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Beyond greening: The challenges to adopting sustainability in higher education.

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Beyond *Greening*: Challenges to Adopting Sustainability in Institutions of Higher Education

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It is common for colleges and universities to include *sustainability* in their mission statements and strategic plans. On many campuses, however, sustainability is associated with green practices only, rather than the comprehensive integration of social equity, economic, and environmental principles on which the concept was founded. In their review of the outcomes of the *Sustainability Tracking, Assessment and Rating System* (STAR), which quantifies sustainability practices of member institutions of the Association for the Advancement of Sustainability in Higher Education (AASHE), Urbanski and Filho (2015) found that there were significant differences in the interpretation of sustainability by higher education stakeholders, which could potentially result in unintentionally lower commitments. Beyond this limited interpretation of the concept, research has identified numerous obstacles to the adoption of sustainable practices. The goals of this paper are to examine the obstacles to the comprehensive adoption of sustainability in institutions of higher education, in general, and to suggest a conceptual framework of a *sustainability culture* as one most appropriate for the more effective incorporation of comprehensive practices.

The Concept of Sustainability

In 1987, the Brundtland Commission of the United Nations defined sustainability as "meeting the needs of

the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 8). To make this a reality, the integration of economic, social and environmental efforts is required (Ralph and Strubbs, 2014). Sustainability is now considered to be a paradigm with which to frame future development decisions (UNESCO, 2011). To become sustainable, decision making must be framed in a way that balances how we use the environment, the need for social equity, and the need for economic growth.

These elements and their interrelationships are typically represented by a Venn diagram (Figure 1). Individually, each element is important and can be considered independently, but, in so doing, tremendous potential for negative externalities are possible. When integrated, the impacts are powerful and have the potential to create substantial growth and change.
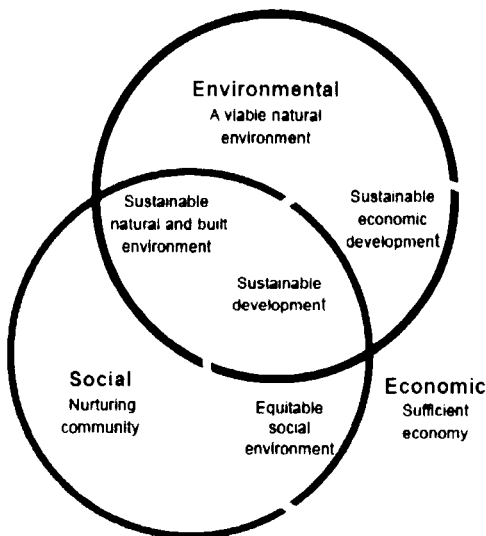

Figure 1. Sustainable Development
(Pittsburg State University, 2016)

The environmental aspect of sustainability encompasses the idea that humans exist as part of the

biosphere and, as such, must be aware of the impact their actions have on the Earth's biodiversity and finite resources. Consequently, sustainable decision making means using resources wisely and respecting the environment in which we live.

The social aspect is often framed in the context of *social equity*. This can range from equal opportunity legislation, to working to ensure that all people have access to resources to meet their basic needs, to working towards social justice in distant countries.

Growth is the goal of virtually every economy in the world. The economic component recognizes the need for productivity and the creation of jobs. Economic decisions, however, often take place in a vacuum, with short-term profit—made possible by the availability of cheap raw materials, cheap labor, and a large consumer base—as the focus. For many, this means economic growth is the sole measure of success and, as such, supersedes the environmental and social aspects in terms of importance. Economic sustainability means planning in the long term and valuing resources (both human and natural) appropriately to ensure continued economic sufficiency.

Growth is possible when all three of these aspects of sustainability: environmental, social and economic, are integrated in a complementary manner in decision making. Integration is key; their interrelationships are more important than the individual elements themselves. These interactions are complex and vary geographically. While some people see sustainable development, or *sustainability*, as an unrealistic goal which can never truly be achieved, others see it as a set of guiding principles to be used in decision making to ensure the long-term survival of not only the human species, but of the entire planet.

In sum, while the environment is a fundamental component of sustainability, social equity and economic sufficiency are equally valued. Accordingly, a sustainable institution must embrace economic concerns, social equity, as well as environmental goals (Selby, 2009).

Obstacles to Institutionalizing Sustainability in Higher Education

University Level: Lack of understanding of the concept of sustainability

In 2006, the Higher Education Associations Sustainability Consortium (HEASC) requested the development of a standardized tool for the assessment of campus sustainability in response to a perceived lack of standardized tracking systems for sustainability in higher education. The goal was to create an analytical tool to help assess "all the dimensions of sustainability (health, social, economic and ecological) and all the sectors and functions of campus, including curriculum, facilities, operations, and collaboration with communities" (HEASC, 2006, p. 1). The system, known as STARS (Sustainability Tracking, Assessment and Rating System), was developed by the Association for the Advancement of Sustainability in Higher Education (AASHE) to meet this need.

In their analysis of STARS data, Urbanski and Filho (2015) found that the interpretation of "sustainability" varies among institutions of higher education. Using STARS data to analyze the levels of understanding and participation in sustainability, they found that, "While some stakeholders interpret sustainability as a concept that is focused on environmental issues, others take a more holistic view, focusing on interrelated social, environmental, and economic dimensions of sustainability" (Urbanski and Filho, 2015, p. 213). A key determinant of whether participating institutions highlighted the three interrelated components of sustainability in their reports was if the language for a particular credit in the STARS Technical Manual specifically included these three dimensions (Urbanski, 2012).

> While differences in sustainability interpretation may be attributed to the nature of credits themselves, there is a strong indication that some higher education stakeholders using STARS are focusing primarily on "green" issues unless otherwise prompted by language in the STARS Technical Manual. (Urbanski and Filho, 2015, p. 213)

Not all STARS goals explicitly refer to the three pillars of sustainability, and it appears that colleges and universities whose goal it is to further their sustainability efforts on their campuses need to extend their efforts beyond the traditional environmental focus and address sustainability issues from a holistic perspective (Urbanski and Filho, 2015).

University Level: The need to implement programs across units/sectors within institutions

To become a truly sustainability-oriented institution, programs must be implemented across multiple sectors or units; that is, social, environmental and economic sustainability efforts must involve administration, staff, faculty, and students, and span facility operations, finance, development, education, research, student activities, and community outreach efforts.

Cross-sector initiatives such as these require groups to adopt new approaches to achieve their objectives and to increase the level of interaction with other units across campus (Blackburn, 2016). A major challenge is that administrative and facilities operations staff may be reluctant to engage faculty and students in their efforts because of concerns that doing so might complicate decision making, slow them down, create extra costs or workloads, or otherwise be unreasonable (Blackburn, 2016).

Curriculum Development and Course Delivery: Overcoming existing administrative and discipline structures

It is common for faculty to initiate the development of a sustainability curriculum. This often means that the faculty must not only serve in their official program/department, but they must also reach out beyond their own discipline to partner with like-minded faculty in other programs/departments to establish the multidisciplinary structure needed for the development of a successful sustainability curriculum.

Existing administrative structures can make it difficult to develop the multidisciplinary approach needed for effective curriculum development. For a sustainability-based curriculum to be successful, the traditional way courses are offered and content is delivered must be re-examined. Blackburn (2016) advocates for a strong multidisciplinary approach to teaching sustainability-related content. As sustainability issues are often complex, it is imperative to teach the material in a way that facilitates student learning of connections between concepts and across disciplines (Wright, 2004). Co-teaching and team teaching approaches, used both within departments, as well as between departments and even across colleges, are most effective in that they allow students to experience different perspectives on sustainability-related issues, which is crucial to understanding and addressing inherent complexities.

The creation of integrated academic programs is another avenue for the delivery of sustainability-related content. The process of creating cross-departmental appointments can be problematic with regard to the allocation of teaching load and funding, however.

The development of curriculum, the team-teaching approach to deliver cross disciplinary courses, and the creation of integrated programs all pose challenges to traditional administrative structures (departments, colleges). Counting teaching loads and credits by department or program can be difficult. The inability or unwillingness of administration to effectively work around these challenges may discourage faculty who otherwise see the benefits of such a cross-disciplinary approach.

Faculty: Challenges of workloads and professional development needs

As a sustainability-based curriculum is developed, challenges emerge about teaching and facilitating professional development opportunities beyond a faculty member's full time department appointment. Faculty are time-committed

to their own discipline. Since funding is rarely available to hire new faculty who are exclusively dedicated to sustainability, it falls on current faculty to form the core of an emerging sustainability curriculum and program. Adding new courses, whether team-taught or cross-disciplinary, can mean having to carry course overloads to facilitate the offering of sustainability-related curriculum. Funding for both additional teaching loads and the new faculty development needs can be difficult or impossible to attain.

Funding: Grants and alumni dedicated to specific departments

While both administration and faculty may be enthusiastic about creating new approaches to curriculum and course delivery, and possibly the creation of new programs in sustainability, the lack of funding may preclude their development. Many university funding opportunities, such as grants and donations, are usually available for allocation to specific programs. Donations from alumni are generally directed to their former home department, so raising funds for new programs can be problematic (Blackburn, 2016).

Beyond the Institution:
Political and economic roadblocks

A political and/or economic environment that fails to understand and/or acknowledge the importance of sustainability can serve as a significant barrier to the adoption of sustainability-related endeavors. In the United States, the prevalence and impacts of the obstacles to the adoption of sustainable practices varies between states, depending on local and regional political, economic, and social circumstances. An overview of the situation in the State of Kansas will be examined here, as the political and economic challenges to higher education institutions in this state are considerable; these can have a significant impact on the adoption of sustainable practices.

The Example of Kansas

Kansas universities operate in an uncertain and dark state-funding environment. Organizations typically prefer stability and homeostasis in external political, economic and social environments. Such predictability leads to comfort, trust in decision makers, and fosters environments of innovation. This is not the case for Regents Institutions in the State of Kansas that have been on the receiving end of consecutive years of state budget cuts under what some have coined "The Kansas Experiment" (Suellentrop, 2015), and which Governor Brownback calls the "march to zero" (Sullentrop, 2015). It is an economic attempt to wean the Kansas government off the revenues of income taxes and to transition into a government that is financed entirely by what Brownback calls "consumption taxes" —that is, sales taxes and, to a lesser extent, property taxes. Since 2011, the march to zero includes an already-passed provision that exempts the owners of 330,000 businesses and farms in Kansas from income tax. The intended goal was to draw free enterprise to the state. The results of this economic strategy have not yet yielded the anticipated positive effects political leaders were hoping for.

In 2016, Governor Brownback announced $97 million in state cuts to higher education which translates to approximately a 4% decrease in state funds to institutions of higher education. The Kansas Board of Regents issued a statement after the governor's announcement, noting that with the most recent cuts announced, state funding for higher education will be $100 million, or 8.6 percent less, than it was in the 2007-2008 academic year (Hancock, 2016).

In addition, in 2013, an attempt was made to pass legislation banning government funding for any project involving sustainable development. House Bill No. 2366 stated: "No public funds may be used, either directly or indirectly, to promote, support, mandate, require, order, incentivize, advocate, plan for, participate in or implement sustainable development" (Kansas Legislature, Committee

on Energy and the Environment, 2013). While the bill was
defeated, it demonstrates the lack of understanding of the
multiple dimensions and benefits that are encompassed by
the term *sustainability*. Such a legislative environment can
potentially serve as a barrier to the adoption of sustainable
practices by the institutions of higher education that operate
within the system.

Working Toward an
Institutional Culture of Sustainability

Most universities do act on efforts to become more
green. Regular reporting on such indicators as energy use,
water use, emissions, waste, transportation, compliance
etc. has become commonplace. Assessment of the social
dimensions of sustainability, however, is reported much less
frequently (Lozano, 2011). Dresner (2002) observed that
in more developed countries, there seems to be a greater
awareness of environmental issues rather than social ones.
Environmental issues are generally easier to measure, while
social issues are often more difficult to monitor and assess
(Salzmann et al, 2003). The measurement and assessment
of such indicators as labor/management relations, health
and safety training, diversity and opportunity, strategy and
management, collective bargaining, disciplinary practices, and
security practices are needed to demonstrate an awareness
of and action regarding the social equity component of
sustainability (Lozano, 2011)

Lozano (2011) concluded that corporate sustainability
efforts could serve as a model for universities. Usually
referred to as the *triple bottom line*, many corporations
recognize the need for incorporating sustainability into
all sections of their operations. Bertels et al (2010) state:
"a culture of sustainability is one in which organizational
members hold shared assumptions and beliefs about the
importance of balancing economic efficiency, social equity
and environmental accountability" (p. 10). At a university, this
might include incorporating sustainability into the strategic

planning process, integrating sustainability goals across all functions and units, and changing job descriptions to incorporate sustainability. It is not uncommon for individuals on campus to act as leaders behind sustainability efforts. While this can be effective to a certain extent, to achieve long term integration, it is important to "assign tasks to roles not people" (Bertels et al, 2010, p. 35)

To create a campus sustainability culture, where *culture* refers to the institutional culture within which all components are integrated and complementary, the holistic integration of the main components of sustainability must take place (Selby, 2009). What is needed is a "broad understanding of sustainability that, while taking the environment as fundamental, embraces economic, health, social justice and other humanitarian concerns" (Selby, 2009, p. 103). Such integration is represented in the model in Figure 2. As well as the adoption of sustainable principles and practice in curriculum, operations and community outreach, a campus environment that ensures student inclusiveness and equitable opportunities for engagement is key. This would include policies and programs to ensure equity among students, handicap access, and equitable distribution of funds to student groups on campus.
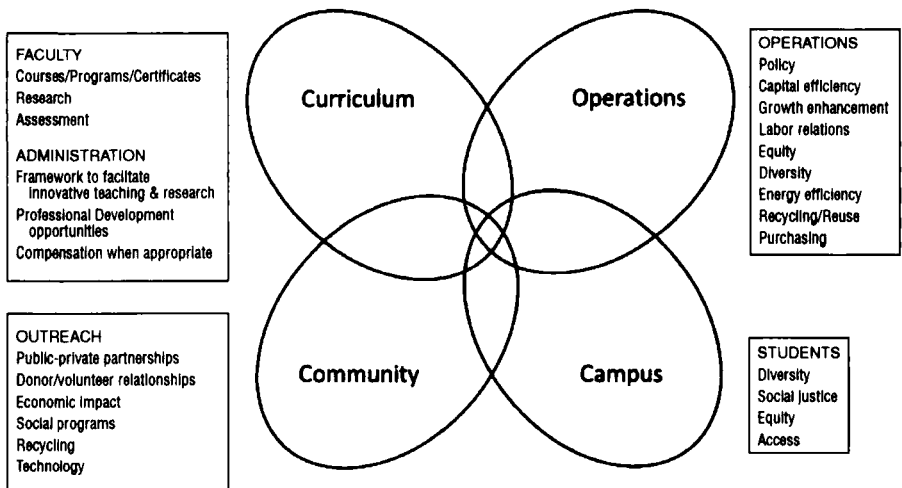

Figure 2. A campus sustainability culture.

Conclusion

The importance of incorporating all three elements of sustainability in university operations: curriculum, campus life and community outreach, is crucial. The current, prevalent focus on greening does show progress, but in only one component of sustainability. Educating administration, staff, faculty, and students on these issues must be a priority to facilitate the development of a sustainability culture on campus. In addition, the continuous re-assessment of what sustainability means for an institution is key to ensure an ongoing commitment (Bertels et al, 2010). Institutions of higher education, tasked with developing the next generation of leaders, must strive to not only teach the concepts but must emulate sustainability in all facets of the institution. In the larger context, the economic and political framework can be limiting to these efforts. Local, regional, state, and federal agencies must create an enabling environment in which policies allow for creativity and funding is available to assist in these efforts.

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