Chapter 20 The Reinvention of an Unremarkable Building through Adaptive Reuse: A Case Study

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ABSTRACT

This chapter addresses the integration of sustainable practice into the interior design studio through the investigation of a grant-sponsored adaptive reuse project. A fourth-year Interior Design studio project afforded the opportunity for exchanged conceptual ideas between students and a sponsoring industry client. The project provided students the opportunity to adapt and reuse a formerly unremarkable bank building, converting it into an innovative office space that meets LEED Silver certification standards. As participants in a sponsored project, the students were provided a unique opportunity to work with, and to be funded by, the client. Evaluations and completed projects indicate that students in the studio learned sustainable values and strategies through this integrated studio approach. The real-world project provided the students experiential knowledge through the implementation of innovative client-centered design and enforced the significance of adaptive reuse as a critical Interior Design practice.

INTRODUCTION

Adaptive reuse is a viable refurbishment trend for existing building sites that are abandoned or have fallen into disrepair (Henehan et al., 2004). Buildings renovated through the process of adaptive

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reuse, a critical interior design practice, recycle the structure's shell, giving the interior space a purpose and program, which differs from its original design (Kessler, 2009). The inherently sustainable process of adaptive reuse thus uses less embodied energy than that of a new construction – and the life of the building is extended (Eisen-Brown, 2009). Key concepts of sustainability (such as lowering

the material, transportation, energy consumption and pollution associated with new construction) are achieved through the avoidance of demolition and by extending the useful life of the structure (Bullen, 2007). Adaptive reuse regenerates valuable community resources from deteriorating or unproductive properties, reduces land acquisition and sprawl, eliminates the environmental and economic cost of new construction, and revitalizes existing neighborhoods. Unlike a building renovation or retrofit, adaptive reuse does not occur "within use," rather it repurposes the core and shell of an infrastructure for another use altogether (Ellison et al., 2007). Using the accepted historic preservation route for the adaptive reuse allows preservation of the building structure and reinterpretation of its purpose, making it once again useful and potentially remarkable. This is a critical challenge for the interior designer to accomplish.

This chapter addresses the integration of sustainable practice into the interior design studio through the investigation of a grant-sponsored adaptive reuse project. An experiential learning collaboration, achieved through studio work sponsored by an industry client, provides students the opportunity to design solutions that address the complexities of real-world problems (Sterling, 2007), while the university/industry collaboration allows higher education to play a critical role in the creation of a sustainable future (Cerych & Frost-Smith, 1985).

A fourth-year commercial interior design studio project afforded the opportunity for exchanged conceptual ideas between students and a sponsoring industry client. The project provided students the opportunity to adapt and reuse a formerly unremarkable bank building, converting it into an innovative office space that meets LEED Silver certification standards. As participants in a sponsored project, the students were provided a unique opportunity to work with, and to be funded by, the client. Qualitative data was collected through observations at site visits

and juried critiques. Self-evaluations, peer evaluations and juror-critique evaluations implemented purpose-specific evaluation instruments with a consistent rating range.

Evaluations and completed projects indicate that students in this studio learned sustainable values and strategies through this integrated studio approach. The real world project provided the students experiential knowledge through the implementation of innovative client-centered design and enforced the significance of adaptive reuse as a critical Interior Design practice.

ORGANIZATION BACKGROUND

The University

Arizona State University (ASU) is an inclusive research 1 State University with an enrollment of 73,373 in 2012. Sustainability is a critical aspect of its mission, and in recognition of its sustainability achievements from the Association for the Advancement of Sustainability in Higher Education (AASHE),

The integration of sustainability in design education is occurring in a variety of ways. Three models, however, appear to be most common:

- Stand-alone schools or programs of sustainability that offer courses in sustainability made available to the institution at large including students in design
- Notions of sustainability integrated into the studio experience common in design education
- Courses in sustainability offered in schools or programs of design

Arizona State University, in various programs, follows all three models. The School of Sustainability at ASU is a stand-alone program. It was launched in 2007 and is part of a larger initiative called the Global Institute of Sustainability. As

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