

LEADING PROFOUND CHANGE

A resource for presidents and chancellors who have signed to the American College & University Presidents' Climate Commitment (ACUPCC)¹

PART I: KEY STEPS FOR IMPLEMENTING THE ACUPCC

In many cases, administrators, staff, faculty and students at ACUPCC institutions begin the climate action planning process with feelings of optimism and enthusiasm, but quickly feel stuck because there is no clear way for the senior administrators to directly move the process along and ensure collaboration from all of the relevant departments and groups on their campuses. As a result, feelings of frustrations, paralysis, and resentment can emerge and derail the process and be replaced with a demoralizing feeling that the task at hand is not possible.

Most of us are all familiar with these challenging situations, and have various ways of working through these processes. Most of us have also had the rewarding experience of being a part of teams or organizations that have come together around a tough challenge and created innovative, effective, exciting solutions faster than anticipated. Each of us will continue to draw on proven techniques and approaches to organizational leadership, uniquely suited for the cultures and circumstances of our institutions. However, the size, scope and complexity of creating a climate action plan makes this challenge unique in many ways, and may require exploring new and different approaches as well. Unlike most other recent nationwide efforts, the climate commitment requires an effective alignment of campus operations, research and education and campus-community collaboration in order to create an environment that supports the kinds of creative solution-finding needed.

This resource represents the beginning of a dialogue and exploration of effective approaches, tools and concepts for leading the kind of change needed to fulfill the ACUPCC in ways that enhance our institutions immediately and over the long-term. This paper addresses the question: *What new and different approaches can we share from our experiences to ensure success and avoid frustrations?*

1) *Treat sustainability as a major transformative initiative employing all the leadership skills of a major institutional change*

Institutional leaders introducing a sustainability agenda should approach it as a major organizational change. Like most examples of technological and cultural change, sustainability programs follow a

¹ *Leading Profound Change* and its Executive Summary is a collection of contributions from the ACUPCC Steering Committee, with coordination support and input from the following members of the Second Nature team: Anthony Cortese, Georges Dyer, and Michelle Dyer.

pattern of diffusion of innovation originally described by Everett Rogers, in which early adopters support the innovation, followed by a surge as the majority supports it, before leveling off as late adopters support it. The adoption rate can be expressed in a bell curve, or an 'S' curve showing the cumulative adoption.²

This process of diffusion and the recruitment of additional participants can and should be facilitated. There is a wealth of research on how routine, strategic and transformational change differ from one another and why all three are needed to practice "smart change" in support of a large-scale initiative like the ACUPCC: "Some challenges can be addressed by using well-practiced approaches to familiar problems (routine change). Other issues require planned-out approaches (strategic change). In contrast, complex demands require approaches that are invented 'as you go'; these require a significant expansion of core individual and institutional capacities and new ways of working together (transformative change). Those who understand these types of change and employ them appropriately are practicing smart change."³ This document provides a high-level overview of a few examples of particularly effective approaches, tools and concepts for being smart when leading change.

Sustainability offers an especially good pathway towards embracing both invention and innovation at an institutional level. It requires a healthy balance of support structure, administrative guidance, social networking and self-organization on the part of the most committed members of a campus community. At its best, it actually demonstrates the qualities of the 21st century organization described by many recent scholars, such as John Seely Brown, Steven Denning, Peter Senge, Clay Shirky, and others, whose works highlight the power of facilitating self-organization in creating solutions, the importance of good story-telling to generate buy-in, and the effectiveness of systems thinking in organizational learning.

Sustainability captures all of the essential learning outcomes articulated by Liberal Education and America's Promise (LEAP) both for individuals and for an institutional community as a whole. It is a great example of a "Big Question." Frank Rhodes, former president of Cornell University, suggests that the concept of sustainability offers "a new foundation for the liberal arts and sciences." It provides a new focus, sense of urgency, and curricular coherence at a time of drift, fragmentation, and insularity in higher education, what he calls "a new kind of global map."

Sustainability provides a vital source of hope and opportunity for facilitating institutional renewal and revitalizing higher education's sense of mission.

The 21st Century Organization

The 21st century organization is characterized in large part by rapid change and uncertainty. Its perspective is global. It is often "flatter" with traditional hierarchical structures complemented by

² Rogers, Everett M. *Diffusion of Innovations*. The Free Press. New York, NY. 1962, 1971, 1983, 1995.

³ Baer, Linda, Ann Hill Duin, and Judith A. Ramaley. "Smart Change." *Planning for Higher Education*. Society for College and University Planning. V36:2 (5-16) January - March 2008.

powerful forces of networks within and between organizations. Its value lies increasingly in intangible assets like relationships, information, and ideas, and it often operates in more decentralized, self-organized ways. Tools for instant communication are ubiquitous, yet old and new barriers to effective, meaningful communication persist. Many scholars and business leaders have commented on these trends, including:

- Clay Shirky, whose research on the social and economic impacts of internet technologies has demonstrated the power of online collaboration, crowdsourcing, and self-organizing networks.⁴
- John Seely Brown, who has focused on information, organizational learning, innovation, digital culture, and ubiquitous computing and the tools and approaches managers need in the face of great uncertainty and rapid change.⁵
- Steven Denning, whose work highlights the importance of organizational storytelling and has identified techniques for engaging people and building buy-in, trust and commitment.⁶
- Goran Carstedt, former executive at IKEA and Volvo, who refers to this shift as moving to the “new logic” – from things to ideas, hierarchies to networks, competition to cooperation, linear to non-linear, knowledge to understanding, teaching to learning, command-and-control bosses to co-creating facilitators, compliant employees to committed members of social networks, closed doors to transparency, and so on.⁷

The 21st century organization presents a host of new challenges and opportunities. Presidents and chancellors at ACUPCC colleges and universities have an excellent opportunity to use the framework of the Commitment along with an understanding of the 21st century organization to foster innovation, meaningful relationships, and tangible benefit for their institutions.

The President’s Role

First and foremost, it is important for the president to demonstrate broad support from the administration. When discussing activities devised to transform Emory University’s culture, Peggy Bartlett explains, “one component of the success we achieved was the signals of support from the provost, the president, and several vice presidents and deans, who at several pivotal points helped reassure some who feared high-level disapproval of our efforts...Several administrators provided funding at crucial junctures, which reinforced the viability of initiatives.”⁸ Signing the ACUPCC

⁴ Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Press. 2008.

⁵ Brown, John Seely, and Paul Duguid *The Social Life of Information*. Harvard Business School Press. Cambridge, MA. 2000; and Brown, John Seely, and John Hagel III. *The Only Sustainable Edge: Why Business Strategy Depends on Productive Friction and Dynamic Specialization*. Harvard Business School Press. Cambridge, MA. 2005.

⁶ Denning, Stephen. *The Secret Language of Leadership: How Leaders Inspire Action Through Narrative*. Jossey-Bass. 2007.

⁷ Senge, Peter M., Goran Carstedt, Patrick L. Porter. “Innovating Our Way to the Next Industrial Revolution.” *MIT Sloan Management Review*. V42:2 (24-28). Winter 2001.

⁸ Barlett, Peggy and Geoffrey Chase (eds.). 2004. *Sustainability on Campus: Stories and Strategies for Change*. Cambridge, MA: Massachusetts Institute of Technology, p.84.

demonstrates that modeling and educating for climate neutrality is part of the institution's mission. In addition to this declaration, administrators can build sustainability education into the institution's mission statement and identify and reward faculty who are champions for sustainability education through fellowships and other means of public recognition and monetary support. Examples of this kind of support include:

- *Antioch New England*, where a stated mission "to provide transformative education for a just and sustainable society" guides teaching in the four academic disciplines of education, environmental studies, organization and management, and psychology. <http://www.antiochne.edu/academics/default.cfm?ref=nav>
- *Cornell University*, where the Cornell Center for a Sustainable Future is providing Academic Venture Fund awards, funded by alumni gifts, to stimulate original and cross-disciplinary research in sustainability science. <http://www.sustainablefuture.cornell.edu/grants/rfptab.php>
- *Elon University*, where a sustainability faculty scholars program offers \$1000 stipends to integrate sustainability into disciplines. <http://org.elon.edu/sustainability/ac-susScholars.html>
- *Foothill De-Anza Community College District*, where sustainability is a core value expressed through four channels: Commitment, Action, Education, and Community <http://www.fhda.edu/sustainability/>
- *Joliet Junior College*, where sustainability is a goal of the strategic plan, the board has approved a new, sustainability-focused master plan, and green collar job training is integrated into curricula. <http://www.jjc.edu/about/committees/sustainable-campus/Pages/green-news.aspx>
- *The University of New Hampshire*, where the Outreach Scholars program recognizes faculty champions and supports a new research paradigm that brings potential users of the results of faculty research in at the beginning. <http://www.unh.edu/outreach-scholars/aboutus.html>
- *The University of Pennsylvania*, where the Global Initiatives Fund, funded by the Provost and President's office, sponsors faculty research and teaching for interdisciplinary solutions to environmental problems with attention to business and policy. <http://environment.wharton.upenn.edu/>

Of course, simply making the statement is not enough. Creating a climate neutral, sustainable campus will require profound changes to the ways in which we think and interact. When developing and rolling out a change-management strategy of this scope on a college or university campus, the president is a part of a community of learners. Approach change as a scholarly act. Due to the turnover of students, faculty and staff, and the dynamic and ever-changing nature of the landscape in which colleges and universities are operating, this process should be iterative and ongoing with regular mechanisms for assessing and updating the strategy.

It is important to cultivate an appropriate atmosphere for each campus community. The ambitious goal of climate neutrality can be a great driver of excitement and innovation towards a meaningful and necessary goal. At the same time, it is important to avoid paralysis or resentment bred by a perception

that the task is impossible or the necessary support does not exist. Some key points for presidents to keep in mind to foster the excitement while avoiding the paralysis:

- Make clear the importance of prioritizing strategic actions, so one solution leads to the next, and all are financially viable in the short-term and beneficial to the institution over the long term.
- Make it clear that the implementation team does not need to have all of the answers right now, or for the first iterations of the climate action plan – and that sections of the plan can include placeholders for further exploration of uncertainties. This will allow people to sit in an innovative space of inquiry – empowered by what can be done immediately, and engaged by what still needs to be discovered and created.
- Ensure there is sufficient space in the plan to account for the “soft” side of implementation – how the people involved or affected by the plan might feel throughout the process. There are “irrational” realities involved with the organic growth of a complex and emergent process, and the president can avoid potential problems by helping people to see that potential ahead of time, and not panic as or when problems occur.
- Reinforce positive change that produces results, creates meaning for people, and fosters networks of committed people.
- Address limiting factors by not pushing too hard, thinking about the future today, conducting experiments, and resetting the goals of the system by examining mental models (see below for more details).
- Recognize that sometimes the perception precedes the reality – that all the pieces don’t need to be in place before the commitment can be embraced, and that once the commitment is made the journey towards climate neutrality and sustainability is one of discovery and not necessarily a direct movement from point A to point B.

The president will likely have many roles in the process of fulfilling the ACUPCC – manager, cheerleader, strategist, coach, communicator, decision-maker, orchestrator, etc. He or she must also fulfill the role of leader by setting, fostering, or co-creating the vision for a climate neutral, sustainable future for the campus and education system – and inspiring and supporting the community to make that vision reality. There will, of course, need to be such leaders and champions at all levels of the organization, and the president has a critical role to play in fostering the emergence of such leaders.

2) Invoke the broad-based support of emotional and participative change

Communicate the Entire Process

Communication is critical throughout each stage of the process. There are many modes of communication, and to be successful in fostering this kind of change, the leadership at ACUPCC institutions can use many different techniques, such as:

- Sending community-wide emails (for example, from Tulane President Scott Cowen: http://tulane.edu/administration/president/tulane_talk/tt_092608.cfm)

- Recording and disseminating podcasts and video messages from the President and others working on the plan and its implementation
- Including updates on campus climate activities as a regular agenda item for cabinet meetings – this not only gives campus leadership an understanding of our progress, but also keeps the focus as a top priority
- Convening regular community-wide meetings to provide progress updates and generate new ideas (especially important because each year there are new students, faculty and staff)
- Remembering to mention the ACUPCC as a way to contextualize news stories, press releases, and alumni magazine features that relate to climate and sustainability to constantly reinforce how each activity relates to all of the other efforts going on, and how they all move the institution (and society as a whole) closer to the goal of climate neutrality and sustainability

Engage Everyone on Campus

As with any other innovation, a first step is to engage all the relevant members in the institution in a conversation about the meaning of the Commitment and to seek their input on the best ways to work toward climate neutrality in the context of your institution.

Foster broad understanding of the climate crisis based in the science of the carbon cycle. Help your community take a broad view of the “whole system,” highlighting the nested roles of the individual within the institution, within the community, within the nation, within the global human society, within the biosphere. Help everyone see the basic mechanism of our fossil fuel-based economy systematically introducing more and more carbon from the Earth’s crust into the atmosphere in the form of carbon dioxide. A basic understanding of these interrelated systems and the underlying mechanisms driving the threat of dangerous climate disruption is necessary for sustained and effective action. These are complex systems with many uncertainties, and ongoing debate and dialogue should of course be encouraged, however a general level of consensus around the basic mechanisms can and should be fostered so all parties are operating within a common framework with regard to the challenge and the goal.

Support awareness and measurement of the current status of activities on campus and in society that contribute to climate disruption, as well as those that offer solutions, so everyone has at least a general understanding of the major emission sources on campus and how their actions and behaviors can and do impact those sources.

3) Empower a dedicated force to establish tangible metrics, milestones, and concrete results

Create Institutional Focus and Responsibility

Creating a learning community for sustainability involves a continual effort of assessing what has been done, learning from these assessments, and guiding the campus community toward integration in all operations across curricula and research. While nothing transformative happens without broad

commitment, initial steps are almost always limited to a handful of people. Any important innovation requires that an organizational unit, group and/or individual have the responsibility and are accountable for advancing its development and implementation. Colleges and universities that have “put someone in charge” of these initiatives are showing the most progress towards integrating sustainability and climate neutrality into educational experiences. The group must also have the support of senior administrators in order to be effective.

These offices, individuals and groups are often charged with some or all of the following responsibilities:

- Determining the strategic plan for how the institution can accomplish its goals for integrating sustainability and climate neutrality into the educational experiences and the best route to take in moving along the continuum towards this goal
- Building awareness and support among programs and departments across campus for integration, and involving students in these efforts
- Cataloguing the various efforts across campus for integration and assessing their success
- Building connections between faculty and staff across the disciplines and departments
- Developing learning outcomes for sustainability that can be used in any discipline
- Providing professional development opportunities for staff and faculty
- Being a conduit between the administration, faculty, staff, and students
- Looking for ways to fund and institutionalize these efforts
- Creating a dashboard of outcome measures that are visible and consistently reviewed by the campus leadership

Several colleges and universities have understood the importance of identifying a group or an individual who is responsible for doing this work, including:

- *Texas Christian University*, where a committee comprised of faculty, administrators, and students has been assembled by the Provost to design the curriculum to incorporate sustainability into every student’s educational experience.
- *Middlebury College*, where the Dean of Environmental Affairs reports directly to the Provost and oversees the Sustainability Integration Office.
<http://www.middlebury.edu/administration/doenv/>
- The *University of New Hampshire*, where the Director of the University Office of Sustainability is also the University’s Chief Sustainability Officer, reporting directly to the Provost. The Office is charged with advancing the university as a nationally recognized sustainable learning community that integrates sustainability across its curriculum.
<http://unh.edu/news/campusjournal/2007/Jul/25sustain.cfm>

The administration can also provide a receptive audience to these efforts by supporting new faculty and staff hires that serve more than one program and will be working at an interdisciplinary and cross-departmental level. These hires will naturally be more receptive to the kind of interdisciplinary work

that is needed for education about sustainability and climate change and achieving climate neutrality in campus operations.

Periodically Assess Progress

In order to determine whether strategies are meeting desired results, it is important to (a) explicitly define success, (b) develop a process for periodic assessment of progress and (c) have in place a means for adjustment of strategies to achieve desired outcomes. Developing emissions targets and learning outcomes for sustainability and climate literacy is a first step. Periodic review by units responsible for the strategies should be complemented by review and discussion with senior administrators.

Create a Collective Learning Community

One of the most important benefits of working on fulfilling the Commitment is the ability for members of the ACUPCC network to help each other and to help advance the whole group as well as other higher education institutions. This has already resulted in new innovations and resources – such as the data in the online reporting system, the Energy Performance Contracting Toolkit, the ACUPCC Carbon Offset Protocol, the Climate Action Planning Wiki, and a slew of reports and guides from other organizations. This learning community will continue to create solutions that will be reflected in all of the ACUPCC documents, workshops, conferences, webinars, websites and other continuously updated resources.

PART II: CULTIVATING INSTITUTIONAL CAPACITY FOR CHANGE

– THE LEARNING ORGANIZATION

The concept of a “learning organization” was popularized by Peter Senge’s 1990 book, The Fifth Discipline. The “art and practice” of creating a learning organization is an effective approach to managing constant change in a complex world in ways that engage members of an organization, creating meaning in their work, and spark innovation. The practice revolves around five interrelated “disciplines” discussed below. The “fifth discipline” is systems thinking – a necessary perspective for organizations undertaking the complex task of creating climate neutral campuses and communities. The following sections are comprised of excerpts and concepts from The Fifth Discipline and The Dance of Change, a follow-up publication covering the same topics.⁹¹⁰

Organizations are products of the ways that people in them think and interact. To change organizations for the better, you must give people the opportunity to change the ways they think and interact. This cannot be done through increased training, or through command-and-control management approaches. No one person, including a highly charismatic president or chancellor, can train or command people to alter their attitudes, beliefs, skills, capabilities, perceptions, or level of commitment. Instead, creating a learning organization involves developing tangible activities: new governing ideas, innovations in infrastructure, and new management methods and tools for changing the way people conduct their work. Given the opportunity to take part in these new activities, people will develop an enduring capability for change. The process can pay back the organization with far greater levels of diversity, commitment, innovation, and talent.

A change initiative driven by learning – one that involves repeated opportunities for small actions that individuals can design, initiate, and implement themselves – builds commitment through participation and action and draws in new people who share similar values and aspirations. This type of change becomes self-perpetuating, as opposed to leader-driven initiatives which tend to only be powerful so long as they are pushed, and fail when the leader moves on or loses interest or energy, or does not produce the desired results for some reason.

The Five Disciplines

In order to sustain this kind of initiative, and create a true learning organization, five components are necessary. While developed separately, they are highly interrelated, and all five are needed to effectively create a learning organization – having four out of five will not get you four fifths of the way

⁹ Senge, Peter M. *The Fifth Discipline: The Art & Practice of the Learning Organization*. Doubleday. New York, NY. 1990, 2006.

¹⁰ Senge, Peter M. et. al. *The Dance of Change: A Fifth Discipline Fieldbook for Mastering the Challenges of Learning Organizations*. Doubleday. New York, NY. 1999.

there. They are referred to as “disciplines” in the sense that they are developmental paths for acquiring certain competencies or skills. Some people are innately more proficient at certain aspects, but everyone can develop their proficiency through practice.

Personal Mastery - This discipline of aspiration involves formulating a coherent picture of the results people most desire to gain as individuals (their personal vision), alongside a realistic assessment of the current state of their lives today (the current reality). Learning to cultivate the tension between vision and reality can expand people’s capacity to make better choices, and to achieve more of the results they have chosen.

Mental Models - This discipline of reflection and inquiry skills is focused around developing awareness of the attitudes and perceptions that influence thought and interaction. By continually reflecting upon, talking about, and reconsidering these internal pictures of the world, people can gain more capability in governing their actions and decisions, and avoid leaping to counter-productive conclusions and assumptions.

Shared Vision - This collective discipline establishes a focus on mutual purpose. People learn to nourish a sense of commitment in a group or organization by developing shared images of the future they seek to create, and the principles and guiding practices by which they hope to get there. Co-create a compelling vision of a climate neutral campus, full of solutions – new campus and building designs, technologies, agriculture and transportation systems – generated by the community and higher education.

Team Learning - This is a discipline of group interaction. Through techniques like dialogue and skillful discussion, teams transform their collective thinking, learning to mobilize their energies and actions to achieve common goals, and drawing forth an intelligence and ability greater than the sum of the individual members’ talents.

Systems Thinking - In this discipline, people learn to better understand interdependency and change, and thereby to deal more effectively with the forces that share the consequences of our actions. Systems Thinking is based upon a growing body of theory about the behavior of feedback and complexity – the innate tendencies of a system that lead to growth or stability over time. Tools and techniques such as system archetypes and various types of learning labs and simulations help people see how to change systems more effectively, and how to act more in tune with the larger processes of the natural and economic world.

Conversation as Strategic Tool

As an institutional leader, you are undoubtedly all too familiar with the barriers, politics, miscommunications and personality conflicts that can hinder progress on even relatively simple initiatives. The challenge of creating, implementing, evaluating, and refining a climate action plan to eliminate net greenhouse gas emissions and educate all students on the topic is large and complex.

Success will require support, creativity and commitment from individuals in all departments and constituencies on campus, as well as some off-campus (alumni, community groups, etc.) – both now and in the future. To help build this kind of commitment and shared vision into the ‘DNA’ of the institution, try to foster meaningful conversations across the community.

Emphasize listening – too often we do not listen effectively, and instead we hear what we want to, or make assumptions about what is really behind what is being said by others, or focus on what we are thinking and how we are going to respond while others are still talking. By promoting authentic dialogue, administrators, faculty and staff can help foster the kind of alignment needed for overcoming such a large and complex challenge. Listen to how people talk about what is happening and be ready to respond to rumors and confusion. Be open, be clear, and communicate frequently.

Be intentional about creating the space for these types of conversations to occur. Create an atmosphere where people can be open and honest about the ‘blind spots’ and assumptions or patterns of thought that we all have, and can stand in the way of the kind of effective cooperation needed to overcome tough challenges. For example, once a semester hold a half-day event for the entire community to check-in on progress and generate new ideas and energy. In these meetings provide inspiring talks from the president, facilities, faculty and student leaders, and also incorporate round table discussions for all attendees where they can reflect on what they have learned, generate new ideas, and provide feedback to the entire group and the ACUPCC implementation committee. Take advantage of effective “social-technologies” for these types of events, such as Open Space and World Café.¹¹

Reinforcing Profound Change

Nothing can grow in self-sustaining ways without reinforcing processes. In order to initiate, sustain, and spread fundamental innovations (such as creating a climate neutral campus) over time, the reinforcing processes need to be recognized and supported. The most common way to reinforce growth is the “better mousetrap” theory that essentially lets the results speak for themselves – if an idea produces results, it sticks and spreads. This can be one effective way to reinforce positive trends, but some proven management innovations die out, or fail to spread. Often success can actually become a risk if it is seen as a threat by others in the organization, or if superficial results are emphasized, even if there are deeper systemic issues that are not addressed. The results focus is only one of three fundamental reinforcing processes to sustain profound change:

¹¹ Open Space and World Café are examples of “social technologies” (tools, methods, processes) that help large groups address complex issues and achieve meaningful results in a short time. Each approach aims to engage participants in dialogue with one another and share important points with the entire group to increase the efficiency and effectiveness with which ideas are shared and generated. See www.openspaceworld.org and www.theworldcafe.com for more information.

Results: "Because it works" - As new practices lead to better results in initial pilots, credibility increases and more people are willing to commit themselves to similar changes.

Personal Results: "Because it matters" - Commitment, imagination, excitement, and energy cannot be sustained if people's personal and family lives are sacrificed. Direct personal benefit, aligned with a "purpose worthy of people's commitment," creates an environment where people can grow.

Networks of Committed People: "Because my colleagues take it seriously" - Informal networks and professional communities, much more than the formal management structures, are vital to how people learn about new ideas, coach one another in trying them out, and share practical tips and lessons over time.

Address Limiting Factors

A necessary complement to reinforcing profound change is addressing the factors that will limit that change. Most people are familiar with the feeling of the challenges that these limiting factors present. Often projects or change initiatives get off to an excellent start, but at some point cross a threshold where people start seeing less movement, activities seem less effective, and support fails. In the language of systems thinking this is the result of a system archetype called "limits to growth" or "limits to success."

The basic system structure is for reinforcing processes to run against balancing processes. This is the means of the system to maintain continuum, stability, and natural balance. The balancing points are not always obvious or explicit, and there are often time delays between a certain action in support of change, and the balancing effect of the limiting factor to be seen. The limiting factors maintain a "happy medium" until some new force changes the system.

Limits are interrelated and affect one another. By tackling one challenge in isolation, others may arise. Because there are a myriad of forces and tensions within an organization, especially with all of the various aspirations and personalities of people involved, a one-size-fits-all approach is likely to backfire. Instead, promoting learning in a way that is integrated with working (so it is not just another add-on program), can help all members of the community identify and overcome limiting factors. Common examples of limiting factors include not having enough time, not having enough support, not seeing a clear connection with core objectives, a gap between espoused values and actions, anxiety caused by change, discrepancy between the change initiative and traditional ways of assessing results, and internal divisions between change-agents and those who are resistant.

For long-standing progress and success, leaders throughout the organization need to understand these limits, and anticipate them, instead of trying to react to them after the fact. In anticipation of these limits, leaders should be careful not to push too hard for growth, as this can simply reinforce the balancing processes. To overcome these balancing processes and shift the system to a new desired

state, leaders should think about the future today, conduct experiments, and reset the goals of the system by examining mental models.

PART III: CONCLUSION

Fulfilling the Climate Commitment and infusing a comprehensive sustainability perspective throughout the institution provides a tremendous opportunity for colleges and universities to maintain their stature as leading institutions in the 21st century. Indeed, such leadership from higher education is necessary if our global society is to create the new ways of thinking, interacting, producing and consuming needed to overcome the interrelated sustainability challenges we face.

The perspectives and approaches presented here are far from exhaustive. There is a large and growing body of research on how to lead profound change and thrive in the face of the many new challenges of the 21st century, much of which is being generated in higher education. This document is intended to serve as a jumping off point for further learning, practice and dialogue among senior leaders at ACUPCC institutions. Different techniques and approaches will prove more effective than others depending on the personalities, culture and circumstances at various institutions – but by engaging in the learning community established by the ACUPCC network, all institutions have an excellent opportunity to learn from each other and accelerate progress towards a sustainable future.

REFERENCES AND ADDITIONAL RESOURCES

Baer, Linda, Ann Hill Duin, and Judith A. Ramaley. "Smart Change." *Planning for Higher Education*. Society for College and University Planning. V36:2 (5-16). January - March 2008.

Barlett, Peggy and Geoffrey Chase (eds.). 2004. *Sustainability on Campus: Stories and Strategies for Change*. Cambridge, MA: Massachusetts Institute of Technology, p.84.

Brown, John Seely, and John Hagel III. *The Only Sustainable Edge: Why Business Strategy Depends on Productive Friction and Dynamic Specialization*. Harvard Business School Press. Cambridge, MA. 2005.

Brown, John Seely, and Paul Duguid *The Social Life of Information*. Harvard Business School Press. Cambridge, MA. 2000

Brown, Juanita, and David Isaacs. "Conversation as a Core Business Process." *The Systems Thinker*. Pegasus Communications, Inc. V7:10 (1-6). December 1996 - January 1997.

Denning, Stephen. *The Secret Language of Leadership: How Leaders Inspire Action Through Narrative*. Jossey-Bass. 2007.

Rogers, Everett M. *Diffusion of Innovations*. The Free Press. New York, NY. 1962, 1971, 1983, 1995.

Senge, Peter M. *The Fifth Discipline: The Art & Practice of the Learning Organization*. Doubleday. New York, NY. 1990, 2006.

Senge, Peter M. et. al. *The Dance of Change: A Fifth Discipline Fieldbook for Mastering the Challenges of Learning Organizations*. Doubleday. New York, NY. 1999.

Senge, Peter M., Goran Carstedt, Patrick L. Porter. "Innovating Our Way to the Next Industrial Revolution." *MIT Sloan Management Review*. V42:2 (24-28). Winter 2001.

Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Press. 2008.