Lessons Learned from 30 Years of a University–Community Engagement Center

Christina J. Groark and Robert B. McCall

Abstract

The University of Pittsburgh Office of Child Development (OCD) has practiced university-community engagement activities for 30 years. This has included hundreds of specific projects conducted with community partners, all funded by outside grants. Based on our experience, we describe some lessons learned regarding the operation of a university-community engagement unit, the conduct of community-engaged scholarship, and some of the challenges that the engagement endeavor poses to traditional research universities. These themes are discussed in the hope that other engagement units can benefit from these experiences.

Keywords: university–community engagement, collaborations and partnerships, research and practice projects, nonprofits, translational projects, implementation

Introduction

he concept of university-community engagement is rising in prominence at many universities. This term refers to the "process that brings together groups of stakeholders from neighborhoods, city, or region (including individuals, organizations, businesses, and institutions) to build relationships and practical collaboration with a goal of improving the collective well-being of the area and its stakeholders" (Maurrasse, 2010, p. 223). Although the term is relatively new, the concept is not; it has a long history (e.g., Burack, Fitzgerald, & Seifer, 2010; Fitzgerald, Burack, & Seifer, 2010; Jacobs, Sutin, Weidman, & Yaeger, 2015a). However, some have observed that there has been more rhetoric than action over the last 25 years (e.g., Bruckhardt, Holland, Percy, & Zimpher, 2004; Community Partner Summit Group, 2010; Pollack, 2015). This article reports lessons learned over 30 years by one university unit devoted to conducting community engagement projects in the hope that they will be useful to other such endeavors.

A Brief Selective History of Engagement

Colleges and universities in the United States were originally modeled after their European counterparts, which were descendants of monasteries with a tradition of reclusive scholarshiplearning for its own sake and teaching the next generation of scholars.

A major turning point in that tradition was the Morrill Act of 1862, which provided land, often in rural areas, to states to create "land-grant" institutions that were required to provide knowledge for the public good (Soska, 2015). Later, in 1914, the Smith-Lever Act established a partnership between the U.S. Department of Agriculture and state governments to initiate "extension" programs through their land-grant institutions to provide practical information to farmers and their families on agriculture and home economics. Over the years, however, land-grant institutions thrived and became major research centers, and the extension programs were progressively dwarfed by mostly basic research in other fields (Soska, 2015) and were sometimes academically treated differently, if not devalued.

Eventually some legislators (e.g., William Proxmire, Barbara Mikulski) became concerned that academics perceived research funding as an "entitlement," taxpayers were not getting their money's worth, and more federal dollars should be spent on practical issues (e.g., "*The Hand*," 1994).

Some academics agreed. Specifically, Bok (1990) and Boyer (1990, 1996) complained that universities had grown too insular and needed to devote more effort to directly dealing with the needs of society. Partly as a consequence, two kinds of actions followed. One we might call a "top-down" approach, in which national reports, commissions, and compacts were initiated that urged university presidents and other top administrators to create policies and activities that would promote engagement with the community across the entire university (Fitzgerald, Allen, & Roberts, 2010a; Jacobs, Sutin, Weidman, & Yeager, 2015b). The second, a "bottom-up" approach, consisted of specific projects and units within universities that pursued engagement activities. Some federal agencies, notably the Department of Housing and Urban Development (HUD) and the Department of Education (DOE), funded such projects at several universities across the country.

However, faculty in many universities that emphasize basic research and scholarship as a criterion for promotion do not value research and other types of projects that have local rather than national relevance and are conducted in the messy laboratories of the community (*Kaplan*, 2015). Thus, even as some universities have encouraged numerous and varied university–community

endeavors (e.g., Fitzgerald et al., 2010; Simon, 2010), others have found it difficult to get faculty interested in such projects (Shields, 2015).

The University of Pittsburgh Office of Child Development

The University of Pittsburgh Office of Child Development (OCD) was created in 1986 as a bottom-up effort to promote interdisciplinary scholarly activities within the university and mutually beneficial university-community collaborative projects (McCall, Groark, Strauss, & Johnson, 1995). Although the national historical themes described above have influenced its 30-year evolution, OCD's initial creation was not a result of the broader movement toward engagement. Indeed, for example, it was established before the agenda-setting papers of Bok (1990) and Boyer (1990) and the urgings of Proxmire and Mikulski.

This article presents a brief history of OCD's development, some of the lessons learned regarding its operation as a university-community engagement unit, some issues of conducting research and scholarship in partnership with the community, and a few challenges that engagement presents to traditional research universities.

A Brief History of OCD

The early history of OCD has been previously described in detail (Groark & McCall, 1996; McCall, 1996; McCall et al., 1995, 1998). Here we mention a few crucial elements of that history as well as a brief summary of what OCD has become to provide a context for the lessons learned.

Two faculty members perceived a local need for collaborations among literally hundreds of faculty and community agencies that shared interests in children, youth, and families and that otherwise tended to operate in isolation from one another. They formed an interdisciplinary committee of faculty to plan what became OCD, convinced the university to fund a professor slot to be its director, and obtained 3 years of operating money from two local foundations to have OCD blend the academic concerns of the university with the practice and policy interests of the community. In this sense, OCD itself was born out of a university-community collaboration.

The university, as part of its 200th anniversary celebration in 1987, was encouraged by community leaders to establish a single point of contact between the community and the university. Although OCD was focused specifically on children, youth, and families, it was designed to be an all-university unit, but it was never perceived as part of an all-university response to this community request. However, because it was originally administratively located in the Provost's Office and directed by a senior faculty member, it was, at least in these ways, an academic rather than an administrative unit, which was unusual for early university–community engagement units (*Soska*, 2015).

OCD was originally conceived to facilitate, but not operate, interdisciplinary and university-community collaborative projects, which is one reason it was called an office rather than a center. However, OCD's early attempts to facilitate interdisciplinary and university-community projects moved OCD in two unexpected directions. First, applied university-community projects were less attractive to young faculty concerned with obtaining tenure through basic research and scholarship. Senior faculty, in contrast, were quite interested in such projects and potentially had much experience and numerous credits to offer them; however, despite their eagerness to consult with the project, they did not have the time or inclination to take an active role in writing a grant to support, or to be the principal investigator (PI) and operate, such projects. In contrast, community agencies were eager and willing to devote time and resources to creating new projects; after all, they really did perish without grant money (if not publications). They were also flexible, creative, and willing to compromise for the sake of the project.

Second, despite the uneven participation, projects were created. But when the first such project was funded and OCD proposed to step aside to allow the partners to operate the project, the collaborators insisted that OCD stay on as the PI. They reasoned, "If we needed an independent convener to get this project started, we certainly need an independent PI when we have real money and responsibilities to manage." As a result, OCD became an operator of collaborative projects as well as a facilitator of them.

For OCD, this early redirection eventually led to a total annual budget of as much as \$8.5 million and an off-campus physical facility of approximately 16,000 square feet. A staff of up to 50 people was hired to implement projects, and 10–20 graduate students were hired, mentored, or taking internships at OCD in any one year.

Over the years, OCD emphasized one of the three categories of engagement that later would be described by the Carnegie

Commission (Carnegie Foundation, 2007) as "outreach and partnerships," in which OCD provided its expertise, resources, and time for use by the community (i.e., outreach) in projects that were conducted as partnerships to the extent possible. Although often perceived as traditional public service, these projects were not academic volunteerism, because conducting such projects was OCD's "job," not avocation, and every project had to be externally funded.

Some Lessons Learned About Operating an **Engagement Unit**

Every engagement unit will be different as a function of the specific circumstances in which it operates. Nevertheless, we discuss below several lessons learned about operating OCD that may apply to some similar units elsewhere.

Balanced leadership. It was clear very early that the new OCD director, who had academic and communication credits and was brought in from the outside, did not know human services in general and the Pittsburgh community of foundations and service professionals in particular. Therefore, a partner was hired who was experienced in these matters, and after a few years, this partner became codirector. This combination of complementary skills helped OCD become known and respected by both academic and community professionals, which helped to foster collaborations among these groups to improve practice and policy in the region.

After 30 years, do we recommend that other such units have codirectors who represent the two constituencies a university-community engagement unit tries to integrate? Their functions need to be equally represented, but not necessarily as codirectors. That is, a university-community engagement unit needs to know and respect and be known and respected by both constituencies, and it helped that both codirectors were given faculty appointments. It may be unusual either to find a single person who meets these criteria or two people who have sufficient knowledge and respect for the other profession and are able to work smoothly together. So how such a unit is directed and staffed depends on the characteristics of the available people, but both constituencies should be equally and prominently represented.

Full-time directors. Integrating faculty across disciplines had been tried at the university before OCD was created, but it did not work very well. One possible reason is that the prior endeavor was directed part time by a senior faculty member who was not a specialist in this domain and had numerous other responsibilities on his plate. We believe OCD worked partly because there were full-time codirectors with relevant and complementary skills who were dedicated and committed to the task.

Core funding. Such a unit needs core funding that covers the salaries of senior administrators and other staff who work to support the unit, as well as expenses involved in prospecting, piloting, and applying for funds for projects; expenses that cannot be supported by project grants; tiding over major staff during short-term gaps in funding; and covering a variety of other expenses (e.g., rent, travel). It is important to have a reasonable source of unallocated core funding, not just salary support, that might come from the university and/or local sources, to be able to facilitate collaborations, create and fund new projects, and survive variability in grant funding.

No quid pro quos. Early on, OCD's collaboration activities were greeted with skepticism stemming from a history of self-serving university dealings with the community. We were often asked by potential partners, "Why are you doing this? What is in this for you? Do we, or will we, have to pay for your services? What are you going to take from this?" It was very helpful for OCD to have enough core funding to be able to say, "We are paid to do this, this is our job, and we will not take anything from the project if it is funded, except if OCD staff play a continuing role in implementing it."

Flexibility. OCD's broad mission, largely limited to children, youth, and families, and with a primarily behavioral emphasis, embraced a wide range of potential projects, and OCD's attentiveness to changing community priorities and willingness to implement funders' agenda gave it great flexibility. Indeed, some have suggested that OCD's "nimbleness" has contributed substantially to its longevity—three decades and counting.

But there are downsides to this characteristic. Both codirectors' backgrounds in early childhood development and the name "Office of Child Development" led to the perception that OCD had an early childhood emphasis, even though its projects often were aimed at adolescents and families. Conversely, because OCD supported projects in a wide range of subject areas, codirectors and staff often lacked scholarly backgrounds and experience in OCD's project domains. As a result, someone at OCD had to get up to speed on the literature, or OCD had to collaborate with a faculty member or someone else who could bring specialist knowledge to specific projects.

Funding for specific projects. Specific projects fostered or managed by the unit are likely to need separate external funding, and such projects live or die on their own program and financial success or failure. Large grants often come from federal sources, and depending on the nature of the project, faculty can be a great help in securing some of these grants.

More commonly, however, community projects may be funded locally, if there are sufficient local resources (e.g., foundations, local and state government agencies). Although it varies with the source, local funding can be different from federal and national foundation grants. It may be based more on personal relationships, and funding applications may be decided by a single program officer rather than several outside reviewers. It is important to develop relationships with local government and foundation leaders by introducing yourselves to them, participating on local task forces, providing them with scholarly information relevant to their needs, and participating in their community events. It also helps to cultivate local university and community "champions" who are vigorous in advertising and supporting the unit to opinion leaders. It may take deliberate efforts and several projects over several years to establish relationships of trust and responsibility with relevant foundation and government officers, and when major players change, the process must be renewed.

Not all projects will be initiated by the unit. Some local funders may be accustomed to deciding themselves what local projects should be conducted and funded, whereas others may look to the university to tell them what is needed and what works. Early on, Pittsburgh foundations frequently decided what they wanted done and asked OCD to implement it; later, OCD made more program suggestions and modifications to foundation ideas and initiated more applications.

Provide constituencies with useful services. In the early years, OCD tried to stimulate interest in applied projects and foster communication among university and community constituencies as well as provide useful services to both groups. Specifically, OCD published a newsletter that contained special reports of researchbased information relevant to faculty, service professionals, and funders; it distributed notices of funding opportunities; it sponsored interdisciplinary and applied colloquia, workshops, conferences, and luncheon discussion groups; it collected and published health, education, and welfare indicator data that were used as background in grant requests; it convened diverse groups of faculty and community professionals around possible new projects; and it published a variety of directories of personnel, services, and policies.

One of the more unusual projects was the organization and sponsorship of a colloquium course, which featured guest lecturers from across the country as well as local faculty and community professionals who spoke on applied academic-community topics pertaining to children and families. The course met weekly, was advertised to university and community constituencies, and was taken for credit by students who stayed after each presentation for guided discussion led by the speaker and OCD. In addition, OCD created and funded two interdisciplinary training programs, offered seed grants for applied projects, and initiated collaborations that led to a local site of the NICHD Early Care Network. These several activities created an identity for OCD in the university and community, brought diverse faculty and service professionals together, and provided useful information to these constituencies. A survey of faculty and community professionals attested to their value and utility (McCall et al., 1995).

Domains for special projects. Over time, OCD created partnerships to develop new special projects in five domains that related to community needs: (1) interdisciplinary education, training, and technical assistance; (2) interdisciplinary research and scholarship; (3) human service demonstration programs; (4) program monitoring and evaluation; and (5) needs assessments and policy studies. For example, OCD and community practice and policy professionals managed the Pittsburgh site for several federal multisited intervention demonstration programs. OCD and staff offered expertise in grant writing, measurement, evaluation design, implementation and management of community-based service projects, and research information regarding what works. These were valuable commodities to many community agencies, and having a university partner often lent some degree of status and credibility to grant applications to federal funders.

Staff. As noted above, OCD did not simply facilitate new collaborations; it also managed and operated them, often as the principal grantee. As a result, OCD acquired staff to perform duties that collaborating community agencies could not (e.g., recruit participants, collect data, manage and analyze databases, provide technical support, train service staff). Graduate students often brought unique skills to a project (e.g., knowledge of scholarly literature or ability to review it, statistics and database management), but most did not have experience working in low-resource neighborhoods and could only work restricted hours on an irregular schedule.

Having its own staff also permitted OCD to conduct many community-based projects that faculty were not able to perform. For example, local foundations frequently wanted a community needs assessment conducted, and they wanted to start it immediately and be finished in 3 months. Faculty typically could not accommodate this schedule, and they largely were not interested in a project that essentially had only local, not national, implications (Kaplan, 2015). But OCD eventually had the staff available to start immediately; conduct the literature review, surveys, and geomapping; and compose and manage a faculty-community advisory committee.

However, if the unit cannot engage faculty and cannot afford senior staff who can create and fund projects, these responsibilities fall on the director(s). We found that the more the OCD codirectors funded, implemented, and managed projects, the less time they had for assembling new collaborations and participating in typical academic functions.

An attitude of mutual respect. A long-standing necessary element of successful university-community collaborative projects is mutual respect among faculty and community professionals (Community Partner Summit Group, 2010; Groark & McCall, 1996, 2008; Mattessich & Monsey, 1992; Mordock, 1993). These groups have different skills, knowledge, values, responsibilities, constraints, and criteria for success, and they may not be accustomed to sharing control over their projects. Also, they often harbor unfavorable attitudes toward one another. Defusing these potential antagonisms requires a leader or coleaders who understand and respect, and have the respect of, both constituencies.

Attitudes based on experience or hearsay are not the only potential source of friction. Conflicts can also arise over ideal scientific methodology, social service best practices, regulations, stakeholder values, and practical circumstances in creating and implementing innovative interventions in community settings. Leaders and partners must be willing and able to compromise and find creative solutions, tasks not commonly required outside such a collaboration. It was in this domain that having codirectors at OCD was especially helpful, because each could represent the point of view of one profession but simultaneously understand and respect the opposite position. Occasionally, the codirectors hashed out the differences in private and then presented alternatives to the partners, and at other times they represented the two professions in a discussion among all partners in a given project.

Shared power. One of the most challenging attributes of true partnerships is sharing power equally between university and community collaborators (Community Partner Summit Group, 2010). Many major projects OCD managed were not equal partnerships, because in some cases the federal government dictated the nature of the project in its request for proposals. Not only did the community feel the project was being foisted on them, but the funder required the project to have certain characteristics that the community found objectionable. It came down to having to accept these characteristics or not apply. Further, many grants were given to OCD/the university, even though on some occasions most of the money actually went to the community, so ultimately the university was responsible for the money and the project, which represented a power imbalance even if it was never overtly exercised.

Other projects are not prescribed beyond the general goal, which permits greater university and community collaboration in creating the program and sharing authority and responsibility. But jointly creating a project can also be rocky. Neither university nor community partners may be accustomed to sharing control and having to accommodate other viewpoints and professional standards and criteria in this process.

Managing successful partnerships. Research points to several characteristics of successful partnerships (Groark & McCall, 2005, 2008). Participants must have a common purpose with clear, concrete, achievable, and specific goals. Each partner should be able to make some necessary contribution to the project; ideally, each partner is necessary, but no single partner or subset of partners is sufficient. All major stakeholders should be represented. Further, partners should be team players, have the ability to get along with diverse collaborators, handle conflict professionally, and accept group decisions that may conflict with their preferences. Regular meetings and good communication among group members are needed. Finally, strong, balanced, sensitive leadership is necessary. The leader needs to be able to listen to, understand, and respect diverse viewpoints, and be sensitive to the needs of each partner. But he or she also needs to be strong enough to keep the group on task and on schedule, deal respectfully with disagreements but achieve group decisions, and move the group toward achieving its goal. Only a few people excel in all these characteristics.

Respect for deadlines. OCD also respected community deadlines. Policymakers expected a report to be delivered on time and sometimes scheduled a news conference before receiving the report. To deliver the report late or not provide an advance copy

so the policymaker could be thoroughly prepared would embarrass the policymaker, and that would be the last such project OCD would get from them or others in town (word travels fast within a locality). OCD lived by the motto that "we do what we say we will do when we said we would do it," so staff were advised to double the estimate of the time they thought the project would take and gave that deadline to the funder. But then OCD would do whatever it took—nights, weekends, whatever—to deliver on time.

Lessons Learned About Scholarship in University-Community Projects

There are several lessons that pertain to conducting scholarship activities in the context of a university-community engagement unit.

Service-learning. OCD does not usually teach courses, although individual staff members do teach courses on an ad hoc basis. Therefore, we do not provide typical service-learning opportunities to students. However, through the years OCD has informally advertised itself as a place where students from several disciplines interested in applied work could get practical experience. Indeed, 10-20 students per year do take internships or work at OCD, and OCD faculty have advised and mentored numerous graduate students.

Although these activities do not look like traditional servicelearning, Nyden and Percy (2010) suggested that involvement of this sort in an engaged research center "represents the more advanced level of service learning" because "it is the active use of theoretical and methodological skills in addressing issues of importance to local communities" (p. 314). For example, OCD students have designed, executed, analyzed, and reported on surveys as part of community needs assessments; designed assessments and databases for charting participation and attitudes of community members of a major local project's governing committee; and participated extensively in assessments, data management and analysis, and publishing of academic reports on interventions for institutionalized and postinstitutionalized children in several countries.

Engaging faculty in local projects. Engaging faculty in community projects is a long-standing challenge at many universities (e.g., Shields, 2015). There are many possible reasons, including the common complaints that faculty are not interested in applied and local projects (e.g., Kaplan, 2015), and there is a preference for basic research credits to obtain tenure. Although some senior faculty develop applied interests over time, it is difficult to persuade faculty to change their scholarly orientation from basic to applied. It is easier to hire faculty who already have applied interests. Engagement units at some universities have faculty slots, salary money, and joint positions with academic departments that permit them to have a strong voice in hiring faculty with applied interests; without such provisions, new faculty tend to be selected on more traditional academic criteria.

Community projects are often community specific; they may provide substantial benefit to many local people, but faculty and national funders relate to national theoretical needs (*Kaplan*, 2015). However, sometimes faculty can perceive broader theoretical and practical implications in a project that starts as a local demonstration. For example, a specific intervention may constitute an exemplar of a theoretical principle or be a case study of a type of intervention being tried at other locations across the country. Perceiving the broader implications may make the project more interesting to faculty and potentially more eligible for national funding.

Also, bringing faculty together with service professionals and local policymakers to discuss the current state of a local problem on the one hand and the current state of relevant knowledge about the issue on the other hand can sometimes stimulate interest on both sides. For example, a service professional may decide that the evidence suggests the advisability of trying a modification in their approach or even an entirely new service, and the academic may realize the issue has parameters not previously considered—together they might create a project to satisfy both insights.

Translational research. As a result of an Agency for Healthcare Research and Quality conference in 2001, major federal agencies concerned with health care began to fund community-based participatory research in an attempt to accelerate the implementation of scientific discoveries in community health practice (*Nyden & Percy, 2010*). The most obvious efforts were to increase communications and implement in the community those interventions and treatments whose efficacy had been previously demonstrated in rigorous scientific studies.

This emphasis spread beyond health care to a broad range of social, educational, and welfare services now under the rubric of "evidence-based" programs. But implementation was much more difficult for a previously validated behavioral intervention than for one relying on health care practices. Even the label "evidence-based

practice" does not denote a "replication" and has become so diluted that it has nearly lost specific meaning.

For example, some years ago the federal Administration for Children and Families (ACF) funded numerous sites across the country to implement the Comprehensive Child Development Program for pregnant women and young children. Although the intervention was "prescribed" in a 100+-page manual, the evaluation of 21 programs revealed substantial differences in the nature of the programs as implemented (CSR, 1997). Further, several programs adopted a family support orientation that provided a vast array of different services from which families chose those pertinent to their needs, which meant that the treatment was different for each family within a site (McCall, Ryan, & Plemons, 2003). Years later, ACF funded Early Head Start sites in a national effectiveness study, but it recognized then that each site would have a different incarnation of Early Head Start. Experiences such as these suggest that in social and behavioral services, "uniform treatment" across sites and across individuals within sites is rarely achieved (McCall & Green, 2004).

This situation may contribute to the common impression that human service programs that have been demonstrated to be successful don't "travel very well," meaning that "replications" tend not to work as well as the original. This failure to replicate also may occur because the replication partners do not perceive the intervention as "theirs." Instead, they may feel the project is being imposed on them, and they do not have the same enthusiasm for or faith in the potential success of the intervention. A good deal of groundwork may be required to avoid these feelings and gain the enthusiasm and commitment (i.e., genuine buy-in) of the directors and staff of the new partners.

Even with substantial local enthusiasm, it is extremely difficult to replicate a preestablished intervention because so many characteristics of the new environment, service professionals, and participants are different from the original. "Replication" is a practical myth. This represents a serious compromise to the fidelity of a treatment model that is essential to being able to specify scientifically the nature of the treatment that results suggest was effective (or, in some cases, was not effective).

Occasionally, with substantial preparation of community agencies and staff, a predesigned program can be implemented in a new context with new people. Otherwise, in our experience, it is best to try to identify the elements of a program that likely previously made it successful or are believed to be essential to a new program. These may be very general (e.g., reduce the number of caregivers serving a ward in an orphanage), and there may be little or no direct evidence substantiating their individual contributions to outcome. Nevertheless, these elements are considered inviolate and must be implemented; specific aspects of these components (i.e., six or eight caregivers) and other program circumstances (e.g., daily schedule of work hours) can be modified to fit the local circumstances (Lindland, Fond, Haydon, Volmert, & Kendall-Taylor, 2015).

Implementation. No matter how effective a program may have been, if it is poorly implemented in a new context it is a poor program. So implementation is crucial to a program's success, but it is often an underemphasized aspect of replication or establishing a new program (*Fixsen*, *Naoom*, *Blasé*, *Friedman*, & *Wallace*, 2005; *Groark* & *McCall*, 2005, 2008, 2011; *Lindland et al.*, 2015).

One crucial aspect of implementation is preparation of the directors and staff of the organizations that will implement the program. Typically, they initially resist change in general and are wary of someone from the university prescribing how they should deliver services. The goal is to get the director, senior professionals, and eventually line staff to buy into the program, which is best done by having them contribute meaningfully to its creation and design.

Sometimes interventions are designed from scratch in true partnership, starting with agreement about the problem to be addressed and the desired outcome. This approach, if well managed, usually leads to acceptance and enthusiasm.

At other times, a fairly specific intervention is desired, perhaps as part of a request for proposals or because a government entity has funded local replications of an evidence-based program. First, the director and senior staff of the agency must be convinced to implement the program. If the director and senior staff are unknown to you, organize social events to help people get to know one another before you concentrate on the project. Then it helps to listen—what does the agency do now and why do they do it this way? What are the current outcomes, and ideally what should the outcomes be? What should be changed to achieve those outcomes (i.e., theory of change)? What about implementing one or another component in a new program? Then go to a more formal logic model. This process can take many meetings and compromises on flexible aspects of the program. Then have line staff contribute to the implementation plans. They will know what can and cannot be done and why—the devil is in the details (Groark & McCall, 2011).

Sometimes they will resist, and eventually you may need to declare, "You may be right, but let us give this a try." The program should not be started until everyone is committed to it; one or two line staff who do not subscribe to the new program can undermine the entire project. Finally, measure the implementation so it can be accurately described and elements can be used in the analysis (see below).

On one occasion OCD enabled community partners to design "on their own" an intervention OCD had in mind but did not communicate directly to them. In this case, OCD wanted to transform an orphanage for infants and young children to be more familylike in structure, operation, and caregiver interactions with children, similar to the St. Petersburg-USA Orphanage Research Team (2008) intervention. Using a Socratic method, OCD asked whether the directors and senior staff of the orphanage thought the family was the best place for rearing children—they did. Then OCD had them list in a table the characteristics of the ideal family (e.g., few and consistent parents, few children per parent, mixed ages of children, etc.). Then OCD asked what the orphanage was like on each of these attributes. When the table was completed (i.e., the orphanage was opposite to the family on every characteristic), there was a group epiphany—"Oh my, we have to change the orphanage!" OK, how do you want to change each of these characteristics? They planned "our" intervention in the next 2 days.

Sustainability. Many projects are designed to satisfy criteria of scientific rigor or to provide the maximum service to increase the likelihood of positive outcomes. These are understandable strategies, but another consideration is planning the project to be sustainable once the demonstration grant is ended. One step in this process is to form an advisory committee at the beginning of the project composed of some stakeholders relevant to future funding (e.g., county director of human services, foundation officers). They come to feel the project is "theirs," and they understand and appreciate it when it comes time to continue funding it.

A second strategy is to design the project in a way that can be sustained. For example, use train-the-trainer strategies so senior staff can train replacement staff, and hire as few additional positions as necessary to avoid increasing the budget for operations. Also, write a manual describing the training curriculum and intervention so that the project can endure staff and director changes and be exported to additional sites.

Design and Analysis of Field Studies

Applied research conducted in community contexts may require different research designs and data analyses than basic research. The community is often an imperfect, sometimes very messy, laboratory consisting of a host of circumstances that threaten the internal validity of the study. Factors that increase external validity (i.e., ecological validity) often compromise internal validity (i.e., cause–effect relations). Even the gold standards of research methodology (random assignment, uniform treatment, etc.) actually may not be the most appropriate strategies (*McCall & Green*, 2004).

Random assignment. Random assignment of individuals to a treatment versus a comparison group is often difficult to implement in the community, and if participants live in close proximity there may be treatment contamination among friends and relatives assigned to different groups. Random assignment of groups (i.e., neighborhoods, schools) is often more feasible, but initial comparability of groups can be an issue (use a longitudinal design that compares changes over time regardless of initial values). Social service workers often resist random assignment, preferring to give the treatment to the most needy individuals. However, if the treatment must be limited to a subset of eligible participants because of cost and staff availability, random assignment of eligible participants to treatment versus comparison groups may be the fairest approach.

No-treatment comparison group. Frequently, a comparison group is difficult or impossible to obtain. One cannot impose new measurements on staff and clients in a service that receives no benefit from the study. A variety of quasi-experimental designs can partly overcome this limitation (Cook & Campbell, 1979; McCall & Groark, 2010; McCall, Ryan, & Green, 1999; Rossi, Lipsey, & Freeman, 2004), and modern statistical analyses (e.g., propensity score analysis, instrumental variables, structural equation modeling, hierarchical linear modeling, latent growth curve analysis, complier average causal effect) can help.

Participant dropouts. Participant dropout, intervention contamination, and even participants switching treatments can be major problems. Be sure to build into the program incentives for participants to complete the program. Intent-to-treat analyses, in which participants are included in the group to which they were originally assigned regardless of their actual experience with the intervention, is a common statistical strategy intended to preserve random assignment. But substantial numbers of participants may

be included in a treatment condition that they never or minimally experienced. It may be instructive to conduct intent-to-treat analyses and to compare selected subsamples that experienced the full intervention, dropouts, changes in treatments, and no treatments. Social services conducted in society are never randomly assigned to potential clients, so generalizations to practice may be more appropriate from self-selected samples.

In addition, there are often procedural inelegancies. Staff and clients vary in how long they remain in the program, and staff members may not work consistent schedules or may be off for several weeks, which threaten collecting true longitudinal data. Who collects data can be an issue. Research assistants have a value and training for collecting data but no relationship with clients or staff; staff do have relationships with clients but have limited time or value for data collection. Have staff administer the questionnaires that the client then mails to the evaluator. In most cases, compromises on scientific virtues are frequent. The task is to get the best obtainable, if not the ideal, research information, and interpret it appropriately.

Analyses of multiple-stage designs. Many interventions, such as two-generation interventions, actually represent a sequence of two or three stages. The intervention may consist of training caregivers or parents, who then learn from the training and presumably change their behavior with the children, resulting in the children improving developmentally. Unfortunately, some of these projects have been analyzed with insensitive procedures, and it is even possible that much of the lack of evidence for social programs derives in part from using inappropriate analysis procedures.

For example, the Comprehensive Child Development Program offered low-income families with young children a menu of services, and individual families selected which services were most appropriate for them (McCall et al., 2003). The first problem was that the comparison group did not sit idly by but went out and got services on their own at nearly the same overall rate as the treatment group. Further, intervention effects for individual services were measured on the entire sample, even though in many cases fewer than 15% of the sample actually chose and received that specific service.

An alternative strategy for multiple-stage intervention versus comparison designs might be to measure the intervention that was provided and the extent to which participants experienced it. This should include measures of the inviolate as well as the discretionary

characteristics of the intervention. Then, if parents or caregivers are the proximal recipients, measure the extent to which they changed their behavior with the children in ways intended by the intervention. Then measure the effects on the children.

The first analysis is to compare the relation between the presumably crucial inviolate characteristics versus discretionary characteristics of the intervention and children's outcomes. One could also ask whether the inviolate factors relate to children's outcomes controlling for the variable characteristics. In the second analysis phase, determine the extent to which parent behavior mediated these intervention effects; presumably they should mediate most of the inviolate effects on children in the intervention condition to a greater extent than in the comparison condition.

Some Challenges to Universities of University-Community Engagement

Successfully operating a university–community engagement enterprise at a major research-oriented university can produce some major university challenges.

Staff may not fit. Being a center that houses staff who are "leased" to community projects can create challenges (*McCall*, 1996; *McCall et al.*, 1998). Community-based interventions may require staff who can relate to very low-income participants or who themselves have had mental health issues, been abused, or had adverse experiences with the law. Other needed staff may have a great deal of high-level community administrative experience and command a high salary but lack higher education. Such qualifications may not match the university's job classification system and salary scales. If exceptions to common university policies are needed, go to the lead administrator, not a lower level employee. Only the lead person can make exceptions, and he or she is more likely to have faced a similar issue before. Try to keep such exceptions to a minimum.

Indirect costs. Major research universities value receiving full indirect costs from some federal agencies, and some grants to an engagement unit may come from such agencies. But many local projects will be funded by local government and local foundations that pay only 10% of indirect costs or nothing at all, although many are accustomed to paying as direct costs some items that are typically included in the indirect cost calculation (e.g., space, administrative support). The university needs to accept this situation if it wants an engagement unit, and the unit and university should

work out an arrangement regarding traditional indirect costs paid as direct costs.

Assessment of scholarly activity. When basic research and traditional academic scholarship are the criteria for faculty promotion and tenure, peer-reviewed publications in high-quality journals and grants from research-supporting federal agencies, among other credits, are convenient criteria for scholarly quality and productivity. Community projects may offer significantly different results. Scholarship might contribute to the design of an intervention (e.g., research demonstrates that one home visit a month is not sufficient to produce family benefits; once per week is needed), and an evaluation may be more of a quality assurance study and published, if at all, in practice rather than research journals. A community project is less likely to be reflected in citation indices and more likely to result in "softer" measures, such as improving children's development, helping people out of poverty, even saving lives outcomes that may be difficult to determine and quantify. If the purpose of scholarship is to improve the human condition, these outcomes certainly qualify as relevant and as indices of impact. But they must be documented through different methods, perhaps including committees of academic and community professionals who review reports and interview stakeholders, academics who understand applied methods and can judge quality in the face of limitations, testimonials of project participants, and so on.

Conclusion

In more than 30 years of conducting a great variety of university-community engagement projects, OCD has learned that such projects can be, but very often are not, direct translations of basic research methods and procedures. Compromises and sharing of control are usual, and the design and analysis of applied field projects can be very different from and more complicated than basic research methods. It will likely take many years for socialbehavioral research disciplines to adjust to the realities of applied work and invent new approaches to dealing with its challenges, and it will take at least as long for the academic value system to reward such efforts on a par with basic scholarship. Applied research is more complicated and difficult to do well; rather than denigrate it as scientifically inferior, the disciplines should send their very best scholars to conquer its challenges and contribute directly to society's well-being.

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About the Authors

Christina J. Groark is director of the University of Pittsburgh Office of Child Development and associate professor of education. She has collaboratively created, funded, implemented, and managed numerous innovative interventions for vulnerable children in Pittsburgh; St. Petersburg, Russian Federation; and Kazakhstan. She received her doctorate from the University of Pittsburgh with an emphasis on children with disabilities.

Robert B. McCall is the former codirector of the University of Pittsburgh Office of Child Development and professor emeritus of psychology. His scholarly interests include the development of infants and young children, interventions for young children, program evaluation, and the development of institutionalized and postinstitutionalized children. He received his doctorate from the University of Illinois in experimental psychology.