

Convocation Speech 2008
Dr. Jonathan Lyon
Associate Professor of Biology
Merrimack College

The Greening of Merrimack: Sustainability, Liberal Education and Innovation

Thank you for this opportunity to speak to you all on this Convocation Day 2008.

On any given day, it's hard not to hear or read the words 'green' or 'eco-friendly' or 'fair trade'. Zealous marketers have made sure these terms are part of our consumer culture. But what does it mean that we use green toothpaste or take an eco-friendly vacation or purchase fair trade chocolate. Behind all this 'commercial greenness' in our consumer culture is a much deeper and more poignant worldview - the green movement, a movement with a rich political, social, ethical, economic and ecological history. When I speak of the greening of Merrimack, it is the latter to which I refer. The sustainability movement that has emerged in higher education in recent years is rooted in this deeper green tradition and has caught fire in academia.

So what does it mean to be green and sustainable? At its core, the sustainability movement is about re-thinking and more importantly re-structuring how we humans interact with each and every natural system on the earth. The sustainability movement recognizes that humanity and the planet on which we all ultimately depend, face many profound and immediate challenges including: global climate change; population growth; poverty; north-south disparities; HIV/AIDS; social and economic injustice; economic globalization; environmental degradation; and non-sustainable economic growth. A 2002 study published by the *National Academy of Sciences* concluded that humanity's collective demands surpassed the earth's natural regenerative capacity in 1980. That means we are now operating beyond the earth's sustainable yield capacity. The green and sustainability movements are not about skirting these issues, but rather confronting them head-on and working to find viable solutions. The sustainability movement: is about making the often *invisible* social, economic, health and environmental impacts of economic development and resource use *visible*. It is also a deeply rooted ethical movement based on the belief that humans have a profound responsibility to be stewards of the earth's resources. In short, it is a movement based on four principles:

- ∞ Maintaining the health of all current and future humans and other species;
- ∞ Supporting the fairness, equity, stability and security of human cultures and social systems;
- ∞ Providing economic opportunity for current and future generations; and
- ∞ Maintaining ecological diversity and integrity.

It is not against economic development, it is about ensuring that development is sustainable in social, environmental and economic terms – the so-called triple bottom

line. To underscore the breadth of the sustainability movement, the United Nations has declared this the *Decade of Education for Sustainable Development*.

So why the surge in interest in sustainability on College campuses?

Sustainability has caught fire on campuses in large part because people and societies around the globe, including students in the US, are having to deal with the ramifications of a carbon-based economy, soaring energy costs, global climate change, the degradation of natural resources and a relentless non-sustainable global economic machine that has a profound disconnect with the sustainability of social and environmental systems. Students, faculty, staff and administrators are exploring new paradigms and new sustainable systems that fundamentally change our relationship with the natural world and lessen our impacts. However, adopting sustainability has not necessarily followed a smooth path for Colleges and Universities.

David Orr in his essay *Environmental Literacy: Education as if the Earth Mattered*, noted that institutions of higher education “must challenge the hubris buried in the *hidden* curriculum which assumes that human domination of nature is good, that the growth economy is natural, that all knowledge, regardless of its consequences, is equally valuable, and that material progress is our right. Because we hold these beliefs, we suffer a kind of... anemia that renders us unable to resist the seductions of technology, convenience, and short-term gain.”

There were and are powerful forces and mythologies that need to be overcome to implement the principles of sustainability in the many facets of a College's operations. Stan Rowe, in his book *In Home Place: Essays on Ecology* notes that in past decades the university has “shaped itself to an industrial ideal—the knowledge factory. ...it is overloaded and top-heavy with expertness and information. It has become a **know-how** institution when it ought to be a **know-why** institution. Its goal should be deliverance from the crushing weight of unevaluated facts, from bare-bones cognition or ignorant knowledge: knowing in fragment, knowing without direction, knowing without commitment.”

A focus on **know-why** is at the heart of the sustainability movement in academia today.

In the past two decades, some of the most effective catalysts for wholesale academic and institutional transformation have been small groups of motivated students. Students have demanded that their campuses not only embrace sustainable practices, but that they become models for the rest of society: models for education and curriculum, resource conservation, energy efficient technologies, waste stream reductions, recycling, composting, socially responsible procurement, green construction and renovation, alternative transportation, alternative energy infrastructure, and socially responsible endowments and campus contracts. During these transformations, many institutions of higher learning have also become very aware of the positive and practical financial benefits of many sustainable practices, namely significant long-term cost savings. But the sustainability movement is much more than cost savings for budget line items.

As an Augustinian institution, one of our stated values is that: “the contemplation and reflection encouraged by the intellectual life inspire an ethical sensibility as well as a prophetic critique of social structures in light of justice and peace.” This clearly intertwines with the key values underlying the sustainability movement and challenges us all to re-think how we engage with the concentric rings of community with which we interact; rings that extend locally, regionally, nationally and globally.

Pursuing sustainability requires the individual and/or the institution to look beyond itself and examine the impacts of what and how it procures, consumes, disposes of and invests in. Pursuing sustainability demands a new engagement with the community; an engagement that compels us to contribute to sustainable regional planning, investigate new models for the work place and promote sustainable community development and environmental health. Pursuing sustainability calls for working in partnership with community-based groups, not-for-profit groups, corporations, hospitals, social service providers, local, state and federal governments and K-12 schools to address the pressing needs in those communities that surround us. Needs that include economic disparities, public health concerns, poverty, housing issues, transportation problems, suburban sprawl and environmental degradation. Sustainability is about action and possibility and searching for new solutions. This is why Colleges are embracing sustainability, to address the immediate and pressing challenges of this new century here and now and prepare a new generation of graduates for the unique challenges of this time.

A recent editorial in *Sustainability: the Journal of Record* Monty Hempel noted that “any institution that is dedicated to innovative ideas and the preparation of future leaders will need to consider sustainability as a core component of its mission and strategic plan.” This is exactly what a growing number of Colleges and Universities have done and are doing. As Lester Brown of the *Earth Policy Institute* likes to say, “saving human civilization is not a spectator sport”.

What about the linkages between sustainability and liberal education?

In order for sustainability to take root, institutions of higher learning need to avoid succumbing to the pressure to solely prepare students for employment in the labor force and to give them opportunities for upward mobility in the existing non-sustainable world. Knowing how is not enough, knowing why and re-thinking how is one of the goals of a liberal education. I am defining liberal education here after the *Association of American Colleges and Universities*, as ‘a philosophy of education that empowers individuals with broad knowledge and transferable skills, and a strong sense of value, ethics and civic engagement.’ This is in contrast to pure practical or know-how learning and training taught in myopic isolation. E. F. Schumacher in his book *Small is Beautiful* noted that “education which fails to clarify our central convictions is mere training or indulgence” and unless corrected “Education, far from ranking as [our] greatest resource, will then be an agent of destruction.” Higher education needs to be part of the sustainability solution and not contribute to the problem or be a standard bearer of the status quo; liberal education is not an extravagance, it is an absolute necessity.

What about the linkage between sustainability and innovation?

If institutions of higher learning adopt sustainability, it is typically individuals and small groups, formal and informal, driving innovative change. Change can be initiated from almost any position and involve initiatives from students, staff, administrators, faculty, trustees, presidents, alumni or any combination of the above. Sustainability innovations have often been the result of, in the words of Bartlett and Chase in their book *Sustainability on Campus*, “the messy reality of participatory engagement in cultural transformation.” It is certainly an opportunity for all motivated voices to be heard.

There is no prescription for Merrimack to become a sustainable or a green campus. For a greening to succeed, it will require both dedicated individuals and an institution-wide commitment and resolve. To succeed, our green transformation will have to be supported by our mission and identity. If such a resolve is in place, then innovation can flourish and with it a freedom to explore, to experiment, to innovate, to fail spectacularly, to succeed spectacularly, to learn by doing. A mission embracing sustainability has the power to restore our sense of community, foster a new era of interdisciplinary investigation and facilitate linkages across the divides now present between divisions, faculty, administrators, staff, trustees, alumni and the community.

Sustainability is not simply thinking outside the box, it is living outside the box, and to carry the metaphor further, it is to redesign the box itself. Concerned students, staff, administrators, alumni and faculty, this is our time to act, our time to make change, our time to be heard. We have a unique opportunity to embrace sustainability as individuals at Merrimack and as an institution – who will, and how will we respond to the challenge? We need to become the change we want to see, the change we are morally obligated to bring about. Like the battles for civil rights, women’s rights, gay, lesbian, bisexual and transgender rights, the pursuit of sustainability and social, economic and environmental justice, is simply the right thing to do – whether we succeed or not.

I often think about what Merrimack will look like when I retire. I imagine a campus that recycles everything; that procures goods and services only from companies with a commitment to sustainable principles; that generates its own electricity; a campus with a net zero emission of carbon dioxide; with new and renovated green and sustainably designed buildings; a campus with a new Urban Institute with a litany of successes and 100s of student interns working with community partners; a campus with 200 environmental studies/sustainability majors and 100 minors; a campus that is a green resource for the Merrimack Valley; a campus with a \$400 million endowment invested in socially and environmentally responsible businesses. Imagine. Imagine and act, join the good fight, and keep your eyes and ears open for opportunities to engage in sustainability work on campus in the coming weeks.

To quote Margaret Mead: “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”

Thank you I wish you all a dynamic, rich and transforming academic year.