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Collaborating For Systemic Change

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and nongovernmental organizations. Unfortunately, as soon as this Marine Stewardship Council was formed, it was immersed in controversy.² Environmental NGOs interpreted aggressive goals to certify major fisheries as a corporate drive to certify “business-as-usual” overfishing.³ Conversely, NGO efforts to contest certification were criticized by the multinational corporations as stalling progress toward sustainability. One of the first projects of the MSC — to certify the Alaskan pollock fishery (the largest white fish fishery in the world) — became a multiyear legal battle. Similar difficulties have plagued other efforts to establish certification mechanisms in forestry, organic and nongenetically modified foods.

Two conclusions stand out from efforts like the MSC. First, recognition of the need for such collaboration is growing. Second, it is exceedingly difficult to engage a diverse group of partners in successful collaborative systemic change. Although some relevant research exists,⁴ cross-sector collaboration at this scale is largely unexplored. The need is great, but the challenge is equally great.

The Society For Organizational Learning

Beginning in the late 1990s, organizational members of the Society for Organizational Learning began several initiatives focusing on collaborative solutions to a variety of sustainability issues.⁵ The group’s goals have included the application of systems thinking, working with mental models and fostering personal and shared vision to face these complex sustainability issues.⁶

Through its work, SoL has learned that successful collaborative efforts embrace three interconnected types of work — *conceptual*, *relational* and *action driven* — that together build a healthy “learning ecology” for systemic change. Failing to ap-

preciate the importance of each is likely to frustrate otherwise serious and well-funded attempts at collaboration on complex problems. What follows are examples from particular projects in which this learning ecology provided an important foundation for substantive progress.

Conceptual Work: Framing Complex Issues

Making sense of complex issues like sustainability requires systems-thinking skills that are not widely shared. When effective collaboration is the aim, developing a shared conceptual “systems sense” is even more important.

Illustrative Conceptual Projects: Integrating Sustainability Frameworks

A dozen SoL organization members including Shell, Harley Davidson, HP, Xerox and Nike formed the SoL Sustainability Consortium in 1999 to gain a better understanding of how learning tools could support their efforts to integrate sustainability concerns into their business practices.⁷ One of the first conceptual projects that emerged in the consortium grew from the confusion of members about the many different sustainability frameworks and tools they encountered,⁸ including the Natural Step,⁹ Natural Capitalism,¹⁰ ISO 14001,¹¹ Zero Emissions Research Initiative,¹² biomimicry,¹³ WBCSD Indicators,¹⁴ ecological footprints,¹⁵ life-cycle analysis,¹⁶ and cradle to cradle.¹⁷ (See “Describing Different Sustainability Frameworks,” p. 48.)

This confusion became an issue because the proliferation of frameworks and tools was actually slowing progress toward sustainability rather than assisting it, especially because people were spending their time arguing about which framework was “right.” In response the consortium frameworks group emerged — a

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general ideas into specific organizational strategies, practices and objectives takes imagination, courage, persistence, patience and passion. In its final report, the consortium subgroup concluded, “The sustainability challenge is fundamentally a learning challenge, a process that requires both ‘outer changes’ like new metrics and ‘inner changes’ in taken-for-granted assumptions and ways of operating.”²⁴

Lessons From the Conceptual Work The learnings from conceptual work done on particular projects suggest the need for collectively built frameworks that create clarity without denying complexity.

Build community through thinking together and sharing. When faced with difficult conceptual tasks, it is faster and easier to leave the work to small groups of experts or to outsource it to consultants or academics. But doing so bypasses the collective intelligence embedded in diverse organizations and industries and can result in output for which there is neither deep understanding nor commitment. In contrast, when conceptual frameworks are developed collaboratively, the process builds community and fosters more extended application and testing. As one member reflected, “Working together to make sense of the different sustainability frameworks showed us that we were not the only company who was confused about sustainability and helped us communicate what sustainability meant in terms of outcomes and strategies in a way that worked in our culture.”²⁵

Achieve simplicity without reduction.²⁶ Clarity must not come at the expense of oversimplification and trivialization of complex issues. Conceptual working groups can sometimes produce rousing action agendas that include little penetrating insight; similarly, turgid analyses of complex issues can leave people better informed but no more able to take action. Nevertheless, tools like system dynamics²⁷ and stock-flow diagrams (see “Naturalism and Sustainability,” p. 50) can help in digesting the complexity of a problem while communicating key features that guide action. Simple system models highlight key variables and key interrelationships.

Relational Work: Dialogue and Collaborative Inquiry

Success in any collaboration between organizations rests on the quality of relationships that shape cooperation, trust, mutuality

and joint learning.²⁸ But supporting relationship building is not easy, given the competitive culture and transactional relationships typical in organizational life. Only rarely do groups move beyond “politeness” or win-lose debates into more authentic and reflective interactions characterized by candor, openness and vulnerability.

From its inception, members of the SoL Sustainability Consortium were committed to skills of reflective conversation and working with mental models as a way to build more productive relationships. As part of bringing new members into the community, a half-day, premeeting workshop introduced basic tools of organizational learning; specific ground rules for effective conversation were made explicit, including such things as confidentiality, radical respect for each other, the imperative to “listen, listen, listen” and inquiry balanced with advocacy. These steps were especially useful in ongoing projects in which people deepened their understanding of one another through genuine dialogue.

Illustrative Relational Projects: Women Leading Sustainability The first Women Leading Sustainability dialogue was held in 2001 to explore the distinctive nature of women’s leadership in sustainability initiatives. Over the years, participants developed a repository of the group’s experiences, including stories about leading sustainability initiatives, reflections on personal challenges and lessons learned through the eyes of their children. In these ways, the group has lived the consortium’s dedication to candor and cooperation.

The relational work of WLS has had tangible effects. For example, Simone Amber, founder of a corporate-funded, global Internet-based educational project called SEED, said that the honest dialogue of WLS helped her see how far sustainability efforts go toward helping others, especially those in developing countries. In WLS, participants’ motivation for working on sustainability goes beyond business benefits by integrating work, family and self; and the members have developed a sense of purpose, fueled by a desire for their work to benefit others. These successes are embodied in the group’s description of itself: “What matters most about this group is that we assert the importance of taking time for reflection so that our learning evolves through integrating action and reflection.” Action and reflection are necessary for good decision making, yet in today’s “just do it” culture, time for learning is rarely practiced or valued.

executive officer of BP p.l.c., has arguably done as much to legitimize the importance of climate change in the business world as anyone over the last decade. This started with a day-long meeting of climate scientists and a handful of BP top executives in 1996. “The very fact that we took a whole day on this issue was significant,” says former BP chief scientist Bernie Bulkin. “Prior to that, this was a subject that might have gotten 20 minutes on a management team meeting agenda. But, I remember Brown saying that, ‘We are grownups. We can think these things through on our own and find out what we really believe. Maybe we come to the same conclusion as the industry association, or maybe we come to a different conclusion.’” This “thinking together” eventually resulted in a historic speech Browne gave at Stanford University, in Stanford, California, in 1997, in which for the first time in public a CEO of a major oil company broke ranks with peers. He declared that it was sufficiently likely that climate change actually was occurring to warrant serious action, and he announced a series of initial commitments that BP would make unilaterally to reduce its emissions and begin investing in alternative technologies.

Nurturing relational space can be systematic and purposeful. Although the deep questions that drive dialogue cannot be overly planned, there are ways to encourage a relational ecology out of which initiatives will self-organize. For example, many of the founders of Women Leading Sustainability brought specific methods to the group, like personal check-ins and basic principles of dialogue and learning. The provision of free space is a must — and perhaps is the most challenging. Although it sounds simple, free space to simply explore what emerges is virtually nonexistent for today’s busy managers.

Once it is recognized and legitimized, deepening relational space also infuses results-oriented work. Effective relational work encourages diverging conversations, asks difficult questions and helps confront dysfunctional practices and attitudes in our organizations and ourselves. Such capacities also benefit action-oriented change initiatives.

Action-Driven Work: Building Collaborative Change Initiatives Conceptual and relational work are important for effective collaboration, but they are especially important as they come together to enable whole new levels of action. Effectively weaving together all three dimensions requires a new approach that is more personal *and* more systemic than traditional planned-change approaches.

Illustrative Action-Oriented Projects: Collaborating For Innovation in Food Systems Although most consumers in wealthier countries are unaware of problems with global food systems, these are the largest drivers of poverty, social and political instability and local

environmental deterioration worldwide. For example, falling prices for coffee have created a “crisis for 25 million coffee producers around the world, [many of whom] now sell their coffee beans for much less than they cost to produce.”³¹ Long-term trends of falling prices for major agricultural commodities — 40%–90% declines over the past 50 years for wheat, soy, maize, potatoes, dry beans and cotton — relentlessly drive down farmer incomes.³¹ Whereas wealthy countries like the United States buf-

Integrating Frameworks Across Levels

Different sustainability frameworks relate to different levels in the management system. Companies often develop customized or home-grown versions that combine elements of various frameworks.



fer farmers with over \$500 billion in annual agricultural subsidies, developing countries do not have that luxury. As a result, the increasing production needed to meet demand and offset falling incomes leads to vast environmental degradation (for example, over 1.2 billion hectares of topsoil has been lost in the past 50 years — more than the area of China and India combined) as well as increasing worldwide water shortages, since 70% of water use is for agriculture. And yet, despite increases in production, 800 million people remain chronically underfed.

The Sustainable Food Lab project was organized around an innovative approach to weaving together conceptual, relational and action space and included about 40 upper-middle and senior

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founders of the Sustainable Food Lab — Unilever, Oxfam, the Kellogg Foundation and the Global Leadership Initiative — spent over two years gathering a sufficiently large and diverse network to undertake the project. While the scale of the challenge is huge, in this case “getting the system in the room” — meaning that the people who are present should represent all aspects and stakeholders of the problem being explored — is a common principle for all system-change processes. This is challenging not only because of the time and effort involved but also because it includes people who will see the world very differently. By defining the project as a cross-sector, multistakeholder initiative, the founders not only signaled that it would take time to engage an appropriately diverse group of participants but also that it would take time to eventually generate action projects for which such diverse participants could truly collaborate.

Systems thinking is essential for change, but it also can be messy and uncomfortable. According to Andre van Heemstra, a management board member at Unilever where the food lab was founded, “The whole awareness of sustainability (in the corporate world) has been growing because systems thinking, in different forms, is enabling us to see more interdependencies than we have seen in the past. It is those interdependencies that make you conclude that it is more than stupid — it is reckless to think of commercial sustainability in isolation of either social or environmental sustainability.” As a conceptual tool, systems thinking can help to clarify interdependencies and complex change dynamics.³⁵ But at the same time, seeing systems *together* means allowing for different, sometimes conflicting views.

Radical methods are needed for collaborative action work. The basic toolbox from the organizational learning field — which includes systems thinking, building shared vision and working with mental models and dialogue — is a useful starting point in collaborating for systemic change, but it is just a starting point. New approaches for organizing complex change processes and for large-scale dialogue like the World Café³⁶ — a process for leading collaborative dialogue and knowledge sharing, particularly for larger groups — will also be needed. Traditionally, group and team dynamics approaches have sought to foster deep personal and interpersonal work, but much less is known about

opening minds, hearts and wills across networks that cut across diverse organizational boundaries.

The Collaboration Imperative

Business as usual is reaching an evolutionary dead end. Efficiency improvements are useful but limited and, if extended too far, become counterproductive. It is hard to have healthy businesses, no matter how efficient, in unhealthy social and environmental systems.

Businesses, governments and NGOs increasingly will confront complex sustainability problems for which isolated efforts are inadequate. Transactional models for improvement (pay for performance, rewards and punishments, benefit-cost relationships, fear as the primary motivator) have never sufficed for dealing with transformational or “adaptive” change, which requires a new mandate for learning across organizations, industries and sectors. We are at the very beginning of recognizing and responding to this historic shift, and we need to learn as quickly as possible.

Distinct but Not Separate Approaches Although it is convenient for analytic purposes to distinguish the conceptual, relational and action domains, our experience suggests that they interpenetrate each other in important ways. True systemic change means enacting new ways of thinking, creating new formal structures and, ultimately, transforming relationships. As Hal Hamilton of the food lab says, “The relationships among leaders across normal boundaries might be the most crucial ingredient to major change.”

Interweaving conceptual, relational and action work is especially relevant for the cross-sector collaboration needed for many of the “big issues” confronting society. But there is little precedent for such collaboration — protagonists from different sectors often focus on building political leverage and power rather than creating new knowledge and possibilities together.³⁷ Only by integrating our thinking, relating and acting will projects like the food lab become more common and successful.

Leadership and Transactional Networks While the limits of transactional ways of interacting are apparent, generating change at a scale that matters often requires engaging large communities of diverse participants with different motivations. Efforts like the

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food lab, by virtue of the deep personal and interpersonal work involved, have many members who share a strong commitment to the success of the enterprise as a whole. But specific projects also must involve a larger number of individuals and organizations in order to be viable. This means including people and organizations that are focused on narrower agendas and do not share the same sense of responsibility for the whole.

The resulting leadership and transactional networks operate on different logics. In effect, leadership networks function like communities, whereas transactional networks operate like markets. Markets are only viable when actors perceive that benefits exceed costs. From a transactional perspective, a collaborative effort is attractive when there is a compelling value proposition, a clear “business case.” By contrast, the logic that binds communities revolves around a larger purpose that matters to people. It is not that they are indifferent to benefits and costs, but their primary motivation comes from a commitment to the transcendent aim of sustainable agriculture and its long-term strategic importance for their organizations.

Both types of networks matter for achieving large-scale systemic change. For example, articulating new industry norms that require direct competitors to work together also require enough participants who are genuinely committed to longer-term aims for the industry as a whole. Failing to discern and appreciate these differing motivations can result in stalled initiatives because of an overreliance on transactional players in the early going.

Three Recurring Questions As we progress along this twofold path of collaborating to achieve practical changes and building learning communities capable of ongoing collaboration, we continue to wrestle with three questions.

1. How can we get beyond benchmarking to building learning communities? Benchmarking is a well-established form of cross-organizational learning, but a learning community involves much more than site visits or listening to PowerPoint presentations — it involves disclosure and vulnerability. Learning communities are most evident when people are openly discussing real problems and asking for help, and they grow as people offer help simply because they want to. Over time, they nurture common commitment and relationships based on respect and mutuality. Perhaps the biggest question is: Which people and

organizations will be willing to move beyond more common transactional relationships to build the leadership networks from which such communities grow?

2. What is the right balance between specifying goals and creating space for reflection and innovation? Most collaborative efforts among businesses commence with explicit objectives. But initiatives like the SoL Sustainability Consortium and the Sustainable Food Lab did not; rather, they organized according to a general intention to foster learning communities around broadly articulated sustainability issues. This created a good deal of anxiety but also provided space for exploration. Several short-term projects and dialogue groups materialized but did not achieve the critical mass to continue. On the other hand, no one would have predicted the long-term importance of the Women Leading Sustainability dialogue nor many of the Sustainable Food Lab initiatives aimed at radically shifting social and environmental conditions. These unforeseen developments and larger webs of collaborations would have been unlikely if the issues agenda were predetermined or driven from a central organizing group.

3. What is the right balance between private interest and public knowledge? There is much artistry in building collaborative systemic change initiatives, but at the same time, most of the key members of such networks are from for-profit businesses seeking competitive advantages. Commercial interests and proprietary know-how must be balanced with public interests when tackling systemic issues. SoL believes that balancing private and public interest means focusing on issues that are larger than individual organizations, improving the related systems that can benefit all and respecting that it takes healthy organizations to address these issues. In this sense, balancing public and private interests resembles the mantra of all great teams and healthy communities: It’s up to each of us, and no one can do it alone.

REFERENCES

1. B. Halweil, “Home Grown: The Case for Local Food in a Global Market,” November 2002, www.worldwatch.org/pubs/paper/163.
2. See www.unilever.com/ourvalues/environmentandsociety/sustainability/fish/default.asp; www.msc.org; and B. May, D. Leadbitter, M. Sutton

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