

## Agency and Immersion: Design Build & Social Entrepreneurship

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We believe that architectural curricula can, and often do, include tangible experiences that provide unequaled immersion that builds agency toward a productive and innovative career trajectory.

We know this is the case, because we have been testing this premise for thirteen years now. The questions have always been: how can we empower students to exercise their creativity in a way that produces tangible results in collaboration with the community (design build), and how can we inculcate and reinforce values that support positive social change through the design excellence, ambition, dedication, and compassion of students?

Undergraduate students (fourth and fifth year) and upper level graduate students have designed, developed and built thirteen houses since 2006 through the URBANbuild program. These projects are led by a faculty member and financially supported by the school. A house project begins in late August each year and by early May, the house is ready to go on the market. The houses are progressive and experimental in the way they explore different strategies for the creation of affordable housing. They are individually and collectively entrepreneurial, developed in collaboration with a local non-profit housing organization which provides the sites, while advising, selecting and approving potential homeowners. Several years ago, the dean secured a gift from a donor which allows the program to operate essentially as a revolving fund; the school provides all of the funding necessary for these houses and the instruction required for this program. The capital investment returns to the school with each sale, and we share the modest profits with the non-profit organization. As a social entrepreneurship venture, the work of students and faculty has not only resulted in a portfolio of impressive houses and house designs, it has also served to help a struggling neighborhood to turn around in a more positive and stable direction. It is also a self-perpetuating enterprise.

Inspired by the work of this architectural education innovation, the school later launched a highly successful university-wide minor in Social Innovation and Social Entrepreneurship (SISE). Architecture students, and students from across the other four undergraduate schools, have pursued this sequence of courses as a way to develop their own strategies for positive social change. The founder of URBANbuild was in the first cohort of 10 individually

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endowed Social Entrepreneurship university-wide professors, teaching one of the required courses called "Design Thinking for Social Change."

In relation to the overall theme of the ACSA Conference, this example is NOT a Black Box. It is decidedly open, transparent, inclusive and accessible. These programs attract diverse students and with a track record of over a decade now, evidence of the collective impact in terms of a neighborhood (URBANbuild projects) and careers (SISE minor students) is clear. Architectural education benefits from engagement in "...the messy vitality over obvious unity" (to quote Robert Venturi). These two programs suggest a different kind of professional future for our students as compared with more traditional notions based on the intentional or unintentional hermetic tendency of inward-focused pedagogy.

### INTRODUCTION

We understand and respect the laudable intentions underlying the 2019 ACSA Conference theme. However, we challenge the notion of "inputs and outputs" as suggested by the title of the conference and described in the expanded text describing the theme. In contrast to the theme's implied absence of explicit attention to strategy, tactics, actions, and the charted trajectory of pedagogical work, our case study is fundamentally about content, context and a legible process with clearly and proudly articulated values and goals. This is NOT a "Black Box." Our agenda is decidedly and intentionally transparent, inclusive, accessible, open, and engaged with the community of New Orleans. The programs described in this paper explicitly attract diverse students who are interested in the impact their work can have in addressing inequities in society. The work proposes and builds opportunity for others and lays the groundwork for students to inflect their careers as architects and engaged citizens toward positive social change.

### URBANBUILD AND ITS IMPLICATIONS

With a track record of nearly fifteen years, there is extensive evidence transformative impacts in a low-income neighborhood of New Orleans (called "Central City") through completed and constructed student projects. These projects are led by an experienced design-build faculty member who is also a prominent practicing architect. Through the continuum of thirteen completed URBANbuild projects, access to affordable housing and the collective momentum this has created, Central City has been transformed and stabilized through these projects. URBANbuild has additionally



Figure 1. Byron Mouton, URBANbuild Director.

attracted investment from non-profit development corporations and for-profit companies as well. This has been accomplished with a consistently high level of design excellence, superb construction quality, and careful attention to sustainable design strategies. These projects have been recognized repeatedly through design awards from the local and state chapters of the American Institute of Architects in annual awards programs. The momentum is significant. While the area of focus witnessed disinvestment and decline for decades prior to Hurricane Katrina, Tulane University reopened in January 2006, and since that time the accumulated impacts connecting the energy and talent of students with the community have combined in powerful ways. The challenge of creating appropriate solutions to persistent housing challenges has provided the platform for innovation and the delivery of multiple constructed prototypes for sale, replication and for other developers and several architects to emulate within the community.

### **SOCIAL INNOVATION AND SOCIAL ENTREPRENEURSHIP**

Closely related to the student work of URBANbuild, Senior Professor of Practice Byron Mouton, faculty colleagues at the Tulane School of Architecture, and others from across Tulane launched a university-wide undergraduate minor in Social Innovation and Social Entrepreneurship (SISE) under Dean Kenneth Schwartz's leadership. Professor Mouton was one of the founding "Social Entrepreneurship Professors" at Tulane University, a program that provides significant research and project funding to ten professors from across

the entire university through individually endowed funds supported through philanthropic gifts. These professorships recognize and provide support for faculty to advance their own research, teaching and community work. Mouton won this competitive award of a multi-year professorship as a result of his innovative work in advancing positive social impact through design build in the community. He was in the original teaching cohort that launched the SISE courses, where he taught the first Design Thinking for Social Impact in cross-disciplinary collaboration with School of Public Health Senior Professor of Practice Dr. Laura Murphy (a Stanford graduate and expert in design thinking).

This paper explores both of these interconnected initiatives, URBANbuild and SISE, with a focus on the lessons learned through the unique synergy coming out of an entrepreneurial school of architecture.

### **ARCHITECTURAL EDUCATION AS TANGIBLE EXPERIENCE WITH PURPOSE**

Architectural curricula often include inspiring experiences that provide unequalled immersion opportunities for students through any number of design challenges. They may also address societal challenges, ranging from affordable housing, sustainability, adaptation and resilience, construction within serious financial and construction constraints and working with clients who do not typically have access to design services. A list of the challenges that intersect with social justice considerations is almost limitless. When applied to possibilities of specific architectural resolution in relation to housing, the list becomes more focused, and these are among the issues that are explored within the curriculum at the Tulane School of Architecture.

By presenting architecture students with opportunities for growth in this productive space, the program exposes students to entrepreneurial aspects involved in the business of design build and real estate development dynamics. The program aims to build agency toward meaningful, relevant, and innovative career trajectories that include the traditional practice of architecture as well as options that embrace public interest design. We know this is the case, because we have been testing and assessing this premise for thirteen years. The questions have been consistent: how can we empower students to exercise their creativity in a way that produces tangible results in collaboration with the community (through design build projects), and how can we inculcate and reinforce values that support positive social change through design excellence, ambition, dedication, and compassion of architecture students?

Fourth and fifth-year undergraduate students and upper level graduate students have designed, developed, and built thirteen houses since 2006 through the URBANbuild program. These projects are led by one faculty member (Byron



Figure 2. URBANbuild 12 crew.

Mouton) and supported financially by the school and by a funding a staff as an assistant. A house project begins in the summer with site identification and positioning the staffing and financial resources needed to launch and complete the project during the academic year. In late August each year the construction begins. By early May, the house has secured a certificate of occupancy. At this point, it is ready to go on the market. The houses are progressive and experimental in the way they explore different strategies for the creation of affordable housing. Common materials are used in creative ways in an effort to provide the community with replicable strategies rather than custom “one off” productions. They are individually and collectively entrepreneurial, developed in collaboration with a local non-profit housing organization (Neighborhood Housing Services, NHS) which provides the sites while advising, selecting, approving potential homeowners, and assisting in the orchestration of financing packages for these first-time home buyers. The URBANbuild schemes are positioned as “workforce housing.” Thus far, the owners have included police officers, nurses, teachers, artists, musicians, and others.

The orchestration of this project is not simple, and it certainly goes far beyond the typically schematic nature of most studio projects in school. Each student engages in serious research focusing on building systems, precedents, environmental considerations and user perspectives for these approximately 1,000 square foot homes. As in an architectural office, time for the schematic design phase is necessarily brief. At the end of a month or so for research and schematic design, the professor guides a midterm review discussion with the studio and outside professionals. This review culminates in the *students* electing a chosen scheme. At times, the choice involves a hybrid of two schemes which is also a common occurrence in “real world” commissions. At that point, the students begin design development and construction documents as a class-wide “office.” The tasks are arranged in small teams and include multiple meetings with the studio as a whole. A

complete contract document set is included in this paper as an illustration of one tangible result of this collaboration. The students go further to do quantity take offs, costing and are involved with the process of securing building permits.

Throughout the entire semester, the students meet with members of the community and staff members from Neighborhood Housing Services, the essential non-profit partner in this enterprise. In a sense, NHS serves as the “client” on behalf of potential owners who are considered for the purchase of each house.

The final review of the fall semester serves as a last check in before the contract set is submitted to the city for a building permit, and it always includes a large and diverse group of architects and community members. This presentation, along with others throughout the semester, reinforces a recognition by the students that they must present their ideas with clarity in graphic terms and with an emphasis on accessible language with minimal jargon in their verbal presentation.

Suffice it to say that collaboration, teamwork, humility, empathy, leadership and a shared sense of purpose unite the students throughout the process. This parallels experiences in most progressive and responsive architectural firms, but it also goes further. Knowing that the project will be built by a spring semester student team leads the fall students to be seriously focused on the viability of the scheme at the large scale and down to the construction phasing and details. Usually around one half of the twelve students from the fall continue into the spring “build” phase, and the other eight students come into the process afresh in early January.

The spring semester “build” semester is an extraordinary opportunity and experience in its own right. Teamwork and division of labor among the students continue in this semester with the added challenge of training students in various construction skills while on the job. The design process does



Figure 3. URBANbuild 11, front construction.

not end at the completion of the fall semester. It continues in the form of detail development and testing. For example, one year the studio tested a strategy of fabricating polycarbonate sliding hurricane shutters off site and installing them after this pre-fabrication. These, along with millwork and other crucial details require design as applied at a refined scale and with attention toward the actual construction.

Each house aspires to LEED Silver certification as a minimum, thus they pay serious attention to sustainability, environmental sensitivity and human comfort all within a tightly controlled budget. This presents an exciting challenge for the students. It should be noted that only one of the houses has successfully gone through the full Silver certification process thanks to an added contribution from a generous donor. The others follow the same pattern, but the added expense of LEED certification for all of the houses was hard to justify; and it would risk of pushing them beyond the affordable level for the home buyers who are targeted with this program.

The students take this on as a full-semester obligation with a total of 12 credit hours when the six studio credits are combined with two “courses” that pertain to the detail development drawing and modeling process as well as the construction work itself. The curriculum is designed to allow other course to clear out during this semester, giving students this kind of opportunity along with other design build offerings for the students to consider each semester. The mechanical, electrical, plumbing, insulation, and drywall installation utilize subcontractors who are coordinated by the students as a “general contractor” of sorts. In fact, the professor not only stamps the architectural set, he is also a licensed contractor and carries the liability insurance (paid by the school) so the project is completely compliant with all city rules and regulations.

Several years ago, the dean secured a gift from a donor which allows the program to operate essentially as a revolving fund; the school provides all of the funding necessary for these houses and the instruction required for this program. The capital investment returns to the school with each sale, and the modest profits are shared with the non-profit organization. The arrangement is formalized in a Memorandum of Understanding. As a social entrepreneurship venture, the work of students and faculty has not only resulted in a portfolio of impressive houses and house designs, it has also served to help a struggling neighborhood to turn around in a positive and stable direction, with many of the purchasers from the neighborhood itself. The enterprise is also a self-perpetuating enterprise. As recently as early 2018, the Dean Schwartz also secured a \$600,000 endowed professorship whose proceeds go to the first named chair for his use in advancing the program through research, publication and operating expenses. Byron Mouton holds this professorship.

#### **SOCIAL INNOVATION AND SOCIAL ENTREPRENEURSHIP MINOR AT THE SCHOOL OF ARCHITECTURE**

Inspired by the work of this architectural education innovation and other post-Katrina efforts by faculty and students, the school launched a highly successful university-wide “SISE” minor in Social Innovation and Social Entrepreneurship (2011). This new academic program was connected to our university’s emergence as a national leader in agendas involving social change with official recognition as an “Ashoka U Changemaker Campus” in 2009. Architecture students, and many other students from across the other four undergraduate schools, have pursued this sequence of courses as a way to develop their own strategies for positive social change. The founder of URBANbuild was in the first cohort of 10 individually endowed Social Entrepreneurship professors, teaching one of the required courses called “Design Thinking for Social Change.” This program brings together full-time faculty from across the university whose own research, creative work, teaching and practice has a nexus with social innovation. On the premise that the university has extensive pockets of faculty who pursue this type of work across all schools at Tulane University, the SE professors’ program has become a robust way of connecting across disciplines. Each SE professor has a title (with the donor’s name) and significant research funding that supports their work for a three-year term, renewable for a second two-year term. This initiative has provided an incentive, both financial and in terms of the prestige attached to a named professorship, for faculty to think about and further develop their work and its impacts for students and beyond the classroom as well.

Building on Tulane University’s strengths in civic engagement and service learning, as the only comprehensive research university with two semesters of required service learning built into core courses for all undergraduate students, the Social Innovation and Social Entrepreneurship minor provides students with skills to create a more just and equitable society

throughout their academic and professional careers. The five main SISE courses introduce students to concepts of social innovation, mindsets of human-centered design, and frameworks for social impact leadership. Students in the minor develop an understanding of complex problems and engage in systems change thinking while developing a toolkit to create positive social and environmental change.

The required courses give an indication of the blended interest in social innovation and social entrepreneurship:

- Introduction to Social Innovation and Social Entrepreneurship (with mandatory service-learning component)
- Introduction to Business for Social Innovation and Social Entrepreneurship
- Design Thinking for Collective Impact
- SISE Senior Seminar
- SISE Elective (course to be tied together with Senior Seminar)

The program is “housed” in the School of Architecture where it began. Indeed the idea of the minor was the product of a cross-disciplinary group of faculty and staff who designed the curriculum. It was the provost’s decision to situate the minor in the School of Architecture, because he thought it had the best prospect for a successful launch given the synergy between the SISE program’s aspirations and the track record of the School of Architecture since Hurricane Katrina. In addition to URBANbuild, there have been many community-based studios and projects hosted by the Albert and Tina Small Center for Collaborative Design (formerly known as the Tulane City Center). Since 2006, this center, and the school’s faculty and students as a whole, have completed over 100 projects in the New Orleans community.

While the percentage of architecture students in the overall undergraduate population is only around 3%, approximately 6% of the SISE students have come from our “home school,” and the remaining 94% come from the other four undergraduate colleges. In its seventh year, we have seen over 1,000 students who have taken at least one of the SISE minor courses, and approximately 300 have completed the minor. Like many other universities, Tulane operates on a decentralized budget model. This means that the School of Architecture has generated substantial additional net revenue through this program. While we did not launch this program based on a profit motive, it is interesting to note that it has become a successful entrepreneurial venture, because “outside revenue” from students who otherwise would not have taken architecture courses has essentially provided additional funds for architecture program priorities. When Kenneth Schwartz considered the opportunity to launch this minor, he developed a business plan to make sure that the program would be advantageous in terms of the academic mission and the financial health of the school.

Naturally, the main motivation was to expand opportunities for students and to encourage and support the next generation of “changemakers” on our campus. This is consistent with Ashoka U’s mission and the mission of the Phyllis M. Taylor Center for Social Innovation and Design Thinking—another important outgrowth of the work that was germinated in the School of Architecture.

The examples provided in this paper and dominating our experience over the last ten years have been transparent, collaborative and outward-looking. Architecture schools have often been seen as “Black Boxes” in their tendency toward inward turning reflection as well as an occasional bias toward autonomy. While this mode has been



Figure 4. SISE Minor.



Figure 5: URBANbuild 13, front and entrance.

challenged from time to time over the history of architectural education, the examples of URBANbuild and the Social Innovation minor present a form of expansive engagement that transforms the role of architecture students and faculty within the university and community. It has also spawned a broader initiative, beyond the walls of the architecture school, in the form of the Phyllis Taylor Center for Social Innovation and Design Thinking. Now in its fifth year, Dean Schwartz launched this university-wide center with a disciplinarily diverse team of faculty in the fall of 2014. After a total of ten years as dean and four of those years as both the dean and the director of this independent center, he has left the former role to devote more time with the growing Taylor Center. There are comparable centers at other universities in the United States and abroad, but it is rare if not unprecedented to find an example where such a university wide center for social innovation emanated out of a school of architecture. Many of the other centers have emerged from business or engineering.

As an example of bringing this connection full circle, Kenneth Schwartz is developing a new entrepreneurial venture that will involve the architectural and landscape design, construction, and development of a new outdoor education center for New Orleans and rural Mississippi youth in a central Mississippi location on a large 3,000 acre farm. The project also includes an ecological and sustainable master plan for the property, with a cross-disciplinary team of faculty and students from a wide variety of disciplines (forestry, agronomy, biology, wildlife, economic develop opportunities for the community and more). This project is just getting started and is currently in a proof of concept phase.

## CONCLUSION

We strongly believe that architectural education benefits from engagement in “...the messy vitality over obvious unity” (Robert Venturi). The programs highlighted in this paper, including a “traditional” (but not so traditional) design/build student projects over almost fifteen years, a number of other initiatives underway at the Tulane School of Architecture, and a growing emphasis on social innovation across many disciplines beyond architecture at Tulane University, suggest a different kind of professional future for our students as compared with more traditional notions based on intentional or unintentionally hermetic and inwardly focused pedagogy. With roots in a long history of attention to high quality design, fabrication and craft in its many forms, with the public realm and an equal concern for social justice issues as advanced through Public Interest Design, these programs are firmly situated in a progressive and optimistic tradition about architecture’s role as a positive force in addressing inequity through and by design. Outreach, appropriate and respectful community engagement, and sensitivity about cross-cultural difference are fundamental touchstones at this point, informing and inflecting the way that design is taught among architecture students. This exposes non-architecture students in many of these issues as well through the wide-reaching opportunities for others to participate in Design Thinking or Human Centered Design.