

Where Do We Go from Here? An Evaluative Framework for Community-Based Design

By Michael Rios

Community design began in the late 1960s as an alternative to the traditional practice of architecture and planning. An interdisciplinary field, it can be defined by a commitment to building local capacity and providing technical assistance to low- and moderate-income communities through participatory means. This community-based approach to design is taught in many schools and practiced by numerous organizations and individuals in the public and private sectors alike. A 1997 survey conducted by the Association of Collegiate Schools of Architecture identified more than a hundred community design programs, centers, and nonprofit organizations in the United States and Canada (ACSA 2000). Of the 123 architecture schools that offer a professional degree in North America, over 30 percent run university-based community design and research centers. Technical assistance, community outreach, and advocacy characterize much community design work emanating from university campuses. While community design, built on a rich history of participatory practice, is growing within the academy, substantive dialogue and reflection about its contribution to community development are lacking. We urgently need to know about more promising practices and assessments of long-term impacts.

This essay examines the efforts of university-based programs within the field of community design and presents an evaluative framework for community-based projects as a starting point. My framework treats universities and communities as coequals and emphasizes criteria to measure the impacts of community-based projects for each. Measurements of organizational capacity building, policy generation and implementation, and the quality of service and input through community involvement are examples. My proposed framework suggests that methods such as participatory action research hold promise in meeting the goals of both communities and universities.

Introduction

Practitioners of community design identify and solve particular environmental problems that combine social, economic, or political aspects (Comerio 1984). It is a distinctive form of professional practice that links issues of social equity, the environment, and economic advancement. More than 80 community design and research cen-

ters are in operation nationwide, compared with a peak of 60 centers during the early 1970s (Pearson 2002; Curry 1998). A survey of university-based community design conducted in 2003 by Pennsylvania State University's Hamer Center for Community Design Assistance categorized more than 40 programs by service area, type of mission, projects and services, and funding support. Today's centers are more varied, on the whole, than the community design activity that grew out of the social activism of the 1960s or the economic pragmatism that followed.

One core value of community design is participatory decision-making, understood as a critical component in the implementation of local programs and achieving successful outcomes (Kretzman and McKnight 1993). Participatory decision making can include conducting community charrettes, using user-friendly models and technology such as GIS and Web-based delivery systems, inviting suggestions from the community throughout the design and development process, and offering technical assistance to residents.

Academics and practitioners offer several reasons for contemporary attention to community design, including changes in federal policy, economic restructuring, the emergence of sustainability as a design and planning paradigm, and a move toward integrating public service into design curricula. A review of recent surveys echoes these findings (Gabler 1999; ACSA 2000; Hamer Center 2003). Regardless of the underlying reasons for an increased focus on community design, the number of university-based programs suggests a desire and need for this type of activity. Evaluation of community-based design has been conducted in relationship to mainstream architectural practice, without consideration of its own body of work. Comerio published the first article (1984) that alluded to "defining success" in community design, but his central focus was to evaluate community design vis-à-vis traditional professional practice. Although community-based design has long been at the leading edge of integrating teaching with community outreach, it has contributed little to the growing literature on service-learning and public scholarship (but see Forsyth, Lu, and McGirr 2000).

If the community-based design movement is to grow, it will be critical for its proponents to share knowledge that can help guide design and planning education. The movement needs to disseminate knowledge and promising practices, publicize opportunities for education and training, assess long-term impacts, and create commonly accepted standards. The recent focus on university-based activity raises several questions related to the broader field:

- What goals do community-based projects serve for institutions of higher education?

- What contributions to community development are being made by university-based programs and initiatives?
- How is quality defined for community-based design education and practice in institutions of higher education?

In the following sections, I argue the need for evaluating community-based design. After giving a brief overview of approaches to assessment in community settings, I present a working framework for evaluation. I conclude with several challenges to university-based programs vis-à-vis communities and factors affecting the quality of evaluation.

Why Evaluate?

Evaluation is a key element of successful community development. It is used to measure neighborhood impacts and to assess the process of activities and the role of intermediaries and local stakeholders (Hyland 2000). Increasingly common is the use of indicators that measure the progress of project-defined goals linking benchmarks to desired outcomes (Kline 1995). Most indicator-driven projects use data and information readily accessible to the public, but they may also include volunteer programs to generate data and measure progress as a form of citizen science. Community indicator projects range in extent from metropolitan regions to cities and municipalities. Indicators that focus on community development are typically practice-based and include identifiable categories and themes such as housing, economic development, and community building (Development Leadership Network 2001).

Most efforts to assess and document design projects use the case-study method (Francis 1999). This is a descriptive approach to evaluation, initiated after project implementation, which concretizes generalizations and anecdotal information about projects and processes (Yin 1994). A staple of teaching in business and law schools, the case-study method can provide useful information to practitioners looking for precedents and can be a form of continuing education. Although it is beneficial in providing an in-depth analysis of a particular project, the case-study method does have some limitations. One is the difficulty of comparing across cases, especially when different types of information are being gathered. Evaluating projects comparatively is a critical first step before knowledge can be generated more systematically.

A promising alternative to the case-study method is participatory action research (PAR), which has emerged as an important approach to local participation in guiding and evaluating community projects. As an alternative to the scientific method of research, PAR is “a way of creating knowledge that involves learning from investigation and

applying what is learned to collective problems through social action” (Park 1992: 30). Efforts in PAR have focused on community development, resource management, organizational decision-making, and community health, among other aspects (Reardon, Welsh, Kreiswirth, and Forester 1993; Chambers 1993; Whyte, Greenwood, and Lazes 1989; Wallerstein, Sanchez-Merki, and Dow 1997). Within schools of architecture, PAR offers the possibility of combining sound methods with the knowledge and scholarship of practice. As a teaching and community outreach approach, PAR also offers the potential to improve current models of service-learning that emphasize pre-professional assistance and pro bono services at the expense of research.

The results of community-based projects, if they are assessed using PAR, can also serve community groups as a tool to advocate for political resources (Nyden and Wiewel 1992). This is a vital area of assistance, given that community groups often turn to university-based design programs from a lack of capacity and resources. Many university-based centers get involved in projects at the initial, conceptual stage and help frame issues and problems, taking into account complex social, economic, and political considerations. Project designs, reports, maps, and other technical documents can serve a political purpose to highlight resource disparities, articulate environmental concerns such as the prevalence of toxic sites in low-income neighborhoods, or organize a community in support of neighborhood improvements such as public parks and recreational facilities (Hou and Rios 2003). PAR provides a means to measure results against initial goals and identify critical elements within a project to advance a community’s agenda or desired outcome. In addition to measuring tangible benefits as a result of university involvement, a PAR approach can also “put less powerful groups at the center of the knowledge creation process (and) move people and their daily experiences of struggle and survival from the margins of epistemology to the center” (Hall 1992: 15-16). Shifting from “expert” to “local” knowledge opens up new sites of inquiry and discovery outside traditional academic settings, for both faculty and students. However, we can realize the collective benefits of work accrued by service-learning projects only if we share knowledge between schools *and* communities.

An important distinction between the case-study method and PAR is that the latter includes a theory- or goal-driven form of evaluation (Chen and Rossi 1992). While the method-driven evaluation of the case-study approach follows steps built according to predetermined criteria, theory-driven evaluation begins with a working hypothesis or goal established at a project’s inception. It is important to note that the case-study method does not assume a given outcome or explicitly state an objective in evaluating the results of a project. For theory-

driven evaluation such as PAR, hypotheses can be generated from abstract constructs, as well as hunches, to determine what is to be collected and what is to be measured to identify emergent patterns that match hypotheses. This approach permits tracking of the actual experience over time against the theory, and the testing of alternative hypotheses (Hebert 2001).

The decision to use theory-driven instead of method-driven evaluation in community design projects depends on the overall goal of evaluation — its purpose and audience and the potential benefits from the assessment. If, for example, we want to create a community facility on an abandoned, trash-strewn lot, we might hypothesize that our intervention will cause the surrounding physical environment to improve. We would develop a series of benchmarks to measure this hypothesis before and after completion of the project. One relevant benefit of this form of evaluation is that it provides a framework from which to plan a project from conception through implementation. Also, we could use evaluation as an argument for procuring resources from city agencies if crime rates dropped in the surrounding area, or as a strategy to attract private investment if a heightened sense of pride and ownership among local residents resulted in property improvements around the facility.

A Working Framework for Evaluation

The discussion thus far has focused on evaluation used outside the field of community-based design, and how the adoption of such methods could be beneficial to community-based design at universities. Given the emphasis on outreach by many university-based programs, one of the challenges will be the ability to integrate service learning activities into the language of research. A review of university-based programs conducted by the Hamer Center for Community Design at Penn State identified only 7 of 41 programs, or 17 percent, that evaluated projects (Hamer Center 2003). However, new paradigms in community-based research that emphasize mutual engagement and collaboration, such as PAR, suggest an unprecedented opportunity to do so without compromising the core values of community service and advocacy, while at the same time meeting pedagogical goals and curricular objectives.

The following table and section present a framework to evaluate the work of community-based design that proposes a twofold approach to assessment: (1) centrifugal knowledge, involving activities aimed toward the external goals of community groups and related community development intermediaries, and (2) centripetal knowledge, involving activities directed toward the internal goals particular to university-based community design programs. For each, questions

AN EPISTEMOLOGY OF COMMUNITY DESIGN	
CENTRIFUGAL KNOWLEDGE <i>Aimed toward the "external" goals of community groups and related community development intermediaries</i>	CENTRIPETAL KNOWLEDGE <i>Directed toward the "internal" goals particular to community design practitioners, educators, and students</i>
1) Technical Assistance Whose interests have been served and with what results?	1) Community Involvement To what degree did residents participate in a community design project, and what were the significant outcomes of their participation?
2) Capacity Building How do capacity-building efforts further the mission and goals of community groups and individuals?	2) Service-Learning How does service-learning in community-based design education benefit students as future practitioners?
3) Policy Support To what degree did a community-based project shape regulatory or policy change?	3) Promising Practices What are the standards used in community-based design projects and how do those standards compare with those established by the profession?

are posed as guides to evaluating community-based design projects and programs. This is not to suggest that the goals are mutually exclusive, but rather that they reinforce each other to meet the needs of both communities and universities.

Centrifugal Knowledge

Many community-based projects, rooted in the Civil Rights movement, have focused on the needs of low-income neighborhoods and disadvantaged populations. The emphasis of this work is largely to serve community organizations and likely users of designed environments. Projects range significantly — from design-build affordable housing to streetscape designs, and neighborhood plans to model code policy tools — and include both short- and long-term relationships with government agencies, nonprofit organizations, and community groups. Projects aim to support community goals and priorities and can be part of a triad focused on *technical assistance*, *capacity building*, and *policy support*. (This triad was developed by the Pratt Institute for Community and Environmental Development, one of the oldest community design centers in the country. See also Blake 2003.)

Technical assistance often takes the form of plans, drawings, studies, and reports that enable community groups to carry out their mission and objectives. Often, activities will be concentrated at the be-

ginning stages to help gather information, frame issues, and provide documentation of the results. Technical assistance helps groups make key decisions and identify resources for implementation, and serves as a mechanism for developing consensus and support for a project. Thus, a key question is: Whose interests have been served and with what results?

Capacity-building activities conducted by faculty and students fulfill an important educational and advisory role in helping groups develop their own capabilities. Grant writing, development of budgets, zoning and data analyses, the use of technology, and meeting facilitation are some of the skills that can be shared with community groups. Several outcomes that measure capacity building include the strengthening of local institutions, increasing the ability of organizations and individuals to identify and secure resources for staffing or project implementation, gaining legal nonprofit status, or implementing a successful community-driven project or campaign. A challenge is to identify gaps and weaknesses in organizational capacity and use projects as vehicles to strengthen these areas. Thus, a key question is: How do capacity building efforts further the mission and goals of community groups?

Policy support through projects and studies carried out by service-learning activities often includes recommendations that lead to changes in policy and regulation. Policy support varies significantly and can also include recommendations for changes to city services, code enforcement, and other aspects of community regulation. A goal of policy support might be to educate community members, elected officials, and municipal staff about resource disparities, regulatory discrepancies, procedural problems, or other policy-related issues. Outcomes to evaluate the role of policy support in community design activities could include changes to policies, reallocation of municipal resources, or the creation of new tools that address regulatory barriers. Thus, a key question is: To what degree did a community-based project shape regulatory or policy change?

Centripetal Knowledge

In addition to advancing the goals of community groups, university-based projects and programs seek to improve the pedagogy and practice of design. Community engagement gives students feedback for making design choices that are responsive to the physical and social contexts of a given project. Community engagement also provides a space for experimentation leading to promising practices that emphasize mutual engagement between universities and communities. Additionally, service-learning done through mechanisms such as community design centers can advance research unachievable in pro-

fessional and classroom settings. For example, the application of on-site building methods related to straw bale and rammed earth allow for problem-based learning while providing a vehicle for research in community settings. It is valuable to assess both what is being created and tested and the degree to which service-learning experiences enhance pedagogy, practice, and research. Assessing *community involvement* and *service-learning* and the identification of *promising practices* are considerations related to the internal goals of community design projects and programs.

Public involvement is an essential component of any community design process. Designers often solicit input, ideas, and criticism from neighborhood groups, municipal officials, and local residents in order to establish project goals and to guide the refinement of specific proposals. Faculty and students should assess their success in engaging communities in their work, since resident participation is crucial at various phases of the process and can contribute to success. One goal that bridges the external goals of community groups and of professional practice is community involvement. Outcomes in the assessment of participatory projects could include the level of public involvement, from project inception through implementation; increased levels of trust and volunteerism; skills development; or community awareness of a given issue. Thus, a key question is: To what degree did residents participate in a community design project, and what were the significant outcomes of their participation?

Service-learning has been identified as an important vehicle in creating a scholarship of engagement (Boyer and Mitgang 1996). The service-learning model of community-design education teaches professionals the civic relevance of design, facilitates interdisciplinary learning and collective problem solving, fosters professional ethics, and introduces diversity issues into practice. Service-learning is also important for research and outreach to communities that lack resources. Assessing university-based service-learning could include measures that benchmark civic and professional development, volunteerism, and social responsibility. Thus, a key question is: How does service-learning in community-based design education benefit students as future practitioners?

The quality of community-based design can be measured by the number of awards and commendations received, as well as by publications in peer-reviewed journals and external funding for community-based projects. However, the impact of community design can also be measured in terms of new methods and techniques that may be developed during design, and the quality of completed projects. Outcomes in the assessment of promising practices could include the adoption of new methods, the durability and usability of built works and community environments, or the long-term sustainability of pro-

posed strategies. Thus, a key question is: What standards are used in community-based design projects and how do they compare with those established by the profession?

Conclusion

My purpose in proposing this framework is not to prescribe particular forms of measurement, but rather to define a starting point from which architecture schools, community-based programs, faculty, and students alike can begin to develop goals to assess the outcomes of projects and related activities in community settings. Nor does my proposed framework suggest an exhaustive list of criteria. To do so would not acknowledge the diversity within the field and the varying sizes and organizational capacities among curricular programs and university-based design centers. This evaluative framework should be viewed as an initial sketch, open to interpretation, critique, and further development. It is also an invitation to design faculty to be more reflective and critical of their work in communities and to contribute to the growing body of knowledge in community-based design.

While my suggestions may seem straightforward, they require addressing several challenges. Although community-based design projects are becoming more common in schools of architecture, they are undertaken for different reasons and reflect different interests and values among faculty. For some, they provide an enriching student learning experience; for others, they are either an outlet for alternative practice or a form of advocacy. Regardless of the motivation, service-learning presents challenges for faculty, students, and communities when it comes to time commitments and meeting expectations for the quality of work (Forsyth, Lu, and McGirr 2000). It is also important to note that although university-based programs and projects may appear in line with work conducted by nonprofit community-based organizations, the organizational goals and priorities of nonprofits are often different than the institutional goals of universities and colleges. Faculty should be cognizant of the limitations of institutions of higher education, especially when it comes to resource and liability issues, while community organizations should understand that the primary function of universities and colleges is education, not service delivery. Furthermore, universities risk creating dependency when they replace programs and support once provided by government.

Beyond these general observations, there are several specific challenges to academic programs conducting evaluation of community-based projects. Conflicting goals between researchers and practitioners, and methodological issues such as the objectivity of the evaluator when the same person is a participant, need to be considered, as do questions of context and scale. For example, how is the

community defined and what is the scale for assessment (e.g., building, block, neighborhood)? Additionally, evaluation is often shaped by external factors, such as public agencies and foundations that fund community-based projects (Jenkins and Halcli 1999). How do these entities influence the goals of a project and the types of assessment to be conducted? Lastly, the issue of time is critical. The differences between “university time” and “community time” need to be accounted for in the planning and implementation of curriculum-based projects. Evaluating both effective process and project outcomes can ensure greater success in community-based design projects.

In sum, evaluation of community-based projects should not be entered into lightly and takes a considerable amount of individual faculty effort. However, the presence of programs at universities and colleges suggests that community-based design is here to stay. In order to deepen the knowledge within the field, community-based projects need to be viewed as an integral part of scholarship in teaching, research, and service. More reflective practice is needed in service-learning to illuminate the actions and activities of practitioners, both academic and professional. In the words of educator Donald Schön, we must “discover what [we] already understand and know how to do” (Schön 1991: 5). The changing landscape of our cities, towns, and neighborhoods provides an unprecedented opportunity for faculty and students to engage in issues of public significance through service-learning. Now is the time.

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