

Integrating Sustainable Design Into Architectural Education

Victor W. Olgyay, AIA

University of Hawaii at Manoa

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The ecological health of our environment is profoundly affected by the design of our built environment. This paper describes recent experiments teaching sustainability within the architectural curriculum at the School of Architecture, University of Hawaii at Manoa (UH SoA). Examples show environmental issues integrated into both initial and advanced design studios.

Like environmental issues, architectural education is by nature interdisciplinary. Architectural design studios require the combination of information from many disciplines, including history, materials, structures, engineering, meteorology, social sciences and others. This wealth of information is both an asset and a liability. Since there are few boundaries as to what is considered relevant design information, it is easy to add additional material. However, there is often too much content for students to consider meaningfully.

In the beginning design studios, sustainable design was taught by focusing on a tangible project, in this case collaboration with Maui Community College on the design of and construction of an "eco-village." To solve this relatively small architectural program, students also had to learn the technology of environmental systems.

Information on sustainability was pursued theoretically in the advanced studio by investigating the morphology of environmental forces. This approach required students to combine information from previous experiences (both architectural and non-architectural) with topical investigations. This resulted in original research as well as examples of advanced application of environmental technologies to building form.

These studios have successfully brought the issues of environmental sustainability from the periphery of architecture education to become a standard element in the palate of design concerns. Normalizing issues of sustainable design encourages students graduating from schools of architecture to contribute to an ethic of environmental responsibility.

Victor W. Olgyay, <volgyay@hawaii.edu> Associate Professor, AIA,

School of Architecture, University of Hawaii at Manoa, 2410 Campus Road, Honolulu, Hawaii 96822.USA.