Chapter 6
The University of Hawai‘i at Manoa Sustainability Courtyard as a Center for Campus Engagement

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EXECUTIVE SUMMARY

The University of Hawai‘i at Manoa Sustainability Courtyard provides a venue for campus engagement to educate and increase awareness of developing solutions and/or adaptations to geopolitical and environmental challenges, particularly energy, water, and food security. Few institutions are immune to coping and addressing triple bottom line issues of energy (economy), water, food and waste management (environment), and workplace comfort and safety concerns (equity), so the limited window of time students have on university campuses is an opportunity to engage and prepare them for an uncertain future (+ education).

INTRODUCTION

What evidence will there be that society has been transformed as an outcome of all the rhetoric on sustainability of the past two decades, and how will anyone notice a difference at the University of Hawai‘i at Manoa? (Cusick, 2008, p. 246)

This chapter describes a space on the campus of the University of Hawai‘i at Manoa (UHM), the State of Hawai‘i’s flagship institution of higher education, which has demonstrated the potential to effectively contribute to the university’s strategic

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planning objectives related to sustainability. The UHM Sustainability Courtyard (SC) is an example of what institutions of higher education can do, and are doing, to promote education and awareness in support of civic engagement. The cumulative efforts of the campus community, particularly over the past decade, are relevant in the development of sustainability literacy, and the SC provides a case study of how other institutions may consider the use of campus space for similar purposes.

As is often noted, the terms *sustainable development* and *sustainability* generate multiple definitions and perspectives (Barlett & Chase, 2004; Edwards, 2005). The challenges have less to do with defining terms and more with cultivating the sense of individual and collective effort required to adapt to the scale of challenges likely to confront contemporary societies. While the key concepts of all sustainability definitions focus on economic development, environmental management, and social equity, also referred to as people, planet, and prosperity (or profit), which are collectively referred to as the triple bottom line and three pillars of sustainability, the problems, as noted by David Orr (1992), are that the challenges “feed upon each other.” Of relevance to the transformative use of campus spaces as described in this collection of case studies is the role of education itself. Orr suggests that “all education is environmental education” and that the practice of civic engagement to educate people to live sustainably requires that education occur “in part as a dialogue with a place” (Orr, 1992, p. 90). One such place to facilitate the paradigm shift discussed by Andres Edwards in *The Sustainability Revolution* are the campuses of institutions of higher education. “Through education, sustainability can become firmly established within the existing value structure of societies while simultaneously helping that value structure evolve toward a more viable long-term approach to systemic global problems” (Edwards, 2005, p. 23).

Consensus on the application of sustainability at an institution of higher education, let alone a working definition, can be difficult to reach for several reasons. First, many hard choices have to be made by university administrations and faculty for near-, medium-, and long-term goals, whether involving campus planning and capital improvements or research and instructional programs, while students tend to focus on near-term personal goals, such as graduating in a timely fashion and managing the costs and logistics of independent living. Second, complex issues, such as adoption of alternative sources of energy, purchasing of local and green products, and reduction and disposal of solid wastes, can require years of planning to organize and execute across a university campus. Nonetheless, any progress at UHM responding to vulnerabilities to energy, water, food, and waste management systems moves the State of Hawai‘i closer to the sustainable futures so enticingly articulated by many proponents.
FRAMING THE STUDY OF PLACE

Places are records of change in space and time that allow us to investigate the active expression of human agency (Jackson, 1989); they constitute the physical setting where social relations are played out (Agnew, 1993). The concept of place is interpreted as a “center of meaning” and the “focus of human emotional attachment,” understood as involving a variety of attributes, and a geography of the lived world (Relph, 1976). Places manifest themselves under conditions that emerge as distinct from one another, as reflections of contemporary concerns (Lefebvre, 1991), and can be viewed as signifiers, elements set within a cultural system. Cultural geographers focus on representations of place in their natural and social contexts to understand and explain human behaviors.

Institutions of higher education have responded to sustainability challenges with a variety of activities and initiatives ranging from commitments to lower greenhouse gas emissions and increase green purchasing to offering new courses and degree programs. As for the UHM campus, a former parking area for university vehicles was reassigned in 2006 to give the topic of sustainability a “place” on campus. The place is a commons area that occupies a central location on campus with the potential to effectively contribute through civic engagement, the recognition by individuals that they are members of a larger society and have responsibilities to promote and take actions to make differences in their communities. The reproduction of the space from wide expanses of concrete to one with a variety of services and infrastructure in an aesthetically appealing setting constitutes a new destination on campus for social interaction and student activism (Figure 1).

The interdisciplinary nature of sustainability requires broad participation of schools and colleges, departments and centers, and administration and staff to be considered a truly “engaged” campus community. The responsibility of addressing the many identified challenges cannot be the domain of a single campus unit or organization. To do so is to factionalize the effectiveness of collective action that can result from diverging agendas of individuals’ short-term self-promotion objectives at the expense of achieving long-term institutional goals.

The initial momentum of the SC slightly faded in 2009-2010 due to construction in the vicinity and other campus sustainability projects gaining traction. Despite the hiatus and limited available funds, current facilities include two food kiosks with a dozen picnic tables, a stage, and a student-managed herb and vegetable garden, while student-faculty organized events in the SC over the years have included Earth Days, environmental film series, demonstration projects, and live music events. Taken as a whole, these initiatives have redefined a concrete expanse into a place to engage the campus community in the dialogue suggested by David Orr.
The desired conversation “is the opposite of the specialization and narrowness characteristic of most education. The ecologically literate person has the knowledge necessary to comprehend interrelatedness, and an attitude of care or stewardship … Knowing, caring, and practical competence constitute the basis of ecological literacy” (Orr, 1992, p. 92). However, the goal of developing a sustainability ethic as stated in the current UHM Strategic Plan requires more than a single courtyard with food kiosks serving vegetarian meals. The following sections discuss learning outcomes of the past two years and outline several visions for the space as presented by students as part of an assignment in an Environmental Practicum course taught by the author.

THE STRATEGIC CONTRIBUTIONS OF THE SUSTAINABILITY COURTYARD

Community buy-in to the goals of sustainability are made evident in the Hawai‘i 2050 Sustainability Plan that recommends “putting a stake in the ground” and “creatively educating the community about the importance of living sustainably and launching programs in the schools to teach sustainability strategies” (Social Sciences Public Policy Center, 2010, p. 33). The relevance of environmental education is that “an environmentally literate person in Hawai‘i is an informed, lifelong learner who values
Hawai‘i’s uniqueness, practices environmental stewardship, and lives sustainably” (Sato & Staab, 2012, p. 2). The Hawai‘i Environmental Education Alliance reports that the results of a 2000 survey demonstrated 93% of survey respondents were in favor of environmental education in the public schools. “If anything, with more attention focused on being ‘green’ today, public support is potentially even stronger … the key (to success) will be to link” education with alleviating pressing issues “such as unemployment, homelessness, traffic congestion, crime and violence, illegal drugs, and the high cost of living” (Sato & Staab, 2012, p. 51).

The Hawaiian Islands are often referred to as a place of inspiration unequaled in the world, which is evident by the over seven million annual visitors who are hosted by a resident population of one million. Representations of the Hawaiian Islands as a “paradise on earth,” particularly fueled by the mass tourism industry, reflect the marketability of sustainability. “We need to value our distinctiveness today. The entire world recognizes this, even if only as a tropical fantasy” (Howes & Osorio, 2010, p. 7). This sense of exceptionalism, also captured in the words of an often-sighted bumper sticker “This ain’t da mainland,” could be lost if proper care is not afforded natural and cultural environments. While UHM recognizes a special responsibility and obligation to do more to meet the needs of the people of Hawai‘i, such responsibility is as much local as it is global in today’s technologically connected societies. Assuming responsibility implies taking leadership, and institutions of higher education exemplify a commitment to leadership and innovation by embracing the processes toward developing a sustainable future.

The UHM 2011-2015 Strategic Plan identifies sustainability and technology as two of five values that guide university decision-making: “Our unique location has required Manoa to prioritize environmental, cultural and economic sustainability so we can become an international leader in this area” (University of Hawai‘i at Manoa, 2011, p. 5). Among the unique challenges created by the geographic isolation of being thousands of miles from any continent are that the State of Hawai‘i imports 90% of its energy needs, urbanization reduces the amount of agricultural lands available to offset food imports, and habitat loss results in the islands status as “extinction capital of the planet” with nearly three quarters of native and endemic species of plants and animals on the Endangered Species List. The concepts associated with resource management based on topographic features and natural processes associated with tropical and sub-tropical island ecosystems on volcanic islands, as was done by Native Hawaiians in ahupua‘a—land divisions that generally run from mountain to sea that provided most of the needs of a community—provide organizing principles as to how contemporary societies can restore balance and avoid environmental degradation.

Smart technologies, as identified in the Strategic Plan (2011), “allow us to emerge as a stronger and more organizationally sustainable campus” and expand the
reach of UHM locally and globally. For instance, innovative resource management strategies developed and tested in Hawai‘i are applied to other places worldwide that are faced with similar competing demands of environmental conservation and economic development. Thus, at a time when the need is evident worldwide, universities provide education and training that societies and employers increasingly indicate are in demand to analyze and address environmental management issues. Therefore, sustainability is an investment not only in the campus community but also in the environmental quality of the places where we live, work, and recreate.

The required space and infrastructure to engage the campus community is already established within the SC. The branding of the place as the SC has been understated in terms of signage, although it is identified by name on the official campus map. The perspective of one student early on in the evolution of the space was that the SC is where the “hippies” hang out. Tibetan prayer flags, occasional evening drum and chanting circles, and weekend skateboarders aside, there may be more than meets the eye to the casual observer who passes through the SC on their way from one corner of campus to another. Cultivating a sense of place and campus stewardship to emphasize interdisciplinary approaches to knowledge, principles, and practices of sustainability is the greater challenge that will require the input of resources and labor to maximize its potential for civic engagement. Such is the importance of the SC as a place for “habitation” as referenced in a 2012 draft of the Manoa campus Landscape Master Plan.

Over the years, the SC has primarily functioned as a social space with occasional events held during the academic year. Sea Grant College administrators and staff along with the campus grounds manager were the primary force in establishing the SC in 2006. Those early efforts led to their redesigning an adjacent courtyard with picnic tables and landscaping and creating a quiet refuge in contrast to the busy flow of daily traffic through the SC. As no one single campus unit or student organization has sole responsibility for the SC, the situation is somewhat a tragedy of the commons except that less is made of its potential as a resource rather than the wholesale degradation of the place by a variety of users. The campus wireless Internet network includes the SC and allows students to socialize and/or study online. The neighboring Hawai‘i Institute of Geophysics that houses Sea Grant College on one side of the SC and the Environmental Center on another have served for several years as bases for faculty-student collaborations to plan, organize, and host events and activities. These partnerships were initiated by members of the Council on Sustainability and maintained by the Manoa Sustainability Corps, both of which are faculty-student groups supported by the past two Chancellor administrations respectively.

The combined assets of open space, food kiosks, outdoor seating, stage, recycling bins, edible and ornamental landscaping, as well as two adjacent lecture auditoriums, provide communal space to host day and evening events. Previous events include
film screenings and live music, open forums and vendor exhibits, and student club activities and fundraisers (Figure 2). An ongoing coalition of student clubs with academic and administrative units, particularly members of the Ecology Club, Surfrider Foundation campus chapter, Sustainable UH, Sustainable Organic Farm Training program, Cycle Manoa, and Sustainable East-West Center, with administrative support from the Manoa Sustainability Corps managed by the Vice Chancellor’s Office of Physical, Environmental, and Long Range Planning, as well as students enrolled in Environmental Studies, Interdisciplinary Studies, and Honors Program courses, has helped cultivate collaboration among students as stewards of their campus. In the past academic year, students investigated and critically analyzed current UHM initiatives in support of sustainability, as well as surveyed the campus community for perspectives on how sustainability is articulated and prioritized. These efforts have been supported with funds from undergraduate and graduate student government organizations as part of campus greening initiatives.

Whether activities take place there or not, the SC serves as an inspirational space to make considerable progress on education and awareness as far as students are concerned. Headlines and articles published in the campus newspaper over the course of 2011-2012 demonstrate partial success in the campaign to increase campus engagement. Many of the articles are written by or have content provided by participating students, thus allowing them to develop a portfolio of work that enhances their employment prospects while contributing to the university administration’s interest to cultivate a sustainability ethic among the campus community. The following newspaper article headlines provide a sample of the initiatives:

First Green Friday discourages dependency on plastic; Solar feasibility plan aims to take UHM off the grid; Students compete to reduce energy use in dorms; Ecology Club promotes change; UHM works toward sustainability; and Energy audit aims to decrease energy usage connected to student tuition. (see http://www.kaleo.org/)

The following excerpt from one article suggests a rationale for university leaders to provide such collaborative spaces on campus:

These events are targeted at students and community members to promote understanding of environmental issues and possible progressive action. By showing these films, the club hopes to broaden knowledge of environmental problems and provide incentives for attendees to consider environmentally friendly practices ... we are in charge of our future. To irresponsibly disregard the real threats and realities is to live against what our values are, especially in Hawai‘i, said Ecology Club member Keri Namimoto. (Avery, 2011)
STUDENT VISIONS FOR THE SUSTAINABILITY COURTYARD

Students active in SC-related projects are representative of the campus community as they pursue majors, minors, certificates, and/or are associated with the following departments and programs: Anthropology, Architecture, Biology, Botany, Creative Media, East-West Center, Economics, Engineering, Environmental Studies, Geography, Hawaiian Studies, Honors Program, Interdisciplinary Studies, Latin American Studies, Marine Option Program, Pacific Island Studies, Peace Studies, Philosophy, Psychology, Public Administration, Sustainable/eco Tourism, Tropical Agriculture, Women’s Studies, and Zoology. In addition to student recruits from degree programs,
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the Environmental Studies program provides a base for the Ecology Club, one of 67 university chapters supported by the Ecological Society of America’s Strategies for Ecology Education, Diversity and Sustainability (SEEDS) program. Recent activities include:

• Mentoring local high school and visiting international students,
• Securing funding for on and off-campus activities,
• Receiving scholarships to attend conferences and workshops,
• Conducting community service through paid and unpaid internships,
• Contributing volunteer hours on campus greening initiatives, and
• Providing input to campus administration on matters of mutual interest.

The collective pool of students in Environmental Studies courses and other students who are recruited through social and academic networks are actively reshaping how the SC is designed and utilized. While a wholesale radical transformation of campus is not evident at present, the trajectories for such changes are being set in motion. Diverse groups of students have enrolled in courses taught by the author in the 2010-2012 academic years and participated in projects that contribute to the research, instruction, and service missions of the Environmental Center, Environmental Studies program, and Ecology Club, as well as to support the Chancellor’s advisory group, the Manoa Sustainability Corps, and the Adopt-a-Landscape program administered by the campus grounds manager.

The courses emphasized experiential approaches to learning and leadership, and highlighted principles and practices of sustainability through active engagement with campus and off-campus partners. For example, students working independently and in small groups hosted semester-long environmental film series, contributed articles to the campus newspaper and public service announcements to the campus radio station, expanded landscaping at several campus sites, and organized Earth Week events, including energy, water, and food forums in the days leading up to a celebratory Earth Day 2012 event. Students also participated in quantitative and qualitative data collection and analysis and reported research results to campus and community partners through reports and multimedia presentations, including video, posters, and Powerpoint slides that are then posted on the Environmental Studies website (see www.hawaii.edu/envctr/evs/ecologyclub_projects.html).

A final class assignment asked student groups to rethink the SC as an optimal space for learning and campus engagement. The variety of responses, in part, provides answers to the question at the top of the chapter: What will the transformation toward a sustainable future look like at UHM? Below are several excerpts from the assignment that shed light on potential transformation of spaces on the campuses of higher education institutions in the future.
One group started with the question of how to recruit visitors to the SC and listed a number of activities and demonstration projects that highlight innovative practices and technologies, thus drawing the attention of a wider audience who would be interested in unique design and application features. These include (1) a water catchment system to irrigate landscaping, (2) a demonstration aquaponics system, and (3) composting and vermiculture systems to reduce green and food wastes generated by the campus community while providing valuable nutrient-rich compost and soil for campus landscaping.

Another group focused on event planning for the SC as a strategy to recruit visitors to the space. Their suggestions included films, poetry, art, fashion and dance exhibits, and complimentary massage therapists to raise awareness of the health and wellness aspects associated with sustainable lifestyles. Group members recognized that their involvement and cooperation is critical so that the administration pays attention and makes the kinds of changes to the built campus environment advocated by and for faculty and students.

While many of the proposed changes seek to address the “low-hanging fruits” associated with reduce, reuse, and recycle, members of one group proposed a smartphone application and associated website. They noted that despite the good intentions of sustainability supporters, one strategy to address the “degree of ignorance” among the campus community would be to effectively integrate information into the lifestyle of contemporary students who want information “on the go.”

Students recognized that miscommunication during the event planning phases result in missed opportunities to involve everyone in the process equitably. Leaders among students emerge, but the process of development can delay progress at vital junctures during the semester. This can impact effective promotion and decrease participation and attendance, let alone lose public relations opportunities. While some students consider attending meetings a distraction from their education, substantive meetings are important to stage successful events in order for organizers to stay on the same page and ensure that individual tasks are completed for the benefit of collective efforts.

Comments in course evaluations confirm that among the important learning outcomes for students is realization that learning outcomes are applicable to future projects and/or can be considered on the job training. Indeed, students routinely segue internships directly into jobs and entry into graduate schools. Among other learning outcomes, students identified peer communication and the equitable division of labor as critical skills developed through their roles as project managers.

Overall, students develop skills and experiences in events planning, fund raising, and professional and social networking and improve written and oral communication skills. With each passing semester, sustainability approaches the critical mass to
create a positive tipping point of widespread acceptance and application on campus and in the State of Hawai‘i.

LEARNING OUTCOMES AND NEXT STEPS

A primary goal for the SC is to connect students to the campus and cultivate their stewardship in the context of its location in Manoa Valley and by extension to situate campus in relation to drainage divides, mountain slopes, and coastal and nearshore environments. Within view from campus is the urban core of Honolulu that stretches from the extinct volcanic crater known as Diamond Head through Waikiki to downtown skyscrapers towering over Chinatown and continuing into the industrial waterfront that extends to the airport and Pearl Harbor. In the opposite direction are views of the valley, the upper montane forests of the Ko‘olau watersheds and a residential community of 30,000 people. All of these features are within less than ten miles from campus, and yet too many students experience their education within the four walls of a classroom.

A learning community, developed over the past several years among faculty, staff, administration, and graduate and undergraduate students, and community partners provides opportunities for mentoring and networking on projects on and off campus. An experiential learning approach allows a process that, at times, admittedly resembles “organized chaos.” The trade off of not conforming to a pre-arranged schedule is allowing students and instructors to respond to opportunities and events that present themselves over the course of the semester and academic year. For example, the start of semesters are generally spent preparing grant proposals and meeting submission deadlines to secure funds for the academic year, while simultaneously revising and updating résumés and cover letters to send to potential internship sponsors. Next may be the review of sustainability initiatives at institutions of higher education in the United States to provide examples of sustainability projects, then nominating movies for the film series, arranging permits and reservations for equipment, and signing up and scheduling volunteers for future events.

Students in the courses meet with and learn from key informants on campus to identify priorities for the campus community. Course activities and campus events expand on themes related to environmental philosophy, green politics, environmental economics, sustainable technologies, and environmental media as they relate to the Hawaiian Islands and elsewhere. Through collaboration, students connect to their campus and cultivate relationships that would have not been possible in traditional classroom settings. In addition to serving as a basis to understand campus sustainability, student-initiated projects enable them to articulate learning outcomes to peers and mentors alike that go beyond just having read a textbook.
Among recent outcomes of student efforts are:

- 30,000 lbs. of electronic waste collected at UHM Earth Day 2011;
- Sustainability Assessment Questionnaire survey conducted on campus each of the past four semesters to assess and monitor sustainability awareness;
- CFL lightbulb exchange fundraising events;
- Successful grant proposals to fund sustainability initiatives;
- Graduate-undergraduate student collaborations on data collection, input, and analysis;
- Restoration of landscaping impacted by recent construction projects with donations of native and non-native plants from local nurseries as well as installation of water catchment, vermiculture worm bins, and green waste management systems; and
- Film series and educational forums to highlight energy, water, food, and waste themes.

A comment from UHM Chancellor’s Update May 2011 brings to light the public relations windfall that can result from student efforts. “Congratulations to everyone who helped make last month’s 10th annual Earth Day Festival the largest ever on our campus and the biggest in Hawai‘i. We’re leading the way on providing information on how to maintain more sustainable lifestyles and ways of operating.”

Civic engagement for sustainability on many campuses tends to focus on the reduce, reuse, recycle mantra; reduce energy consumption and greenhouse gas emissions, reuse water for irrigation and convert green waste into composting, and recycle as much as possible. The SC as an outdoor educational space is an opportunity to further elaborate on a Hawaiian sense of place and the university as a living laboratory to highlight the more broadly developing research, instruction, and service initiatives associated with sustainability on a 21st century campus. The fact that courtyards emphasize “habitation” rather than “movement” offers a rationale for such use of campus space so as to reflect contemporary concerns (Lefebvre, 1991). Sustainability is likely a permanent item on the agendas of generations to come, and providing places on campuses for people to gather, review, discuss, and debate challenges and solutions is not only an appropriate response by institutions of higher education but one that is increasingly expected by campus communities. In summary, the SC helps cultivate a sense of belonging to and stewardship of the UHM campus.

Sustainability is readily, and rhetorically, promoted on campuses through signage and narratives, by means of projects that may start with a flash and flare out over time, and intermittent events with unpredictable turnouts that spotlight the fact that “everyday is earth day.” No matter the scale of successes and failures, Lester Brown
reminds us in *Plan B 4.0 Mobilizing to Save Civilization* (Brown, 2009, p. 266) that “saving civilization is not a spectator sport.”

**REFERENCES**


The University of Hawai‘i at Manoa Sustainability Courtyard


KEY TERMS AND DEFINITIONS

Civic Engagement: The recognition by individuals that they are members of a larger society and have responsibilities to promote and take actions to make differences in their communities.

Ecological Literacy: A way of thinking that requires the “demanding capacity to observe nature with insight, a merger of landscape and mindscape” (Orr, 1992, p. 86).

Education for Sustainability: This implies learning about links between economic development, environmental management, and sociocultural equity that contributes to healthier lifestyles for communities and the planet.

Place: Cultural geographers focus on representations of place in their natural and social contexts to understand and explain human behaviors.

Sustainable Development: Human actions that do not undermine the ability for future generations to meet their resource needs.
Cases on Higher Education Spaces:
Innovation, Collaboration, and Technology

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