

HIGHER EDUCATION'S TRUE ROLE

Creating a Healthy, Just, Secure, and Sustainable Society



CASE STUDY FOREWORD *by* Anthony D. Cortese, Sc.D

INTRODUCTION

Higher education has been granted tax-free status, the ability to receive public and private funds, and academic freedom, in exchange for educating students and producing the knowledge that will result in a thriving civil society. It prepares most of the professionals who develop, lead, manage, teach, work in, and influence society's institutions, including the most basic foundation of K-12 education. College and university campuses are microcosms of the rest of society—they are like mini cities and communities that mirror society. Society looks to higher education to anticipate future challenges, develop innovative solutions, and model the action and behavior that society must take in order to continue to evolve. In this edited volume, Bill Timpson and Debra K. Holman have invited a diverse collection of university students from a graduate education class to contribute original case studies, so that students at all levels of schooling, as well as other audiences, can join in discussions about the challenges of sustainability and what may be constructive ways forward.

HUMANITY & HIGHER EDUCATION AT A CROSSROADS

Higher education now has a challenge bigger than any other it has ever faced, because humanity is at a crossroads without historical precedent. Because of the extraordinary and exponential growth of population and of the technological/economic system, humans have become the pervasive and dominant force in the health and well being of the earth and its inhabitants. We have become a planetary force comparable to the ice ages and asteroids. While the earth's population has grown from 1 billion to 6.7 billion in the last two centuries, energy consumption has risen 80 times and economic output has risen 68 times. Most of that has occurred in the last half century. According to all major national and international scientific assessments, all living systems (oceans, fisheries, forests, grasslands, soils, coral reefs, wetlands) are in long-term decline, and are declining at an accelerating rate. At the same time, we are not succeeding in many health and social goals: 3.2 billion people are without sanitation and earn less than \$2.50 per day; over a billion have no access to clean drinking water. We have a worldwide economic recession and international conflicts and wars over resources such as oil and water that are destabilizing world society. This is happening with 25% of the world's population consuming 70-80% of the world's resources. That is without China and India appropriately raising the quality of life for the majority of their 2.5 billion people.

And the challenge that will accelerate all the negative trends is human induced global warming, primarily from the burning of fossil fuels that is now destabilizing the earth's climate and most of its other life-supporting systems. Despite what we may read or hear in the U.S. media, human in-

duced climate disruption is real and is already affecting us: it is worse and happening faster than predicted by the most conservative scientists just a few years ago in 2007. As with many other negative impacts of modern civilization, the burden will fall hardest on native peoples, people of lower income, and people of color.

The crucial question for all of humanity is: how will we ensure that all current and future humans will have their basic needs met, will live in thriving, secure communities, will have economic opportunity in a world that will have 9 billion people, and that plans to increase economic output 4-5 times by 2050, on a planet whose capacity to support life is more precarious every day? This is the biggest intellectual, technical, social, and moral challenge that humanity has ever faced. Clearly, we need our colleges and universities as active partners in the search for answers, and case study development allows for contributions to our curricula from a broad and diverse base of students, teachers, and others.

A CHANGE IN MINDSET

How did we get here? The cultural operating instructions of modern society are that if we just work a little harder and smarter and let the market forces run society, all these challenges will work themselves out. We are dominated by linear short-term thinking and view increasing consumption as the principal measure of success, despite increasing negative health, social, and environmental effects. We need a transformative shift in the way we think and act. As Einstein said, “We can’t solve today’s problems at the same level of thinking at which they were created.” We currently view the array of health, economic, energy, political, security, social justice, environmental, and other societal issues we have as separate, competing, and hierarchical, when they are really systemic and interdependent. We have a de facto systems design failure. The twenty-first century challenges must be addressed in a systemic, integrated, and holistic fashion with an emphasis on creating new and more desirable ways of helping society succeed, e.g., local, sustainable food production that provides healthy food, local jobs, and protects soils and water supplies. It is also a greater motivator for individual and institutional change. Because they are inherently interdisciplinary, even trans-disciplinary, case study development encourages this systemic, integrated, and holistic thinking.

Unfortunately, the current higher education system is reinforcing the current unhealthy, inequitable, and unsustainable path that society is pursuing. This is not intentional—it is because of deeply held beliefs that humans are the dominant species and separate from the rest of nature, the predominance of disciplinary learning, and an implicit assumption that the earth will be the gift that keeps on giving—providing resources and converting our wastes into useful substances—ad infinitum and irrespective of the size of the population or the level of its material desire. As David Orr (Oberlin professor, well-respected environmental educator, and author) has said—“It is not a problem in education, it is a problem of education.”

HOPE & POSSIBILITY

How can we create a healthy, just, secure, and sustainable society? We need to redesign the human economy to emulate nature—operating on renewable energy, creating a circular production economy in which the concept of “waste” is eliminated because all waste products are raw materials or nutrients for the industrial economy, and managing human activities in a way that uses natural resources only at the rate at which they can self-regenerate—the ideas embodied in sustainable forestry, fishing, and agriculture. A growing consensus of business, government, labor, and other leaders believe that a clean, green economy based on these principles is the only

way to restore American economic leadership, create millions of jobs, and help solve global health and environmental problems. These principles are key to insuring that communities are strong, secure, and vibrant, and they must be accompanied by collaboration and participation in governance, and emphasis on the quality of life over the consumption of stuff.

Consider these ideas as the design principles of a healthy, just, and sustainable society—principles based on a human consciousness in which we apply the Golden Rule to our dealings with all current and unborn humans, as well with the rest of life that evolved on earth. To work, these principles must become the basis for society's economic and governance framework. The case studies in this volume can represent one way forward toward a new curricula, one that is grounded in the compelling issues of the day, engaging and meaningful, yet respectful of inherent complexities that call for more than rote memorization of simple explanations or formulas.

HIGHER EDUCATION'S ROLE & RESPONSE

What if higher education were to take a leadership role in helping to make this a reality? A college or university would operate as a fully integrated community that models social, economic, and biological sustainability itself and in its interdependence with the local, regional, and global community. The context of learning would make the human/environment interdependence, values, and ethics a seamless and central part of teaching of all the disciplines. The content of learning would reflect interdisciplinary systems thinking, dynamics, and analysis for all majors and disciplines with the same lateral rigor across, as the vertical rigor within, the disciplines. The process of education would emphasize active, experiential, inquiry-based learning and real-world problem solving on the campus and in the larger community. Higher education would practice sustainability in operations, planning, facility design, purchasing, and investments connected with the formal curriculum. Higher education would form partnerships with local and regional communities, to help make them sustainable, as an integral part of higher education's mission and the student experience.

Fortunately, there has been exponential growth in the environmental dimension of sustainability in all the above areas of higher education activities across over one thousand institutions in the last decade. It is one of the most encouraging trends in higher education innovation since World War II. Unfortunately, higher education is doing a poor job on the health, social, and economic dimensions of sustainability. The overwhelming majority of graduates know little about the importance of sustainability or how to lead their personal and professional lives aligned with sustainability principles. With a focus on case study development, the efforts by our colleges and universities to become more sustainable can become part of the curriculum and a focus for student analysis and inquiry.

TWO NEW BEACONS OF SYSTEMIC CHANGE

One of the brightest beacons of light for this systemic change in the U.S. is the American College and University Presidents' Climate Commitment (ACUPCC), launched in February of 2007 by twelve college and university presidents, working with Second Nature, the Association for the Advancement of Sustainability in Higher Education (AASHE), and ecoAmerica. It is a high-visibility, joint and individual commitment to measure, reduce, and eventually neutralize campus greenhouse gas emissions, and to develop the capability of students to help all of society do the same and publicly report on their progress. As of May 2010, just over three years later, 686 colleges and universities in all fifty states and the District of Columbia have made this unprecedented commit-

ment. They represent 5.9 million students—about 35% of the student population—and include every type of institution, from community colleges to the biggest research universities.

The ACUPCC is an example of courageous leadership by college and university leaders. Higher Education is the first major U.S. sector with a significant number of its members to commit to climate neutrality. This is especially important given the inability of the international community and the U.S. Congress to act. The participating presidents believe that leading society to a low carbon, less auto-dependent economy fits squarely into the educational, research, and public service missions of higher education. Case study development now allows this momentum to move into classrooms at every level of schooling, as well as out into the community.

A second example is the nascent and crucial effort to rapidly reform the ability of faculty in all disciplines to transform the education of all students to thrive in this new world. Today's and tomorrow's businesses, government, and professionals—architects, engineers, attorneys, business leaders, scientists, urban planners, policy analysts, cultural and spiritual leaders, teachers, journalists, advocates, activists, and politicians—will need new knowledge and skills that only higher education can provide on a broad scale. At several hundred colleges and universities there are new interdisciplinary faculty development efforts to make this a reality.

However, there are few readily available resources to help them and all of higher education reach the majority of students. This book, *Case Studies of Classrooms and Communication: Integrating Diversity, Sustainability, Peace and Reconciliation*, by Timpson and Holman, can be an extremely important contribution to this effort. Faculty across the myriad of disciplines in higher education, who lack the time or expertise to develop the kinds of innovations that they would like and that are essential, will greatly benefit from the frameworks and examples in this excellent book. When we pioneered a faculty development program for 150 faculty through the Tufts Environmental Literacy Institute at Tufts in the early 1990s, this book would have been an excellent asset.

CONCLUSION

Some have argued that achieving climate neutrality and sustainability is too hard, or impossible. What we must do is make the impractical or seemingly impossible inevitable, just as President Kennedy did in rallying the nation to get the U.S. to the moon in less than a decade. The earth does not recognize how hard it is for us humans to change. It will respond to the physical changes we cause on its own schedule and in its own ways. It doesn't have the cognitive ability to decide to wait for us to figure out how we can change to preserve our way of life and ourselves.

The opportunity is for us to have vision for the kind of healthy, just, and sustainable world and mobilize to make it a reality. To quote Benjamin E. Mays, former president of Morehouse College and mentor to Martin Luther King: "The tragedy of life doesn't lie in not reaching your goal, the tragedy lies in having no goal to reach." And that goal must include the understanding of Native peoples that we did not inherit the earth from our ancestors; rather, we are borrowing it from our children, and we must leave it in better shape than we found it when we were born.

Higher education has risen to great challenges before and must do so again now at great speed—humanity is depending on us. If the colleges and universities don't lead, who will?