PROPOSAL TO RENAME AND REDESIGN THE CENTER FOR ENVIRONMENTAL STUDIES AS THE CENTER FOR SUSTAINABILITY

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I. OVERVIEW

The Concept

Sustainability is arguably the defining challenge of the twenty-first century – a challenge with profound implications for the students, faculty, staff, and alumni of the University of Redlands and for higher education, in general. Rising interest in sustainability is already helping to re-shape the vision, mission, and programs of more than one-thousand colleges and universities, as evidenced by the rapid growth of campus initiatives inventoried by the Association for the Advancement of Sustainability in Higher Education (AASHE).¹

Sustainability is ultimately about developing and preserving opportunities in the social, economic, and ecological spheres of life. Education for sustainability requires (1) systems thinking, (2) consideration for future generations, and (3) the integration of learning about the environment, the economy, and social equity – the 3 "E"s. Fundamentally, sustainability is about our collective bequest: what we leave future generations in the way of healthy ecosystems, strong economies, great art, vibrant communities, adaptive management systems, and challenges worthy of a highly educated society.

The most promising use of sustainability concepts may be in conjunction with concepts of community. Sustainable communities do not face the widespread criticism reserved for sustainable *development*, viewed by some to be an oxymoron. Moreover, community ideas resonate deeply in the academic worlds of ecology, macroeconomics, sociology/anthropology, ethics, and many other fields. In fact, the essence of sustainability could be defined as preserving the life of community (human and nonhuman) for purposes that include happiness, physical life-support, spiritual growth, and progress toward the realization of unfulfilled human potential,

Sustainability, as a unifying philosophy that is grounded in the life of community, might just satisfy the disparate needs of people today and those who will follow. It warrants the serious risk taking that all big ideas demand of those who call themselves teachers and scholars.

The Opportunity

The University of Redlands currently lacks any coherent structure or mechanism for promoting and infusing sustainability ideas across our curriculum, campus operations,

¹ See, for example, the AASHE Bulletin's annual inventory of college and university initiatives: http://www.aashe.org/publications/sustainability-review

and outreach beyond the campus. The University also lacks a sustainability "portal" or "receptor node" for attracting financial support from prospective donors for whom action on sustainability is an emerging focus and qualifying criterion for support.

Although some might argue that the existing environmental center and undergraduate program are all that is needed to provide such functions, it is important to understand the limitations of subsuming sustainability education within an environmental mission. Sustainability is not a subset of environmental thought. Given the disciplinary focus and fragmentation of knowledge that characterizes most of higher education, concepts like sustainability, which are inherently *trans*disciplinary, or at least *inter*disciplinary, cannot be properly integrated into an academic landscape designed by microspecialists. Similarly, it should go without saying that no one department or program should "own" sustainability as an academic idea or pursuit, and that includes Environmental Studies.

Sustainability objectives require optimization across a large number of diverse academic domains, implying high levels of synthethic research and integrative understanding – a difficult challenge for academic communities comprised mostly of disciplinary scholars, each working in one of many narrow subfields. The proposed redesign of the Center for Environmental Studies into a sustainability center is premised on the understanding that environmental education is insufficient to accomplish the goals of education for sustainability and that the active participation of faculty in many other fields will be necessary to properly design, build, and lead a learning community dedicated to sustainability.

Over the past ten years, several proposals have been submitted to develop an organized and continuing sustainability effort on campus (see, especially, Apendices III, VI and VII). Some of those proposals have resulted in significant achievements, in terms of campus sustainability initiatives, but an honest appraisal would conclude that Redlands has accomplished less in the way of a recognizable sustainability campaign than most of the institutions we aspire to be like (e.g., Claremont Colleges, Occidental, Santa Clara, etc.).

The University has a very promising opportunity to enhance its visibility, intellectual excitement, operational cost-savings, and student recruitment potential by developing a center that gives greater coherence and focus to its existing sustainability initiatives and unmet future needs. Student interest in sustainability offerings remains high and faculty support, although hampered by a perceived lack of progress in earlier efforts to mobilize, retains strong commitment from dozens of individuals. Moreover, the timing for launch is favorable due to the parallel development of the Redlands Sustainability Network (RSN) – an off-campus community-based initiative supported by members of the City council, faculty and students from the University (four faculty members and a former student currently serve on the RSN steering committee), and a diverse range of local organizations and residents who seek to connect sustainability ideas to everything from historical preservation to community energy planning. In this instance, the sustainable communities emphasis proposed for the Center would fit nicely with emerging city and regional initiatives of mutual interest and benefit.

Overview of the Proposal

What is proposed here involves more than a name change; it is principally about a change in vision and mission. While the Center for Environmental Studies was conceived largely as a reporting and coordinating mechanism for environmentally-related initiatives in research and GIS (see "Background" section), the proposed redesign of the Center is fundamentally about facilitation of a unifying concept, sustainable communities, across diverse fields of teaching and scholarly production. It is about the integration of social, economic, and environmental realms of learning, and the strategic inter-connection of ideas and practical applications drawn from almost every department and program at the University. As such, it would no longer be aligned exclusively with environmental teaching, research, and spatial analysis. Instead, it would treat sustainability as a primary concept transcending environmental concerns (see information box to the right).

Proposed Draft VISION statement:

To serve as a regional catalyst for exploring the promise and limitations of sustainability through integrated teaching, research, community collaboration, and service.

Proposed Draft MISSION statement:

To create learning communities that provide personalized education about sustainability ideas, practices, and lifestyles, using the campus community and off-campus partners to build capacity for integrating social, economic, and environmental knowledge and intergenerational ethics.

Why Sustainability Can't Be "Owned"

Sustainability is a synergistic concept: the whole is much more than the sum of the parts. Although it is widely assumed and argued that environmental sustainability is the first and prime imperative of sustainability, scholars have begun to turn this logic on its head (e.g., Agyeman 2003). They note, invoking a very common argument, that people living in absolute poverty or in deeply oppressive societies are seldom in a position to put environmental needs first. Basic food, justice, and other human needs must be met before environmental concerns can emerge. This notion of nested imperatives has helped propel efforts to define sustainability as a primary concept - one that cannot be reduced to separate core components. Sustainability as a concept and practice transcends environmental applications. Strictly speaking, there is no such thing as environmental sustainability; only sustainability -- an irreducible synergy of social justice, ecological integrity, and economic vitality, applied across present and future generations. Although the health of our ecological life support system is logically prior to and dominant among sustainability imperatives, maintaining the health of ecosystems on a human-dominated planet requires achievements in social health and economic vitality that are imperatives in their own right, and not just for environmental protection. While securing the life support system seems a logical first priority, creating a healthy economy and social system in the short term may be a logical prerequisite for addressing that long-term fact. Efforts to avoid infinite regress in such arguments are futile. Hence, sustainability as a primary concept cannot be coherently reduced to its environmental, social, and economic components. It is the synergy of all three that constitutes the essence of the concept.

The Center will assist faculty, students, and interested members of the community in examining sustainability as a subject of interdisciplinary learning and research. It will create opportunities for students to engage in sustainability thought and practice as a sphere of socially important learning and action by helping them connect with relevant courses, workshops, studios/clinics, internships, service learning, film and lecture series, assistance with capstone topics, travel courses, and study abroad.

The Center will foster innovative teaching and research about sustainability, and will help to link on-campus activities with off-campus institutions and community partners. Through its explicit

recognition of sustainability as an integrative concept connecting environmental integrity, economic vitality, and social welfare, the Center will directly support inclusive learning communities that encourage their members to reach across conventional academic boundaries, embracing the sciences, social sciences, arts and humanities as equally valued and legitimate partners in education for sustainability.

The proposed transformation of the Center for Environmental Studies into a Center for Sustainability will neither establish nor significantly alter the structure or educational function of any other existing academic department or program. It is **not** the aim or desire of the Center for Sustainability to push new course content and approaches on established programs and departments but merely to provide resources and rationales for faculty and students within those units who wish to incorporate sustainability concepts, cases, and approaches within their professional or private lives.

With regard to new initiatives and programs, the Center will proceed with caution to avoid overcommitment and overexpansion driven by the enormous variety of problems and opportunities that are popularly deemed to be sustainability issues. Instead, the Center will focus selectively on a small number of key challenges and objectives, leaving the question of new course development to future deliberations about curriculum reform and the potential need for a minor in sustainability. Students have proposed such a minor on several occasions, some as formal and extensive written proposals (see Appendix III).

Among the many programs, projects, and services that could be provided by the Center, at least five areas of categorical emphasis will be explored for future strategic development:

- 1. **Campus Sustainability Initiatives**: energy, water, and purchasing decisions needed to operate and maintain the campus environment;
- Sustainability Across the Curriculum: workshops, films, and publications to facilitate development of sustainability teaching/learning modules within existing courses, and to encourage creation of new courses, perhaps leading to eventual establishment of a minor in sustainability;
- 3. Sustainable Community Development: Partnerships with the Redlands Sustainability Network and elsewhere, especially within the Inland Empire, designed to enhance community service, service learning, and town/gown relations;
- 4. Sustainability Certificate Programs: potential development of short-course programs and certificates with the School of Continuing Studies; and
- 5. Sustainability Liaison Function: improve opportunities for students, faculty, and staff to coordinate activities on campus that involve sustainability objectives (e.g., the Spatial Learning initiative) and to connect with major off-campus sustainability organizations, such as the new Redlands Sustainability Network, and key national organizations, such as AASHE, the American College and University Presidents Climate Commitment (ACUPCC), the Association for Environmental Studies and Sciences (AESS), Sustainable Communities/CONCERN, the National Council for Science and Environment (NCSE), and many others.

Budget Implications

While modest budgetary support would be welcome and appropriate at an annual level of at least \$25,000, the success of this proposal is not predicated on significant funding, especially in the first year or two. It should be noted that the Center for Environmental Studies has operated without a budget of its own, including during its first six years of operation, when it was providing an oversight and integrated planning function for its three semi-autonomous program

components (Environmental Studies, MS GIS Program, Redlands Institute). The only immediate budget need for the Center would be placement on the University's capital campaign priority list.

II. BACKGROUND HISTORY

The Center for Environmental Studies was established eleven years ago, as part of a series of University initiatives to (1) improve and expand undergraduate offerings in Environmental Studies, (2) develop and house a masters program in GIS, and (3) develop and house the Redlands Institute, which took root from the federally-funded Salton Sea Project, initially organized as the Center for Environmental Management, under the leadership of Tim Krantz.

It was anticipated at the creation of the Center that the GIS program and the Institute would eventually outgrow the Center's operations, which were administratively tied to the environmentally-focused Hedco Chair position. The need and desire for an independent MS GIS program and an Institute that was campus-wide in scope evolved quickly under the leadership of Karen Kemp, then director of MS GIS, and Jordan Henk, the third director of the Institute. By 2005, in the case of MS GIS, and by 2007, in the case of the Institute, there was no longer a need for oversight by the Center for Environmental Studies. Moreover, it was important for reasons of branding and identity that both the GIS program and the Institute market their services without the boundary constraints implied by an "environmental" umbrella.

For the past few years, the Center for Environmental Studies has existed merely as a unit on paper, without any budget, and without active programs beyond serving as a liaison function and "bridge" for students and faculty to off-campus environmental organizations and professional associations. It should be noted that the Center for Environmental Studies has always operated without a budget of its own. It has relied, instead, on the Hedco Chair line as its sole indirect source of funding. During its first six years of operation, the Center merely provided a reporting line and integrated planning function for its three program components (EVST, MS GIS, RI), each of which had its own budget line.

III. PLANNED OUTCOMES FOR THE NEW CENTER

Unlike the Center for Environmental Studies -- or for that matter a conventional institute, program, or consortium -- the Center for Sustainability will truly serve as a University "center." If broadly desired, the Center will provide a clearinghouse function for all University students and employees wanting to know more about sustainability knowledge, tools, and practices that may be pertinent to their studies, jobs, or home-life.

The projects and programs of initial interest fall into two categories: (1) faculty development workshops and (2) enhancement of initiatives already undertaken by the University or previously proposed and found promising, but not yet implemented. Major examples of the latter group include the University's strategic plan commitment to sustainable communities, its continuing status as an institutional member of AASHE, its green building commitment (LEEDS silver or better), its climate commitment (ACUPCC), and its interest in developing a center for spatial studies that in many cases will serve to promote the goals of sustainability (see, below, for detailed descriptions).

Additional opportunities to collaborate and support existing institutes and centers abound. In addition to the aforementioned spatial emphasis, these include potential collaborations with the

Banta Center for Ethics, Community Service programs, the Center for Educational Justice, the Campus Diversity and Inclusion office, the Womens Center, and many others.

Faculty Development Workshops

The emphasis on faculty development workshops is premised on the belief that commitment to sustainability education needs to be led by the faculty. Demand may be generated primarily by students or staff interested in applying sustainability lessons in their work, but the responsibility for intellectual leadership and program direction needs to rest primarily with interested faculty members. Workshops that invite faculty to examine and discuss sustainability concepts and pedagogies in novel ways will help the Center identify and serve its core constituency, while encouraging faculty who wish to be involved to take an active role in shaping the future of the Center.

It is probably true that most faculty do not want to be "developed" by any other entity. Hence, the Center will avoid conventional approaches to "teaching teachers" and recruiting converts. Instead, a variety of proven workshop designs and programs will be offered at Redlands, based on experience with dozens of previous faculty workshops about education for sustainability undertaken at other campuses. Possibilities include a two-day summer workshop (ideally supported by a small stipend, food, and drink for approximately 10-15 participants) that would include a series of group exercises, short films, discussions, and critical perspectives drawn from summer reading assignments. Exercises might include (1) group drawings of sustainability concepts as a visualization exercise, (2) "backwards" course design for the purpose of revising an existing course to incorporate more ideas and dilemmas related to sustainability issues, (3) integrative thinking exercises, based on important insights made possible by the fusion of art and science, (4) spatial decision-support systems designed for improving sustainability performance, along with followup skills-based workshops (5) "bird-of-a-feather" breakouts for larger groups, along with discipline-specific activities, and (6) short field trips focusing on "people, place, and pedagogy."

It should be noted that the University's extensive and continuing effort to develop a cross-campus spatial literacy program and LENS fellowship should provide valuable on-campus experience that is applicable to many of the aims of workshops for sustainability. If anything, student and faculty demand for sustainability content and applications should be considerably larger and more diverse than what has been achieved in the various campus GIS initiatives over the past 12 years. For that reason, there is very little risk that interest in sustainability will prove to be too limited to justify future workshops, or for that matter a new center of this type. The problem may be more one of managing expectations and limiting activities to modest levels that a small center can properly manage.

Coordination Support for Existing and Emerging Sustainability Initiatives

The University has many sustainability initiatives underway that lack visibility and effective coordination because there is no one entity with a mission to promote and relate them one to another. An important outcome of a redesigned and revitalized Center is to provide that coordination and visibility.

Among the initiatives that the Center could offer to monitor, evaluate, and communicate would be a small group of potentially high-value University commitments and programs.

University of Redlands Climate Commitment

Former president Stuart Dorsey formally signed the American College and University Presidents' Climate Commitment (ACUPCC) in 2006, setting the

University on a course to reduce its carbon footprint. The ACUPCC currently has 674 college and university members, representing approximately one-third of the students served by higher education. The goal of the ACUPCC is to provide a "framework and support for America's colleges and universities to go climate neutral." The Center for Sustainability could serve as the University's liaison to the ACUPCC, providing reporting services and promoting measures to make reductions in greenhouse gas emissions, thereby helping the University to meet its commitment.

Sustainability Across the Curriculum

The CAS faculty's current efforts to improve the undergraduate curriculum is a good example of efforts underway that may benefit from discussion about the potential role of sustainability as a unifying philosophy for guiding higher education in the future. Although many Redlands faculty may question the need for and legitimacy of such a unifying philosophy, it could be very helpful and educational to have an informed discussion about the idea, including the rationales developed by many of the nation's leading colleges and universities that have already embraced sustainability as a driving force.

In addition to providing faculty development workshops and curricular materials for use by students and faculty, the Center will provide a forum for exploration and discussion of the role of sustainability ideas in the University's strategic planning and curriculum development. The goal is not to replace or displace other philosophies of education and reform, but to insure that sustainability ideas receive consideration in planning and development. The Center seeks to provide resources for infusing sustainability concepts and practices into the courses and learning opportunities offered by the University, but it must recognize the legitimacy of other priorities and approaches to curriculum development.

Minor in Sustainability

For at least the past five years, informal proposals have been made on several occasions for a new undergraduate minor to provide the kind of integrative learning that education for sustainability fosters. Additional and possibly related minors, such as a GIS minor, have also been proposed during this period. Those interested in developing a sustainability minor have included both current and former students, and a number of faculty members, but no formal surveys or canvassing have been done to measure the potential degree of interest.

Student interest has taken several forms, including several capstone papers focused on campus sustainability and a formal proposal for a minor in 2011 by Andrew Green, which is included as Appendix III. Given that the breadth and depth of support for such a minor has yet to be firmly established, the Center will undertake or help coordinate an assessment of campus interest and support for such an idea. It should be emphasized that the Center's objective is not to create such a program, but rather to determine whether sufficient need and support exist to convene a larger discussion about its desirability among the faculty and interested students.

Redlands Sustainability Network (RSN) Project

The Center will offer its assistance to the City of Redlands and its citizen-led sustainability group (RSN) for purposes of providing professional analysis and

advice, student internships, occasional design studios, senior capstone research projects, and shared public learning events. Opportunities for community service and service learning projects will be explored.

Sustainable Landscape and Local Food Project

The Center will assist the University in assembling data and GIS maps to assist in the sustainable planning, planting, and maintenance of campus trees, gardens, and ground cover. Part of this effort will focus on community gardening and education for students, staff, and faculty about the importance of soil and plants in the everyday lives of people, as well as techniques for growing some of their own food.

Sustainability-through-Diversity Project

In order to tie the Center firmly to the University's ongoing activities in areas of diversity and social justice, the Center will develop outreach efforts and linkages to existing programs offered by the Office of Campus Diversity and Inclusion. A major desired outcome is the braided learning that can be achieved by encouraging diversity, inclusion, and the study of social ethics to be accepted as major and legitimate streams of thought in the development of sustainable communities.

"Turning Redlands Green" Project

Initiatives to reduce, reuse, recycle, restore, redesign, and reconceptualize materials and energy use on campus will be promoted by the Center, in concert with existing programs and student initiatives, such as those by Students for Environmental Action.

Video Learning Modules

Included in the Center's resources will be short video modules about sustainability that will be produced for educational use and made available on campus and on sites such as YouTube. The Center will work with the Redlands Institute and Blue Planet Films² to produce educational films of typically 3-10 minute duration, designed to examine specific sustainability challenges and make freely available the resulting videos as classroom support aides for education, here and elsewhere.

IV. ADMINISTRATIVE STRUCTURE

The Center will be housed administratively under the day-to-day direction of a faculty member appointed by the Vice President for Academic Affairs. An advisory board or steering committee broadly representative of the University's teaching, research, and administrative units will guide major decisions and strategic directions. The Center will serve as the focal point for sustainability activities across departments, programs, and schools at the University. It will usually operate informally, supported by a loose coalition of "friends of the Center" – support groups of students, faculty, alums, members of the staff, members of surrounding communities, and various organizational partners.

² Blue Planet United is a nonprofit educational organization that produces films and print publications on sustainability themes. The president of Blue Planet United is Monty Hempel, a Redlands faculty member.

Plan for Advisory Board:

The Center's advisory board will be expected to meet at least once each semester of the academic year. Membership will be drawn from University-wide faculty, staff, and students who are interested in sustainability and possess academic backgrounds that are broadly representative of the sciences, social sciences, arts and humanities. The advisory board should consist of 7-15 members, including the Center director. A preliminary plan for membership might include a stratified structure for recruitment of advisory members, such as that illustrated by the following example:

- EVST/Bio/SCI Center/GIS (2 members)
- Econ/Gov/Public Policy/Sociology/Anthro/Psych/ (2 members)
- SOE/SOB/Continuing Studies (2 members)
- History/Philos/Art/English/Film Studies/Religion (2 members)
- Facilities/Business Office/Library/Other (2 staff members)
- Students (2 members)

As the Center develops, it may become desirable to institute more formal administrative structures, along with an external group of senior advisors, appointed from prominent private, public, and nonprofit organizations with recognized track records in sustainability. Ideally, the University would develop a timeline for hiring a campus sustainability coordinator, housed in the Center, reporting to the director, and guided by the Center's steering committee.

Campus Sustainability Coordinator

The University would benefit greatly from having a staff position for a campus sustainability coordinator, ideally filled by a full-time professional, but perhaps initially filled by students (10 hours/week) or by a recent graduate. Such a position was first proposed in 2004 and proposed again, more formally, in February 2006.

As stated in the 2006 proposal, the coordinator would be expected to create collaboration between students, faculty, staff and off-campus communities for the purpose of raising awareness about sustainability issues, channeling related student interest and energy in constructive directions, and promoting sustainability concepts and practices in the operation and design of academic programs, campus facilities, and community outreach activities. Specific objectives would include initiatives to improve energy efficiency and conservation, minimize waste and enhance recycling, conserve water, reduce carbon emissions, promote green purchasing wherever cost effective, expand use of sustainability principles in facilities management and building design (both retrofit and new construction), educate the attentive public, both on and off campus, and monitor progress toward sustainability goals on a periodic basis. In one version of the position, the coordinator would work closely with students and faculty in developing teachable moments and learning opportunities. A more conventional version of the position would have the coordinator focusing more on campus operations and facilities, perhaps monitoring campus performance using the AASHE STARS system or preparing an annual "state of the campus" report that summarizes all significant social, environmental, and financial benefits achieved and costs incurred for sustainability programs.

Working closely with the Business Office and facilities managers, the coordinator would be expected to devote time to both student services and campus operations. Occasional teaching duties may be desirable, although the exact nature of the instruction might vary, depending on qualifications, from one-day workshops to a regular semester-long or May Term courses. The coordinator would be responsible for helping to develop and manage campus sustainability initiatives, including preparation of grant proposals to obtain additional funding for program activities. She or he could report to the director of the Center or, perhaps, Facilities or the Business Office. Ideally, office quarters could be provided in Lewis Hall.

V. CONCLUDING THOUGHTS

Whether viewed as a universal truth about intergenerational justice and interspecies harmony or as a half-baked attempt to make a virtue out of mere endurance, the idea of sustainability has successfully invaded the rhetoric, if not the substance, of education and public debate. It has become a familiar concept in almost every human endeavor that involves the interaction of social, economic, and environmental systems. The question facing leaders in higher education is whether our institutions will make the commitment that is necessary to move beyond the rhetoric and actually infuse the meaning of sustainability into our teaching, research, and service.

Education for sustainability focuses on the implications and consequences of our decisions and lifestyles for quality of life and for achieving social and intergenerational equity. It explores the profound connections between present and future; between human and non-human; between wealth and poverty; between individual autonomy and community interdependence; between learning and action...and justice. The community of life that it celebrates is intimately connected with life-support systems — ecosystem services and social safety nets — that allow us to secure a meaningful sense of community across generations. What could be more central to higher education than that?

APPENDICES

Appendix I TRENDS in SUSTAINABILITY and HIGHER EDUCATION

Appendix II "THE SUSTAINABILITY TEST"

Appendix III Proposal for a Minor in Sustainability at Redlands (2011)

Appendix IV CASE STUDY: The Oberlin Sustainability Project

Appendix V INTEGRATING SUSTAINABILITY INTO COLLEGE & UNIVERSITY CURRICULA

Appendix VI University of Redlands Campus Sustainability Initiatives 2002-2007

Appendix VII Turning Redlands Green: A Proposal for a Campus Sustainability Initiative at the University of Redlands (2006)