Thinking Globally, Acting Locally: Using the Design/Build Teaching Model for Cross-Cultural Dialogue

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Preparing future landscape architects for practice involves not only teaching them about globally important cultural, social, and ecological issues but also the processes for addressing them successfully in the built environment. An educational model that immerses students in these issues through community and cross-cultural dialog is the Design/Build Studio. (Winterbottom, 1999)

THE LINK BETWEEN design and community participation underlies the pedagogical goals of several accredited landscape architecture programmes in the United States. For many departments, community participatory design is an expression of a commitment to service learning and experiential education, and is allied with support for a strong construction curriculum (Thompson, 1996). Patrick Miller, chair of the department at Virginia Polytechnic Institute and State University, notes that "we don't see 'design' education as conveying facts and information. It is more than this. We believe that design is doing" (as cited in Thompson, 1998). The chair of the Ball State University programme John Motloch, acknowledged that some of his programme's greatest strengths were "our community-based and real world projects ... " (as cited in Thompson, 1998). Department Chair, Vincent Bellafiore, University of Illinois reinforced these perceptions, "The department takes great pride in a series of ad hoc and ongoing public-service projects that provide unusual opportunities for students to learn through action" (Thompson, 1998).

The Design/Build teaching model incorporates these ideas, synthesising design, community participation, service learning and construction. Working in the community, students learn how to conduct an interactive design process and understand the needs, ideas and goals held by the participants (Winterbottom, 2002). In their roles as designers and facilitators, students frequently engage with people who are very different from themselves, including the elderly, children, the infirm, as well as those from a variety of ethnic groups. A recent paper illustrates how a community Design/Build project encouraged cross-cultural learning (Forsyth, Lu and McGirr, 1999). In this type of studio, students perform multiple roles, including that of researcher (gathering information on materials and technologies), mediator (finding common ground with the community), advocate (demonstrating sustainable design practices) and builder. Concepts and skills developed throughout the curriculum are integrated and this direct experience with the entire design process (design through construction) builds confidence, making the transition from student to practitioner more fluid (Bennet, 1998).

The interrelated nature of design and construction, of conceptual thinking and implementation, is revealed to the students through a hands-on approach (Elvin, 1997). In its application, Design/Build represents a balance between the thinking and the act of place making, and is designed to "combat the student's tendency to reject knowledge of construction as a detriment in developing highly innovative, unique design solutions" (Carpenter, 1996). Students are encouraged to think 'outside the box', creatively adapting traditional and local practices. Design/Build projects serve as laboratories, in which new ideas can be tested, results documented, and precedents offered to be used by others when validating their proposals. Models are created that may be transferable to different communities and cultures in other countries (Winterbottom, 1999).

Temple University (TU), the University of Oregon (UO), and the University of Washington (UW) all integrate Design/Build courses into the curriculum. Temple requires a 15-week studio for third-year undergraduates, while Washington offers a ten-week capstone studio as a requirement for third-year BLA students and an elective for graduate students; the University of Oregon offers a Design/Build studio as an option in the fourth year to both graduate and undergraduate students. In all, the class size averages 12 students, one faculty member and a teaching assistant. At UW and UO, most students are from the landscape architecture programme although students from fine art, anthropology, architecture, women's studies and others have enrolled. Projects are selected based on programme, compatibility with department goals, willingness of the client to fully participate, and the ability to fund the project.

At both UW and UO a typical project will allow one week for material research/site analysis, three weeks for participatory community design/ construction documentation, and six weeks for construction, project documentation and post construction review. A revolving student team manages the design, material and cost estimates, acquisition and scheduling. Decision making is largely by majority vote, with a faculty override on issues involving safety, time constraints, or costs. Students rotate through all the varying assignments, so they are both comfortably matched to the work at hand and confronted with new challenges. Given the range of student roles, from materials research to construction, the interconnectedness of design, building and community is experienced through every phase.

These programmes have completed a diverse range of projects, including urban community gardens, rainwater-harvesting systems, healing gardens in healthcare facilities, a public wash facility in Mexico, habitat restoration, stormwater-cleansing bioswales, children's outdoor play and education areas, and campus arboretum gardens. Many projects address issues of community development and habitat conservation, others deal with supportive environments for those suffering from severe medical problems. All projects have had a 'client' participation component and all represent a form of service learning.

Why are local issues important at the global scale? In communities everywhere, people share common concerns for their civic spaces: conservation of resources,

preservation of habitat, healthy environments, and reconnection to nature. Appropriate design is informed by all the unique ecological, social and political aspects that local inhabitants know best. In the Design/Build process, community members are encouraged to participate in every phase from planning through construction, which greatly increases a project's ability to express the unique needs and visions of a particular community (Tai and Lamba, 2003; Winterbottom, 2003).

In 1997, the University of Washington took Design/Build abroad for the first time, building a community wash facility at Santa Ursula, a village in the highlands of central Mexico. Interestingly, many common lessons taken from projects done in the United States of America could be applied locally. These include:

- assessing community needs in an open forum
- presenting multiple designs to offer choices
- mediating differences
- establishing trust by investing time in the community
- following through on the completion of the project.

Local strategies developed in Mexico:

- partnering with a local non-government organisation to establish and maintain a presence in the community
- understanding and respecting the differences in gender roles
- understanding and respecting traditional materials, forms and symbols.

This model allowed for two cultures to work, socialise and, in a real sense, live together. Through Design/Build, students and community members gained a cross-cultural understanding at level much deeper than a traditional touring model can provide. As a joint collaboration, the students are immersed in the indigenous building methods and materials, and in unique cultural expressions. Low-tech and cost-effective solutions are particularly appropriate for impoverished communities because they are easily understood, maintained, and repaired and are the most practical for replication. In many cases, because of financial constraints, a Design/Build project represents the only option for enacting positive change.

The Design/Build studio offers an ideal forum where students understand the ramifications, costs, feasibility and sustainability of their design. Many of the students have expressed the importance of, and invaluable knowledge gained from these experiences as they develop their professional careers (Tai and Lamba, 2003; Winterbottom, 2003). Through the use of participatory design, students are better prepared to address the diverse needs of a community, and the connections between their local interventions and the global issues of sustainability and health are revealed (Winterbottom, 2002). It is through local engagement that the community's needs are best understood, and through applied learning that students link concept to outcome. In Design/Build both facets are addressed in a model transferable to any context. Universal design issues are most effectively addressed,

not in a one-size-fits-all approach, but in an appropriate, site-specific (local) manner. The Design/Build model of engagement and dialogue holds great promise for succeeding in addressing global ecological and cultural challenges, one community at a time.

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