorities were involved, though this changed to some extent in 2008.

In all but one of the four subsequent related studies, no lay community members were involved in the development of the research questions, design, or administration. One of the studies was an exception, and involved lay community members in editing and administering surveys.

Returning to the original Ganey-funded project specifically, application for the grant required that the proposal include an explicit community partner as well as university partners; however, it did not specify the extent of participation of noncampus partners per se. In the ideal, a community-based research project would be written with input from lay community members, instead of local health experts and university members exclusively (*Flicker & Savan, 2006; Israel, Eng, Schulz, & Parker, 2005; Minkler & Wallerstein, 2008; Strand et al., 2003a*). Ideally, community members would have guided the overall research question creation, selected the surveyed grocery stores, edited the surveys, helped collect the data, and guided data analysis. During and after data collection and analysis, lay community members could have provided feedback to improve the data collection process and analysis. For example, they could have suggested other questions to add to the USDA-FSAT survey and offered different ways of looking at the data. In sum, despite attention to diverse participation, the inclusion of multiple perspectives throughout was not ideal.

Applying the Framework from Today Forward

We see no reason why ROC could not use the framework discussed herein as it moves into the future. Were the coalition to use the framework as depicted in this article, it would be able to start tracking how its efforts have affected events around the community. The framework would also help its members see connections among the projects, and this might help them better amass and direct resources toward impact.

Long-term Goals and Strategies

First, we would urge ROC to identify measurable community-wide obesity reduction and prevention goals. ROC can lead the effort to organize major stakeholders in the community to determine the main outcome all obesity prevention activities should try to attain (e.g., reduce the average Body Mass Index of specific populations). These major stakeholders can identify subgoals that support the main outcome, as well as metrics to measure the progression toward the goals. For example, if the stakeholders decide the main outcome should be reduction in average Body Mass Index, a subgoal would likely be increasing nutrition awareness. By setting and agreeing on goals and strategies, ROC planners can look for complementary projects and help lead these projects toward a coordinated goal.

Ongoing Evaluation and Revision

Planning for ongoing evaluation and revision can be done within ROC. Annually, new members for the Steering Committee and Advisory Council are chosen. Reviewing goals and progress can happen naturally during the transition time. Announcing new goals and reviewing the year's progress can be done at meetings when new members are introduced. The current ROC Steering Committee could simply write guidelines for this evaluation and revision.

By placing value on ongoing evaluation, annual projects such as community gardens and farmers' markets can be organized to collect and incorporate feedback in a routine way, and may include suggestions as to new locations, vegetable and fruit selection, and so on. One difficult issue in such research is measuring effects. Many community interventions take place, but they are often not assessed. Factors likely to encourage assessment include setting a goal for each intervention, and involvement of a larger body committed to evaluation. It is possible to start a central database of data collected on common measures; this data could then be used to track progress toward community goals, as well as to apply for subsequent grants.

Broad Participation

More diverse community involvement would also be a priority. Most important would be the involvement of lay community members in ROC, in particular those who would most likely be affected by any research or projects conducted—that is, those some might refer to as the target populations. Interested community members

initially need to commit only to attending a predetermined number of meetings per year. Identifying appropriate community members might be difficult; however, assuming ROC and related organizations commit to valuing participation, the current organizations likely can suggest a number of lay community members.

Conclusion

Community impact is difficult to measure and achieve. It is difficult enough to assess the effects of individual research and related projects; it is even harder to assess the effects of multiple projects and how they interact. Here we are going further yet and considering a longer term view.

Based on dialogue with a number of colleagues around the country and our own experiments with moving our work to achieve community impact, we have proposed a framework here that we hope can help guide community endeavors in which discrete projects are connected to a broader, longer term enterprise whose end point is community improvement. We have laid out the three basic elements of the framework—a clear long-term goal and strategies to achieve that goal, the commitment to evaluate and revise projects midcourse as necessary to stay focused toward the main goal, and a commitment to the broadest participation possible. By overlaying the framework onto the community results related to a CBR project, we hope we have provided in this article some evidence of the potential value of the framework. We intend to develop it more fully over the next few years and have already begun this process by applying it to our work with our grants program.

Endnote

1. Though CBR studies use the word “community” liberally, this term is seldom defined. When practitioners of CBR say they are working with “the community,” they may not always be referring to the same groups. Various literatures define community (e.g., Chappell, Funk, & Allan, 2006; Chavez, 2005; Israel et al., 1998). Among the factors delineating community are locality; shared experiences, interests or perspectives; joint action; social ties; and interpersonal interactions (MacQueen et al., 2001). In this article, we use professional community to refer to the organizations that are locally based national service and locally conceived service organizations that work in areas related to obesity. These members may be extremely well informed about the communities they serve, but they are rarely the people of interest for the study. We use lay community in keeping with

the way this term is used in certain psychology and public health literatures, to refer to individuals that have no particular background or expertise in the study or addressing of obesity and also to refer to individuals that are experiencing aspects of obesity and who might constitute subjects in studies on obesity because of that experience.

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BOOK REVIEWS

*Theodore R. Alter, Associate Editor
The Pennsylvania State University*

Fischer, F. (2009) *Democracy and Expertise: Reorienting Policy Inquiry*. New York: Oxford University Press.

Review by Mark Brennan

The call for an active citizenry characterized by civic engagement and participatory democracy has increasingly been echoed by a wide range of development interests from academia to government and from business to grassroots groups. Active citizens are viewed as a key to local, regional, and national social and economic development. This often ambiguous process of citizen participation and action relies heavily on the role of expertise and advice from economic, political, and academic experts. This expertise can be significant, relevant knowledge and experience or specialized skill from official positions. The presence, absence, or misuse of such expertise can signal success or failure for participatory democracy efforts.

Democracy and Expertise: Reorienting Policy Inquiry explores the central philosophical and practical questions of the roles of policy expertise and democratic society, as well as their interrelationships, and the tensions between them. Although focused largely on political and policy theory, Fischer provides a detailed exploration of the implications of deliberative democratic governance (active democracy in which public deliberation is central to legitimate lawmaking and decision making) for professional expertise. In this setting, deliberative practices (e.g., deliberation, active debate, interaction among citizens and elected officials) are promoted as an essential element in policy-related disciplines that influence participatory governance. The book is unique in that it draws from a wide range of theorists (e.g., Dewey, Collins, Evans), previous research, and application examples (e.g., programs, policies, citizen actions) to aid in understanding the unique role that expertise plays in shaping participatory democracy and an active citizen involvement. Building on the works of Dewey, Fischer focuses on the possibilities for reorienting professional practice to better facilitate citizen understanding of and involvement in complex policy issues. In doing so, Fischer explores how public discourse and deliberation can be viewed as essential constructs in more cooperative forms of policy inquiry. The book is organized in three parts:

1. Policy expertise and citizen participation in the public realm;

2. Situating the technical in the social: implications for policy deliberation; and
3. Policy epistemics for deliberative empowerment: storylines, learning, and passionate reason.

Part 1 provides a solid basis for exploring the interrelationships among expertise, deliberative democratic governance, citizen engagement, and policy. Included is an overview of the debate of technical knowledge versus public responsibility, and an overview of the role of professional expertise in democracy and policy formation. The latter receives the bulk of the attention, with Fischer focusing on the power of experts and expertise in shaping citizen deliberation, participatory governance, and the theoretical base of deliberative democracy. Part 1 is essential for understanding the emergence and evolution of citizen involvement in participatory democracy. It is also an indispensable reading for understanding the process by which expertise shapes public perceptions of citizen involvement in democracy activities.

Part 2 is perhaps the strongest section of the book. It provides a thought-provoking exploration of the links between theory and the mechanisms by which policies, development, civic actions, and democratic processes are shaped. Included is discussion of the social construction of reality, the subjective meanings applied to sustainable development, and the central role of narrative creation in policy and public perceptions. Fischer also provides an analysis that focuses on the relationships among technical and social knowledge, policy inquiry, social learning, and the design of discursive spaces.

Part 3 focuses on the conceptualization of formal models of citizen empowerment. Included are discussions of the emotional connection among the public, cultural politics, empowerment, and transformational learning. Through these discussions, progress toward the application of theory to practice is sought.

Through 10 chapters and a stimulating afterword, Fischer examines the implications of deliberative democratic governance for professional expertise, and extends those implications to specific policy practices. Several chapters in Part 2 are particularly noteworthy in their presentation of a wide range of theories. For example, Chapter 5, "Technical Knowledge in Public Deliberation: Toward a Constructivist Theory of Contributory Expertise," and Chapter 6, "Public Policy as Social Construct: Multiple Meanings

in Sustainable Development,” delve into the social constructionist literature for insights on how the public and experts interact, develop discourse, and move each other toward action.

Chapter 7, “Policy Advice as Storyline: Narrative Knowledge and Expert Practices,” is perhaps the best chapter of the text. Addressing the often overlooked role and function of narratives in social development, the chapter examines literature from a variety of disciplines, including sociology and political science. The result is a thorough exploration of the processes and mechanisms that lead to narrative construction, and the role narrative plays in shaping public response. The chapter’s content effectively links the micro (communities) and macro (the larger society), while providing a basis for citizen action.

Although strong overall, the book could be improved in two areas. First, Part 3 could better synthesize the literature and theory cited throughout the book for a more cohesive call to action and application. Fischer is clear that the goal of the book is to explore and develop a theoretical model for understanding the expertise–participatory democracy interface; however, a more detailed exploration of possible applications would be helpful. The framework presented highlights a number of opportunities for program and policy development that could aid a variety of actions and social change activities. Exploring the opportunities for programs and policy in the context of Fischer’s theoretical model would also be useful. Detailed suggestions for how to shape policy and policy debates would be valuable to grassroots and other citizen-level civic engagement activities.

Second, the book could have been strengthened by giving more attention to the “community” aspect of participatory democracy—the process by which citizens interact with experts to move toward action. Much of what Fischer calls for, especially the concept of citizen participation, is actually community agency (i.e., local capacity to facilitate change). Understanding the role of expertise in shaping citizen action at the grassroots level and the broad societal level is essential. Fischer does not make clear how the role of expertise in the participatory democracy process might differ at the micro and macro levels.

Still, this book is well-suited for professionals, academics, researchers, public policy experts, and others interested in better framing the context in which expertise and citizen engagement interact in participatory democracy. Policy makers, Cooperative Extension faculty members, and grassroots organizations

(e.g., nonprofits, citizen coalitions, activist networks) would find it helpful when developing and implementing citizen engagement activities. It would also work well as a primary or secondary text in university graduate courses that focus on community development, political science, sociology, and policy. In summary, *Democracy and Expertise: Reorienting Policy Inquiry's* attention to theories and logical frameworks for advancing participatory democracy will help readers better understand the role of expertise in shaping program and policy efforts at various governmental and societal levels.

About the Reviewer

Mark Brennan is associate professor of community and leadership development at The Pennsylvania State University. Brennan's teaching, research, writing, and program development concentrates on the role of civic engagement in youth, community, and rural development processes. He earned a B.S. degree from Salisbury University and both his M.S. and Ph.D. degrees from The Pennsylvania State University.

Forester, J. (2009). *Dealing with Differences: Dramas of Mediating Public Disputes*. New York: Oxford University Press.

Review by Tami L. Moore

Community-university engagement scholarship often refers to “the public” as a group outside the university who are potential partners and/or information resources. David Mathews of the Kettering Foundation has defined “public” differently, emphasizing the processes by which “the public” emerges through exchanges among members of the community: “The public does not appear as a constituency, audience, or market. Rather, it shows itself as a dynamic entity more like electricity than a light bulb, more a set of interactions or practices than a static population” (Mathews, 2005, p. 72). Mathews’ notion of *public* as process puts community members—including representatives of higher education institutions—at the center of community building and deliberative democracy. Higher education outreach and engagement activities—partnerships, community-based research, service-learning—are public work in Mathews’ sense. Engagement of this sort can be “messy” in the same ways that John Forester (1993) has described multiparty negotiations and collaborative planning, in that they require the negotiation of differences in culture, values, and organizational structures. “Many applaud [this sort of] public participation in . . . government,” but in Forester’s opinion, “few . . . seem to know how to carry it out successfully in practice” (p. 133). Forester addresses this knowledge gap in his book *Dealing with Differences: Dramas of Mediating Public Disputes*. Avoiding “gimmicks or recipes” for a “foolproof” process (p. 150), Forester draws on previously published profiles of practitioners (Forester, 1999, 2006) to offer “hints and tips, clues and cues to how we might deal practically with deep differences in politicized and contentious public and private settings” (p. 9).

Dealing with Differences reflects Forester’s “careful analysis of how [participatory processes] can work” (p. 11) to address issues ranging from land use to negotiations in the Middle East peace process. “We can often do much more than we think,” he writes in the introduction, “when we have to deal with differences of power, interests, and values, and this book shows how we can do it” (p. 3). The book is organized in four parts, each comprising of two chapters: The first chapter in each part lays out key concepts, and the second provides ideas about how to move forward in the face of these realities. In Part 1, Chapter 1, Forester highlights challenges

that get in the way of resolving public issues: assessing participants, designing processes to facilitate (mutual) transformative learning and mutual gain, and capacity building. As in each part of the book, the second chapter describes moments of “surprising success” (p. 40) from practitioner profiles that resulted in “possible working agreements that others might so easily see as impossible” (p. 41).

Forester makes a key point in Parts 2 and 3: Mediators and participants must deal with difference to facilitate collaborative work through multistakeholder task forces, and to achieve confidence and a sense of ownership in the final agreements for all participants in the process. However, stakeholders’ values run deeper than their interests, in that these values are a more powerful force in shaping behavior in negotiations. Participants typically come into the process with what he calls “facile” (p. 104) and “self-fulfilling” (p. 105) presumptions about the other parties and “the supposedly ‘inevitable’ outcomes” (p. 104) that can undermine the possibility of mutually beneficial agreements. Chapter 3 highlights themes that characterize values-based disputes, and suggests general facilitation guidelines for designing a process to address them. The “lessons from practice” (p. 89) included in Chapter 4 suggest a way forward in the face of difference on deep issues. Generally, the answer is always the same: “when values conflict, assume the need for all parties to learn” (p. 90) about each other and the issue at the heart of the conflict. “Irreconcilability” must be reconceived as the product of a negotiation process, rather than an appropriate premise from which to start conversations.

The practitioner profiles throughout the book tell us that, even where there are deep value differences, such as in the negotiation of HIV/AIDS prevention programs in Colorado outlined in Chapter 5, common ground exists. Effective facilitators in contentious situations such as this one create opportunities for participants to explore one another’s histories and hopes for the future. When participants have time to tell and listen to others’ stories, have informal interaction over meals, or take field trips together to learn about other communities, they are able to find shared interests that transcend value differences. These become the basis for agreements that meet everyone’s needs. The section ends with a practical wisdom for structuring learning opportunities for multistakeholder groups. Forester argues that we must learn to deal with difference to facilitate collaborative work, and to achieve confidence and a sense of ownership in the final agreements for all participants in the process. Chapter 6 presents a very direct premise: “Because we can expect...obstacles [in negotiating public space], we should consider

how we can respond practically to them—so we do better both in our day-to-day meetings, and in the ways we design them in the first place” (p. 123). This is especially true of community-university partnerships, and other engagement activities.

The final section of the book emphasizes specific practices to facilitate deliberations in a contentious arena. In Chapter 7, Forester draws examples from practice to “distinguish” and “integrate” (p. 152) dialogue, debate, and negotiation. “We can,” he writes in the introduction to the chapter, “pay more attention to practical deliberative options, to dialogue, debate and negotiation as these might not only involve many interdependent and networked stakeholders, but enable collaborative and participatory planning processes to achieve greater justice, greater recognition, and greater efficiency, too” (p. 15). Mediators highlighted in Chapter 7 achieve these goals through three techniques: fostering dialogue as a way to build trust and a foundation for future work; moderating debate to “clarify critical differences between parties” (p. 152); and mediating negotiation, to craft arguments to which all participants are willing to commit. Throughout the book, Forester allows the reader to “hear” (p. 150) the power of humor and irony in the mediator’s practice in each of these phases. “Having a sense of humor has very little to do with being funny” (p. 172); therefore, Chapter 8 highlights critical moments when humor has helped in facilitation and draws out lessons from professional practice about how to use it. We learn that humor “accomplishes politically astute work . . . by encouraging engagement rather than resignation, by welcoming rather than punishing multiple points of view on painful topics and difficult issues at hand” (p. 172). In Chapter 9, Forester returns to the list of practical challenges facing anyone doing public work—assessing participants, designing processes to facilitate (mutual) transformative learning and mutual gain, and capacity building—and articulates lessons learned by listening to experienced practitioners reflect upon their work. He summarizes the lessons this way: “Integrating inclusive participation and effective negotiation takes skill and preparation, thoughtfulness and a sense of humor, commitments to fairness and joint gains, and more . . . but not rocket science” (p. 180).

Pursuing the public good, as Mathews (2005) and Forester understand it, requires involving many voices from across a community in conversations about the future. Forester cautions his

readers not, however, to rely on the process alone to ensure a desired outcome because

[No] natural process guarantees that diverse voices will respect or even inform one another instead of becoming just so much shouting and noise, or worse. At times, though, advocates of multicultural, pluralistic societies can get stuck in their own celebrations of inevitable . . . conflict (p. 20).

Constituent efforts to mark and protect their position—posturing, exaggerating, withholding information—are the “regular, systematic obstacles that we can expect to arise in participatory settings” (p. 123). By focusing on what is surprisingly possible in public deliberation, this book shows us that difference is “ineradicable and not yet paralyzing” (p. 186).

“Disputes . . . signal the *absence* of agreement, not its impossibility” (*emphasis in original*, p. 177). This is true in community-based settings, and it is also true when the conflict is between university administrators or researchers and community organizations. The lessons Forester derives from narratives of professional practice point to important skills to be developed by emerging community-based researchers through the graduate curriculum, especially because skill and experience are more important than good intention in these situations. *Dealing with Differences* will be an excellent resource for anyone engaged in the public work of the university, from maintaining partnerships to establishing community-based research projects, or creating service-learning opportunities related to planning, community development, public policy deliberation, or local government. Through this book, Forester makes a useful contribution to the current understanding of what is required for university members to engage in public deliberation and public work in a productive way.

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Mission

The mission of the *Journal of Higher Education Outreach and Engagement (JHEOE)* is to serve as the premier peer-reviewed, interdisciplinary journal to advance theory and practice related to all forms of outreach and engagement between higher education institutions and communities.

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