

# Proffering Design; Service-Learning Strategies to Instigate Design Projects as Social Change

The social responsibility of architects lies in part in believing that architecture can create better places, that architecture can affect society, and that it can even have a role in making a place civilized by making a community more livable.

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A service-learning component in any course can make the experience richer, benefit all parties involved, and at the same time foster social change. Service-learning is education through experience, as it relates service activities to course materials, transforming theory into practice. However, incorporating service-learning into a rigorously established course like design studio can be daunting. Professors may face some consternation when trying to identify a community to work with, and may get discouraged because of the uncertainties involved in this kind of project. They may also worry about introducing service-learning into a school or organization structure that does not recognize its value or potential, or even perhaps worry that service-learning might conflict with the curriculum or not meet program accreditation standards. At the same time, communities may be reluctant to partner with the university or college in fear of letting so-called experts into their communities. The purpose of this paper is to illustrate several strategies that have been used effectively to overcome these consternations in order to successfully integrate service-learning in diverse settings and design courses. The strategies identified, which draw upon the experiences of the authors, include how to identify potential service-learning projects, choose a community to work with collaboratively, integrate service-learning into the curriculum and assess its effects.

## **SERVICE-LEARNING IN ARCHITECTURE**

When thinking about service-learning in architecture, the image that comes to mind is Rural Studio, the community-oriented, Design-Build program of Auburn University, which has served as precedent for the establishment of other such programs across the nation. It is an example of the excellent results that can be derived from the integration of course materials and meaningful service activities.

As compelling as the Rural Studio model is, it is not the only alternative. This paper will present case studies of diverse service-learning projects as possibilities in the field of architecture.

The first case is the Community Design Studio, known locally as *el taller comunitario*, at the University of Puerto Rico, School of Architecture in Río Piedras. Faced with the need to create a medium committed to the physical and social environment, *el taller comunitario* was established in 1998 by Prof. Edwin Quiles with the aim to develop alternatives for improving the quality of life of low-income sectors. It grew out of his practice of assigning real life projects to the students and involving community leaders in decision-making. In *el taller comunitario*, students work within the community to identify needs, interpret wants and define solutions that would most frequently lead to the design of a building. The community leaders, largely grassroots representatives of low-income sectors, participate in all stages of the project, including programing and brainstorming, and are invited to attend schematic presentations, pin-ups and final juries. In most cases, at the end of a project the client gets an architectural model and a set of drawings that can be used for fundraising and for obtaining preliminary permits. When the community has gathered the funds to continue with the project, architecture or engineering firms get involved to further develop the students' proposals. While it works with community leaders at the early stages of a project, *el taller comunitario* does not get involved in the actual construction, unlike Rural Studio, but remains committed as part of the supervisory team.

As a service-learning studio program, *el taller comunitario* serves as an educational resource to both teachers and students as they get involved with the low-income sector and realize the relevance of their academic studies to the real world. Though it started with one professor going into low-income communities and identifying ways students could engage in social responsibility, it has been involved in over 100 projects, including the design development of community buildings, schools, public spaces, recreational facilities and public art. *El taller comunitario* presented an alternative to people that knew the value of architecture but did not have the means to contract professional services; however, because of increased attention from the media and word of mouth, it generated more interest than it could handle. In this situation, the glut of requests required professors to establish specific criteria in order to select projects that best aligned with the curriculum.

In response to the overwhelming number of request, it was determined that *el taller comunitario* would only accept project requests from organized communities with at least one leader involved, and, in a few instances, from non-profit organizations. Communities with no leadership were difficult to work with as, without a representative, the students were not able to get an idea of what the community wanted and no group in particular could make decisions. Individual requests were also not considered. The direct service provided by the students also had to be meaningful and relevant. After these criteria were met, the scope of the project and its relevance to the curriculum and to the mission of *el taller comunitario* was considered. When projects were accepted, community leaders were then allowed to interact with students at their site or at the school.

Another case deals with the hurdles faced by a professor in a school of architecture discouraging service learning pedagogy in studio courses. Sometimes professors with previous experience in community design that want to continue their involvement in the community, or with no experience but want to include a service-learning component, are faced with an administration that believes that a community studio for the underrepresented is not what they want to be known for. In this situation, and despite cultural impediments, the professor was able to incorporate service-learning successfully through a research course with a Design Thinking approach.

Students were asked to design, using Design Thinking methodology, an object for a family member, neighbor or friend with a disability or limitation not currently



Figure 1: Students at *el taller comunitario* presenting their proposal to community leaders.

addressed by designers. Their search led them to work in projects involving a wide range of needs including those for the aging, homeless, and some non-profit organizations, even an animal shelter. After identifying their subjects or clients, they conducted research by means of interviews and observation to identify the needs of the end-users, and collected examples of other attempts at solving similar or the same problem. After several brainstorming sessions in the classroom, an idea board was presented to the clients in order to get feedback. At the end of many rounds of brainstorming, a prototype was designed and built by the students and tested by the clients, joining thoughts with action and theory with experience. They took notes of what was working and recommended changes to their prototypes. Then they presented their work for the local community to see, and uploaded it on a few social platforms as well. The resulting projects brought several awards for the school and the students as well, which helped maintain positive relationships with the administration. Furthermore, the network that developed through the Design Thinking course led to a community in need for a clinic in Africa and the arrangements are being made to include it as a project in a studio course. A site research trip was originally proposed but with the recent outbreak of the Ebola virus, other alternatives of data gathering are being explored as well as ways of digitally communicating with the community.

The third case is a collaborative project with Habitat for Humanity and their mission of building homes for very low-income families in the United States. In Spring 2013, twenty graduate students enrolled in Public Organization Theory and Development course at the University of Texas at Arlington (UT-Arlington) partnered with Dallas Habitat for Humanity to carry out a service-learning project focused on homeownership satisfaction and impact. The Public Organization Theory and Development course is a required course in the Masters of Public Administration (MPA) Program, a graduate program accredited by the National Association of Schools of Public Affairs and Administration (NASPAA).

A key component of service learning is to make sure that partners negotiate the project upfront and identify a project that meets the learning objectives of the course as well as results in a deliverable for the nonprofit or partnering organization. Several months before the semester began, the professor of the course and Habitat staff met to negotiate the parameters of the project with the intent to design a project that would meet both the needs of the nonprofit organization as well as the learning objectives of the course. The key objectives of the graduate course included content related objectives such as teaching students different theories related to the physical, social and economic dimensions of organizations and models to evaluate organization effectiveness. A key need for Dallas Habitat was an evaluation of the impact of the homeownership program on its clients and the communities it serves.

The project partners identified that Dallas Habitat's need for post-client evaluation coincided with the graduate course objectives. Framing the project in this way would not only provide an opportunity to address content related objectives in regards to models for evaluating organization structure, design and effectiveness, but it would also provide the opportunity to engage students in diverse communities, foster an understanding of how to gather, analyze and utilize data to inform organizational decision making, and give students the opportunity to develop recommendations to further Habitat's mission. To complete the project, students were required to conduct a post-purchase evaluation in client's homes, produce a final report and presentation to the organization, identify a set of recommendations on ways to improve the homeownership program, and identify recommendations for designing a more effective means for collecting future client satisfaction data.

The interview survey tool asked homeowners about their experience in their new home and community, as well as their overall experience of homeownership. The tool consisted of five themes: overall satisfaction with the home; community satisfaction; satisfaction with the process, programs and education classes; affordability or finances; and overall impact. Once the surveys were conducted, data was organized, analyzed, and presented in accordance with the aforementioned themes. To conclude the project, the students presented the results of their analysis and recommendations to the staff at Habitat.

#### **STRATEGY #1: WHERE TO FIND A SUITABLE PARTNER.**

The Center for Community Service Learning at the University of Texas at Arlington has an annual Community Partner Breakfast with the aim of bringing faculty and regional community agencies together. The Breakfast takes place on campus and at the start, participants have an opportunity to introduce themselves to the group, the agency or college they represent, and what they need from the students or are able to offer the community. Following presentations, there is time to visit, network and brainstorm with those that seem to have similar interests. Contact numbers are exchanged, appointments made, and from this activity, sponsored by the institution, many projects have resulted.

In the case of *el taller comunitario* at the University of Puerto Rico, at the beginning its founder actively looked for community partners, but then the media and word of mouth made its work well known. The work developed in *el taller comunitario* confirms that working with community leaders is of utmost importance and that the exchange between the students and the leaders is what stirs the direction of the project. The community needs to be organized and conscious of their need in order to accept a partnership with a service-learning class. More than designing for the community, it is about designing with the community; both parties work hand in hand to achieve their goals. Even if the professor and the students see a need in the community and want to help in solving that need, if there is no link to the community itself, the resulting project will be seen as an intrusion and most likely fail. In summary, forums that provide the opportunity for university faculty and community partners can provide linkages, but it is equally important to make sure that the community partner is organized and has the capacity and motivation to be involved.

#### **STRATEGY #2: NEGOTIATE SERVICE-LEARNING PARTNER NEEDS.**

In order to meet accreditation standards, courses in a degree program must be designed to holistically contribute in developing a universal set of competencies deemed important to the profession. At the same time, to be a truly collaborative exchange, the needs of the community partner must be met. Therefore, it becomes important to negotiate partner needs in order to identify a suitable project that meets the needs of the community as well as meets the key academic needs of the program. In the case of the Habitat Project, the Public Organization Theory and Development course is designed to meet the NASPAA universal competencies deemed important for leaders in public service, and includes the following objectives: teaching students how to design more effective and responsive organizations for a diverse citizenry; how to work together effectively as a part of a team and with diverse populations; and how to utilize data to inform public service leadership and management decision making. Therefore, it was necessary to identify a project that would contribute to developing these core competencies for the students.

#### **STRATEGY #3: PREPARE STUDENTS FOR THE PROJECT**

The third component to ensuring project success is to make sure students are

prepared for the project and the experience. Thus, at the beginning of the course it is necessary to understand the perceptions and concerns of students in the class and their current level of skills and knowledge. For example, at the onset of several projects at *el taller comunitario* and also at the Habitat project, many students indicated a negative perception and, in some cases, a fear of working at the caseríos of San Juan or inner city neighborhoods throughout the City of Dallas. Likewise, many students had no previous course in using different tools and models of evaluation or research methods. Thus, a critical first step is to facilitate entry to the communities by visiting the site with all parties involved: clients, professors and students. In this initial meeting, students have the opportunity to talk with community members at the same time they experience the environment in which they will be working.

It is also necessary to prepare students with the content and knowledge to complete the project. Course readings and scheduled class time must be dedicated to preparing students with the theory necessary to conduct the project. For example, in the Habitat project, students were required to complete short assignments related to organizational theory, design and structure, basic quantitative and qualitative methods, and models of organizational effectiveness. The tool selected for evaluation was a survey interview tool, and in-class training was provided to the students to use the interview protocol.

#### **STRATEGY #4: RECOGNIZE THE BRIDGING CAPACITY OF PARTNER ORGANIZATION FOR EXECUTION**

In executing the project, it is important to involve the community leaders or partnering organization particularly if the goal is the design of a building, object or data collection. The organization knows their clients best, have their recent contact information and typically have their trust as well. In the case of *el taller comunitario*, community leaders took responsibility for their group in expressing the need and creating a program with the students. Also, they were the ones to make decisions, guide the programmatic stage, and ultimately pick the project they thought was the most relevant to their needs. Without the leaders, the students would have had a theoretical project and no service-learning benefit. In the case of Dallas Habitat, the staff served as a key bridge between the graduate students and their client population. Dallas Habitat was able to provide contact information to the students and provided an initial communication via a letter to their clients that the students would be contacting them and requesting a visit to their home. They also provided identification that students could use so that homeowners could easily recognize the students as Habitat volunteers. These efforts resulted in a participation rate of 62 percent.

#### **STRATEGY #5: ASSESS STUDENT LEARNING OUTCOMES**

To overcome “administrative hurdles” and to produce data for accreditation purposes, it is of critical importance to devise a plan to assess the student learning that occurred. This can take different forms and shapes (awards, student evaluation or a systematic assessment component built into the class) but the key point is to gather data on the effects in order to educate those that may question the pedagogical value of service-learning. For example, in the project that utilized Design Thinking methodology, the awards and recognition received were shared with the administration to demonstrate its value. In the Habitat project, in order to assess learning outcomes related to course content, students were required to complete short writing assignments linking particular course concepts to distinct phases of the project. As a second means of evaluation, the professor utilized strategies to facilitate critical reflexivity in practice, which required students to reflect on the assumptions

they bring to a particular situation, and to review and reevaluate these as their experience with a particular community changes and evolves (Cunliffe & Jun, 2005). Data to measure the effects of direct community engagement on student attitudes and perceptions were gathered through a series of semi-structured reflections that students completed at various phases of the project. Content analysis was used to analyze the data and generate themes about the impact of the experience on the students. The analysis suggested that a change occurred after students spent time in the communities interacting with the homeowners. Key themes that emerged included a more positive view of these inner city communities post engagement, identification of shared concerns about community, a recognition of the contributions nonprofits can make to facilitating economic opportunity for those excluded from traditional housing and lending markets, a recognition of the symbolism that is represented for American families through homeownership, and a recognition of the limits of viewing a home as just a building but rather as a place that represents opportunity and stability for many families. Finally, students also recognized the importance of incorporating quality post evaluation data from clients in future decision making.

#### **STRATEGY #6: EXPLORE HOLISTIC OPPORTUNITIES FOR COLLABORATION ACROSS THE CURRICULUM**

Although the service learning projects reviewed in this paper were implemented independently of each other in discipline-specific courses, the broader issues addressed in each of the project cut across multi-disciplinary perspectives. Thus, there is great potential for team-teaching opportunities or partnering with particular organizations across a set of multi-disciplinary courses. For example, in the Habitat project, while the organization theory students were primarily focused on the post-evaluation and client satisfaction, there is a partnership opportunity to collaborate with design courses to better understand how specific design features of the homes and communities impact client satisfaction or how the experience of the client's inform design. Using the Habitat experience as an example, professors could partner together in the same semester, negotiate a project with the partner, and design two course syllabi that identify a set of key learning outcomes and objectives that link to the project experience. Alternatively, a professor of design studio could identify a set of learning objectives related to design theory while the organizational theory professor could construct a series of learning objectives related to organization theory. Example projects could include an evaluation of a client population on how they interact with particular design features of a place, an organization, or a built structure; the organizational students could develop a model and set of evaluation tools; and the design students could identify specific questions that relate to design and design theory. The survey data collected could then reveal how different design elements influence homeowner's experiences and satisfaction or sense of community.

#### **CONCLUSION**

Service-learning in architecture is about teaching students social responsibility, either through design-built projects or, like it has been demonstrated in this paper, through the many opportunities that engage students in developing their civic and citizenship skills. Students learn how to help others by participating in meaningful service activities related to course materials, while at the same time gaining experience that will better prepare them for their careers.

We might need to find ways and methods of getting students involved, but for some students, that skill is innate. As an example, The Playhouse Fun Project was a

student-based initiative organized by art and architecture students at UT-Arlington with the objective of teaching art principles and design to disadvantaged students in a public elementary school, culminating with a playground structure built by the students and the community. Their mission was to create an environment of stimulated learning by introducing design projects to students in 4th and 5th grade at the Eladio Martínez Elementary School of the Dallas Independent School District (DISD). A group of 20 students got together to write a program along with curriculum and lessons plans, and presented these materials to the DISD. The students then took turns meeting with the elementary students in sessions once a week for two hours. A solely voluntary initiative of two students, this project makes obvious the fact that many students want to get involved beyond the walls of academia. We, as their teachers, are in part responsible for guiding and encouraging their work, and service-learning methodology makes this possible.

## ENDNOTES

1. Cunliffe, Ann L. and Jong S. Jun, "The need for reflexivity in public administration." *Administration and Society*, 37(2), 225-242.
2. Maymí, Paloma. "10 años del Taller Comunitario." *Diálogo Digital*, April 9, 2009. <http://dialogodigital.upr.edu> last accessed on September 18, 2014.