Reshaping the Boundaries of Community Engagement in Design Education: Global and Local Explorations

Travis L. Hicks and Rebekah Ison Radtke

Abstract

Community-driven design is a current movement in the forefront of many designers' practices and on university campuses in design programs. The authors examine work from their respective public state universities' design programs as examples of best practices. In these case studies, the authors share experiences using community-based design processes, local or global, with their design students. Goals of these two case studies include understanding the varying context and the cultural implications provided by diverse academic and geographic landscapes. In one case, students traveled thousands of miles to experience a different culture; in the other, students traveled across the tracks and down the street for cultural diversity. The comparison of the two suggests that although the site conditions were divergent, the boundary-spanning methodologies provided similar outcomes among students, faculty, and community partners.

Introduction

*T*his *Practice Story From the Field* examines the community-engaged boundary-spanning work of two architecture and design faculty members in public land-grant institutions. By comparing and reflecting on case studies from these two different universities, the authors highlight the importance of reciprocal university–community partnerships; illustrate the challenges that community-engaged work presents for faculty, students, and community partners; and propose design pedagogy as a model for teaching and learning for community engagement. This article illustrates how the contexts and conditions of community engagement can differ widely while still immersing students in opportunities to explore cultural diversity. The methodologies explored in boundary-spanning teaching provide comparable results from students, faculty, and community partners.

The two case studies illustrated in this article come from fully accredited professional programs in interior design that prepare students to become licensed professional designers. The practices of most professional architects and designers are ones of collaboration and teamwork. Even for the smallest projects, teams of archi-

tects, designers, engineers, builders, and consultants are common in current professional practice. Design is a collaborative process that, at minimum, includes the voices of diverse trained professionals and, at its best, rallies divergent voices—both professionals and laypeople—around goals and objectives agreed upon through consensus building. This process, referred to as community-based design, participatory design, or public interest design, is pivotal in creating critical interventions that can transform spaces, places, and communities.

American design education has not always prepared students for community engagement or participatory design *(Ockman, 2012)*. For centuries, design pedagogy was based on the master–apprentice relationship. The design studio master, as keeper of knowledge and process, would put apprentices through a series of design problems to be executed in the vacuum of the studio or atelier. Although many such problems called for designs of large public buildings, the general public was not consulted in the design process. The integration of the social sciences, behavioral studies, and environmental psychology into architecture and design research through the social movement of the 1960s introduced theories that have taken time to gain a prominent foothold in design education.

Many community-engaged design-build programs in architecture programs began in the 1990s *(Schuman, 2012)*. This shift in the university training of architects and designers, with national models such as Auburn's Rural Studio and Mississippi State's Gulf Coast Community Design Studio in Biloxi, Mississippi, is toward developing the skills of consensus building, community engagement, and collaboration in institutions of higher education. By engaging stakeholders and students, design faculty can identify opportunities to rethink design as a catalyst for social activism in our university, state, and global environment. Building on the common threads of place making and cultural identity, the work explored here strives to span boundaries through design partnerships both globally and locally.

A case study from the University of Kentucky (UK) demonstrates how design faculty and students designed and built a sustainable community project in a geographically and culturally foreign land. From the University of North Carolina at Greensboro (UNCG) comes a case study of local collaboration and community engagement in a neighboring community that is equally foreign to the students. The authors, faculty leaders of these two initiatives, describe leading students through processes of discovery and understanding other cultures and communities through commu-

nity partnerships and participation. It should be noted that both authors are tenure-track faculty members in interiors programs within public state universities. In this article, both similarities and differences between the two universities and the two community-engaged projects will be explored.

Literature Review

Over the past several decades, universities have sought to connect education and research with the responsibility of service. Commitment to engage with communities is fundamental to the mission of higher education institutions. This emergent need has developed the practice of engaged scholarship. Boyer *(1996)* defined community engagement as a "special climate in which the academic and civic cultures communicate more continuously and more creatively with each other" *(p. 20)*. Similarly, the Carnegie Foundation for the Advancement of Teaching defined community engagement as "collaboration between higher education institutions and their larger communities for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity" *(Carnegie Foundation for the Advancement of Teaching, 2015, "How Is 'Community Engagement' Defined?," para. 1)*. This civic engagement in the classroom is recognized by scholars to have value that extends beyond teaching to outreach and applied research *(Barker, 2004)*.

Community engagement in design education has enabled professional work and social change to dramatically impact the way design is instructed *(Angotti, Doble, & Horrigan, 2011)*. The intersection of design practice and community engagement provides students with new opportunities to interact with people who will be users of the designs. The ability to empathize with users is an essential skill that designers utilize in practice. By seeing the world through other perspectives, innovative designs can meet users' explicit or latent needs *(Brown, 2008)*.

Design education is founded in teaching students a process of critical thinking to execute a project addressing the needs of users. The initial challenge of addressing the needs of users is to understand "the other" *(Angotti et al., 2011)*. Outreach projects enable discoveries of relationships and collaborations outside the academic environment that integrate scholarship and service. Zollinger, Guerin, and Hadjiyanni *(2009)* stated that in interior design education, "service-learning involves the purposeful integration of thought and practice, that is, the application of theory to real-life problems" *(p. 32)*. Community involvement in academia

is enhanced when students become vocal advocates and can influence institutional commitment *(Angotti et al., 2011)*.

Holland encouraged developing evidence through assessment and monitoring as a means to make the case for engagement. By collecting data for institutional purposes, the value added by community engagement can be illustrated *(Holland, 2009)*. It is essential to look beyond student surveys and monitor the impact on the faculty, partners, and institution. Important skills students develop from community engagement include the ability to collaborate and cooperate.

Weerts and Sandmann *(2010)* described differential roles in boundary spanning within public research universities—based on task orientation and social closeness—including community-based problem solvers, technical experts, internal advocates, and engagement champions. As an initial investigation into a selection of public research universities, their study proposed the need for additional studies of more universities and of more boundary spanners. The case studies presented in this essay explore two additional universities and two boundary spanners who conform to Weerts and Sandmann's definition of technical experts.

In recent years, architecture and design education in universities across the country has promoted the advancement of student engagement in community-based research, design, and design-build projects. Pearson *(2002)* revealed the wide range of design programs in college and university settings, and Bell *(2004)* called for pedagogy to instill in students the need for architects and designers to address underserved populations. The work illustrated in this essay fits into the paradigm of designing for the other 98% *(Bell, 2004)* by leveraging the power of teaching and learning to affect the future of design.

Overview of UNCG—Department of Interior Architecture

The University of North Carolina at Greensboro is a public land-grant research institution in a medium-sized city with a population of approximately 275,000. This university is also a community-engaged university as designated by the Carnegie Foundation. This elective, voluntary classification defines community engagement's purpose as

> the partnership of college and university knowledge and resources with those of the public and private sectors

to enrich scholarship, research, and creative activity; enhance curriculum, teaching and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good. *(Carnegie Foundation for the Advancement of Teaching, 2015, "How Is 'Community Engagement' Defined?," para. 2)*

At UNCG, this classification dates back to 2008, although the university has been engaged in community-based research, teaching, and service for many decades.

UNCG has several administrative offices, in the form of a service-learning office and a community and economic engagement institute, to support engaged scholarship, and it has codified community engagement through its promotion and tenure guidelines. At a time when public universities are faced with ever-shrinking budgets and a need for differentiation, UNCG has leveraged its community engagement for a high return on investment. This university is a member of several national consortia, including Campus Compact and Imagining America, further solidifying its commitment to being a leader in the national conversation around community-engaged scholarship. Within this broader campus context, the Department of Interior Architecture is a signature program for community engagement on this campus.

Description

The case study from UNCG is a long-term partnership between the interior architecture department of this university and the local public library system. This relationship began approximately six years ago with student projects tied to design studios, the central curricular focus. The projects examined herein coincided with a departmental re-visioning around the central focus of community engagement and with the library's capital improvement plan (CIP) update that included renovations or additions to the first racially integrated branch library in the system, renamed after a neighborhood civil rights leader. Author Hicks began working with the library system in Fall 2010 on this historically significant branch library and has continued this working relationship since then.

Students in a fourth-year design studio were challenged to engage a historically African American community near campus. In a community whose citizens played a central role in the civil rights movement, students from UNCG were clearly outsiders. For

some students, this was their first time visiting this neighborhood, even though it is only a few miles from UNCG's campus. At least one student in this cohort lived in the neighborhood; however, this student lived in a gated community disconnected from the neighborhood. Following the semester-long studio project, work with the library extended into a summer research project supported by the university's Office of Undergraduate Research, involving the first author and an undergraduate student from the aforementioned design studio. The project was extended further by a year-long research project involving the same faculty member with a graduate research assistant. These research projects relied on mixed methods to assess the technological needs of the library and the utilization of library spaces by community groups.

Between the design studio work, undergraduate research project, and graduate research project, the faculty and students at UNCG generated design proposals for a new branch library; conducted mixed-methods research through interviews, surveys, focus groups, and observations; and collaborated with the city's library system to produce a vision for the future of this important branch library. Through this work, the first author represented the university while spanning the university–community boundary as a technical expert *(Weerts & Sandmann, 2010)*, residing closer to the university while still collaborating with community partners.

Boundaries and Partnerships

Although UNCG has a history of community engagement, there are clear boundaries that separate the campus from the community that was engaged in this reciprocal project. A historically African American neighborhood, this community has stronger connections to the historically black college and university (HBCU) located nearer to the library. Students from the HBCU lead after-school study groups and tutor students from this neighborhood; students from UNCG perceive a clear boundary between themselves and this neighborhood, which they rarely venture into. Thus, although geographically close to campus, this neighborhood is culturally distant as well as demographically different.

Although diverse cultural backgrounds and identities tend to separate UNCG from this particular community, other forces played into creating an ideal alignment of university and community. In a department with themed design studios, this particular studio covers "institutional" design, for which libraries are appropriate subjects. Finding a library to use as a site for the studio work

required perfect timing, coinciding with the library system's design work on two other branch libraries and with its placing this historically significant branch library on its CIP.

Success of the partnership required close communication between the first author and the library administration prior to and during the semester. During the semester, students attended public meetings and events related to the design of these other branches. Students from UNCG attended multiple meetings and events during the semester in which architects presented design concepts to community leaders. One branch held a ribbon-cutting ceremony and grand opening early in the semester; another branch held a series of community planning meetings. Students gained an understanding of the community-engaged design process from start to finish. In addition, students and faculty extended their engagement into at least two other neighborhoods in the city. This greater level of engagement into multiple branch libraries in multiple neighborhoods required a close partnership between the first author and library administrators.

Figure 1. Focus group, community leaders.

Execution

Author Hicks led well-prepared interior design students to engage the community through staff interviews, library patron surveys, archival research, and natural observations. The most fruitful tool for community engagement was a pair of focus group sessions inspired by the Deep Dive approach to design implemented by IDEO, an innovative design firm, the hallmark of which is an open-ended, creative exchange of ideas with clear rules and expectations *(Kelley & Littman, 2001)*. One focus group consisted of senior leaders from the community and from the library advisory board. The other focus group consisted of youth from the community who regularly use the library facility for after-school activities. The students led both groups through an overview description about trends in library design and the main topics covered in the course, such as community identity, sustainability, and integrated design. The students led the senior group through a visioning activity to identify types of spaces that the group deemed important to the success of the library. The students led the youth group through a more open forum discussion about their vision for a community library.

Figure 2. Student brainstorming session.

Evaluation

The university students synthesized all the information gleaned from community input and collaborated to design a scheme for the future library building and site. Students were able to generate a design that met the vision of community leaders, balanced the wishes of diverse voices and user groups, and honored the history and heritage of the library. Feeling that they were doing important

work for the community, the studio assumed an attitude of excellence beyond the norms for studios in the Department of Interior Architecture. Collaborative, fast-paced design workshops—charrettes—were the basis of all group work on the project. The charrette (from the French word *charrette*, or cart) is a technique from architecture and design. The history of design competitions in the French beaux-arts tradition suggests that students who worked very quickly near a deadline would jump onto the cart (*en charrette)* that instructors used to collect the work. The word *charrette* has come to mean a short period when participants engage in intense and active productivity with clearly stated goals.

In addition to working with the community off campus, students developed community-based working methods within the design studio setting. Students first honed their techniques used to interact with community partners in a safe environment on campus. Building consensus, understanding others' needs, and respecting the ideas of others are soft skills that students developed both on and off campus. The entire group of 18 students arrived at a unified scheme for the new library, while smaller groups of students hammered out different aspects of this single scheme.

Members of the library board who attended the final review of design work commented on how excited they were to see the students' scheme and how they would like to build the project as designed by the students. Funding for such a project, however, is still several years away, and all involved in the project recognize that a long-term relationship is required to maintain the initial success of the work. One way to ruin a perfectly good relationship with a community partner is failing to continue the relationship outside the particular project at hand. The first author continued the project with an undergraduate research assistant in Summer 2011 and with a graduate research assistant in 2011–2012. In Fall 2012, another class of students worked on the project from a different perspective, that of renovating the existing building in lieu of new construction. The relationship continues, relying on the faculty member to act as a campus boundary spanner and the library director to act as a community boundary spanner.

Overview of UK—School of Interiors

The University of Kentucky is a large public university located in the downtown of a city with over 300,000 people. With nearly 29,000 students, it is the largest in the state. UK is a Carnegie-designated Tier One public land-grant research institution fully

engaged in community engagement from a state level to a global perspective. A Carnegie Community Engagement Institution since 2006, it also maintains curricular engagement, outreach, and partnerships classifications.

The College of Design at UK provides many opportunities for students to engage in boundary-spanning work at both the state and global levels. Many courses use real-life project scenarios that activate communities and provide experiences for students to work hands-on with community members. This foundation of engagement prepares future designers to be leaders in the profession. The College of Design seeks to bridge community partners with the design practice to enhance the quality of life of those it serves. It has supported many socially minded community outreach projects since its inception.

Interior design education seeks to provide students the ability to create spaces that protect the health, safety, and welfare of all people. Zollinger et al. *(2009)* stated that "service learning involves the purposeful integration of thought and practice, that is the application of theory to real-life problems"*(p. 32)*. Community-engaged service-learning is essential to creating meaningful applications of interior design issues in the classroom. The project described in this article was designed to offer students experiences that would enhance their understanding of the built environment within a world context, expand their understanding of sustainability, and broaden their understanding of different cultures. In addition, the second author, a university faculty member, sought to foster existing relationships within a community in rural Brazil and the surrounding coffee farms and to develop new connections within the village social groups.

Description

In 2012, the Summer Study Abroad Program to Brazil began because of the second author's previous collaborations in Igarai, a small rural village 300 km from Sao Paulo. The preexisting relationships in the village allowed partnerships to emerge quickly between the students and the community members, offering students an international experience grounded in community engagement.

The village of Igarai is a small yet vibrant community of mostly farmers who work the surrounding farms, which primarily produce coffee and sugar cane. The community lacked financial and community support to provide its early childhood day care center with the necessary tools and supplies to execute its educational

models. The students at Institution B analyzed the existing facilities and interviewed the teachers and administrators, then designed and built new educational tools and furniture to create experiences and spaces within the school that support the vision of the school and its educational model.

While working in the small village school, the class resided at an organic coffee farm, which reinforced the principles of sustainability from an agricultural systems perspective. Cultural knowledge to complete the projects came from interviewing the school principal, playing with the children, and visiting local businesses to obtain donations.

Boundaries and Partnerships

Before instructing at UK, the program director of the Brazil Summer Study Abroad Program worked in the village of Igarai to design and build social infrastructure. With the active participation of the community, local architects, artists, and designers, many projects were identified that the community needed: a park, bocce ball courts, a bus stop, and a playground. These projects were completed throughout the course of Summer 2011. This work was foundational in building trust and cooperation with the community that supported development of the program for the undergraduate students at UK.

The program has operated the past two consecutive summers, with eight students in the first year and nine students in the second year. The students were all undergraduates in architecture and interior design, ranging from sophomore to senior level. Students were interested in participating in the program because they desired to apply the skills and knowledge obtained in the classroom and engage with communities that can utilize design thinking as an activator for community participatory interventions. Collaboration and cooperation are core values of the program and inspired two students to participate in the program both times it was offered.

International experiences with community engagement provide students the ability to experience the global context of design outside the classroom and better understand how it informs contemporary design practice. According to Asojo *(2007)*, "students have to understand the cultural, social, economic and political circumstances of the people they are designing for"*(p. 24)*. This discourse necessitates providing opportunities for practice beyond the campus to encapsulate community-engaged design abroad.

Execution

In the course of 3 weeks, students must adapt, explore, and investigate to design and build educational environments that support the theories and practices of the Brazilian culture. The students engage with the people, culture, and community to create interventions that respond to real-life design issues of the village. Through this process, they begin to understand principles of sustainability from a whole systems perspective as they apply to human environments.

Figure 3. Students and farm workers fabricating designs in a woodshop.

The program began with initial site visits to neighboring coffee farms to foster an appreciation of the community and generate insights into their methodology of construction and material resources. The need to rely on minimal supplies and funding encourages ingenuity and resourcefulness that is lost in a studio setting where materials are readily available. Even learning how to communicate effectively during construction when one isn't sure what the Portuguese word for "nails" is can be trying.

Implementation

The program required students to complete exploratory sketching, responsive writing, and an independent research project to chart learning based on the Council of Interior Design Accreditation (CIDA) standards for global understanding and collaboration. This data was analyzed to assess how well students met learning objectives for the course and how they were impacted both

personally and professionally by the international experience. The students' written responses to Brazil were used to assess how they were transformed by the community-engaged international experience. This assessment of student learning outcomes was informative, yet not conclusive because of the small population of the study. The methodology used in this pilot study could be applied to any engaged scholarship as a means for recording the impact of working with varying perspectives. This study received exemption certification from the Institutional Review Board because it met federal criteria of anonymity, and the data collected did not contain any sensitive information.

Evaluation

Systematic assessment of the data collected revealed how education abroad can enrich the learning experience and provide boundary-spanning experiences. Students exhibited understanding of working with multiple stakeholders and a whole-systems approach to sustainability by participating in design processes abroad. The students showed evidence of awareness of varying socioeconomic conditions within other cultures through active engagement with community members. This uncovered the value of community-engaged international projects and demonstrated how universities can assess the value of designing within a world context.

Findings

The course required that each student keep a sketchbook to document their observations, take field notes, and record their responses to critical questions based on the required readings and learning requirements set forth in the syllabus. The intention was to provide a structure for recording daily reflections and cataloguing experiences so that the students would develop a habit they could continue once they returned home. One student responded to questions of what community is and its implications on design by saying,

> Becoming community is a long process with many factors that determine which direction it will go next. Communication is crucial…. When designing for community, it is important to remember that this is a long process with many details to foster a community's need for communication to keep a sustaining balance.

In addition, students were able to articulate an understanding for engaging in communities within a global context. One student stated,

> Practicing design in other parts of the world forces you to think in a different way than you would in the context of ideas, materials, and uses for things. Designing on a global scale means learning about the culture of the place (or places) you are designing for and fitting the design into that. It makes us be more analytical thinkers and notice more about our own culture.

Students were also directed to develop a research question. Their response could take any form and use any medium, but it had to fit in the school gallery for an exhibition. Having the rest of the summer to work on the research enabled students to reflect on what they had learned and contextualize it within their own cultural background at home. Ranging from nature's influences on the built environment to the cultural effects of graffiti, the research projects were as varied as the participants. The boundary-spanning work of community engagement was well stated in one student's response:

> After traveling [to] Brazil now for the second time, my knowledge of the world has really been transformed.… I have a broader understanding of how the world works. I have realized that "Design is not about the end product, but about the process." I have begun to realize that the issues I see in the U.S. are much smaller than those in other countries. I have really begun to become inter-ested in educational and community design. I would not have this perspective if it had not been for my two experiences in Brazil.

Figure 4. Student's sketch of a bookshelf design.

Conclusions

Community engagement opens doors for new programs and initiatives on university campuses. The relationships between the authors and various community partners have opened doors for new initiatives to enhance student learning and develop applied research on engaged scholarship. Community-driven design projects in academia allow for boundary spanning across discipline, community, and the global context. These two case studies illustrate the opportunities that exist for integrating real-life projects into curriculum. The evidence of the student learning outcomes reinforces the notion that engaged work benefits the student as a scholar and as an individual.

Engaged design pedagogy enables students to experience being active citizens who work collectively to respond to a specific community need. Ultimately, the challenges that face a small village in Brazil aren't that different from the challenges of a historic inner-city neighborhood. Boundary-spanning work has a way of connecting the faculty as well. It cannot be successful without support from the collective whole. By connecting the faculty to a common cause, the group performance is enhanced, and the networks between university and community become much richer. One student stated,

> I think that my most successful collaborations have been when everyone wants to participate (i.e., design program). When collaboration is forced, it is always unsuccessful. Working in [UK instructor's] studio last year was challenging, but so rewarding working in a group, in a class with real client and students.

The work highlighted here extends the university outward to serve communities and students by providing real design solutions to those who are in need of them. Leveraging community engagement can function powerfully to advance an institution's mission. It removes the silos of thinking about teaching, research, and service as independent entities, enabling integration of the three that produces much richer results. Furthermore, the authors have adopted pedagogical approaches that bring notions of community into the university. Ultimately, these authors are piloting a new pedagogy that allows for a multidisciplinary, design-focused community of learning that addresses the needs of communities near and far.

Academia must evolve to provide flexible structures to support the diverse needs of those we are trying to serve. The diversity

allows for innovative thinking and offers the students entrepreneurial experience that provides not only networking experiences but critical life skills. This is the mission of the university; however, how can we navigate a path in the future that allows us to press forward in this work that provides economic growth, civic responsibility, engaged stakeholders, and a sense of place for citizens? We offer community-engaged design pedagogy as one response to this vital question.

References

Angotti, T., Doble, C., & Horrigan, P. (Eds.). (2011). *Service-learning in design and planning: Educating at the boundaries.* Oakland, CA: New Village Press.

Asojo, A. (2007). Technology as a tool for globalization: Cross-cultural collaborative design studio projects. *Journal of Interior Design, 33*(2), 23–36.

Barker, D. (2004). The scholarship of engagement: A taxonomy of five emerging practices. *Journal of Higher Education Outreach and Engagement, 9*(2), 123–137.

Bell, B., (Ed.). (2004). *Good deeds, good design: Community service through architecture.* New York, NY: Princeton Architectural Press.

Boyer, E. (1996). The scholarship of engagement. *Journal of Public Service and Outreach, 1*(1), 11–20.

Brown, T. (2008, June). Design thinking. *Harvard Business Review.* Retrieved from https://hbr.org/2008/06/design-thinking

Carnegie Foundation for the Advancement of Teaching. (2015). Carnegie community engagement classification. Retrieved from http://nerche.org/index.php?option=com_content&view=article&id=341&Itemid=92

Holland, B. (2009). Will it last? Evidence of institutionalization at Carnegie classified community engagement institutions. *New Directions for Higher Education, 2009*(147), 85–98.

Kelley, T., & Littman, J. (2001). *The art of innovation: Lessons in creativity from IDEO, America's leading design firm.* New York, NY: Crown Business.

Ockman, J. (2012). *Architecture school: Three centuries of educating architects in North America.* Cambridge, MA: MIT Press.

Pearson, J. (2002). *University/community design partnerships.* New York, NY: Princeton Architectural Press.

Schuman, A. W. (2012). Community engagement. In J. Ockman (Ed.), *Architecture school: Three centuries of educating architects in North America* (pp. 252–259). Cambridge, MA: MIT Press.

Weerts, D. J., & Sandmann, L. R. (2010). Community engagement and boundary-spanning roles at research universities. *The Journal of Higher Education, 81*(6), 702–727.

Zollinger, S., Guerin, D., & Hadjiyanni, T. (2009). Deconstructing service learning: A framework for interior design. *Journal of Interior Design, 34*(3), 31–45.

About the Authors

Travis L. Hicks is an assistant professor in the Department of Interior Architecture and the director of the Center for Community-Engaged Design at the University of North Carolina at Greensboro. Hicks pursues scholarship that contributes to the sustainability of the Piedmont-Triad region and community partnerships that promote collaboration, interdisciplinarity, and economic development. He earned an M.Arch. from Princeton University.

Rebekah Ison Radtke is an assistant professor at the University of Kentucky School of Interiors. Radtke focuses on opportunities where collaborative learning and community-engaged design processes intersect. She undertakes current research and teaching about learning spaces, hybrid course design, and creativity in the design process. She earned an M.Arch. from the School of the Art Institute of Chicago.