An interview with Peter Senge

Interview by James Nelson

Peter M. Senge has received worldwide acclaim for his work in translating the abstract ideas of systems theory into tools for understanding economic and organizational change.

In 1999, he was named by the Journal of Business Strategy as one of the 24 people who has had the greatest influence on business strategy over the prior 100 years. In 1997, Harvard Business Review cited his book The Fifth Discipline: The Art and Practice of the Learning Organization (Doubleday / Currency, 1990) as one of the seminal management books of the past 75 years. Senge is a senior lecturer at the Massachusetts Institute of Technology and the chair of the Society of Organizational Learning (SoL), a global community of corporations that he helped found in 1997. He is also the coauthor of The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations (Doubleday / Currency, 1999).

Senge talks here with James Nelson about the disciplines that help create a genuine learning organization and how they come into play in his work around environmental sustainability issues.

In The Fifth Discipline, you write about the component technologies or learning disciplines that combine to create learning organizations. You group these disciplines into three broad areas; the first is the capacity for aspiration. Please explain what that is.

Peter Senge:

It has to do with what motivates change. It’s very common for people to think that real change only occurs if there’s a crisis. That’s another way of saying that people have not developed a capacity to change because they see opportunities for real innovation even before somebody has a gun to their head. When an organization changes only when it has to, that’s testimony to the fact that the people in it don’t have a picture of the future that’s compelling enough to cause them to automatically bring about changes needed.

The capacity for aspiration has to do with creating such a compelling picture. It involves the disciplines of personal mastery and building shared vision.

But people don’t aspire in a vacuum. They have to be able to make sense of their current reality.

Peter Senge:

Right, but the problem is, people often have very different views of what’s going on. So just as they need a sense of capacity to aspire and foster shared visions, they also need a second broad capacity, which involves the ability to think together and reach some common understandings.

People often suppress their differences, choosing simply to salute the flag of what management says. But for organizational learning to take place, people have to be able to articulate their assumptions about what’s going on – in other words, to learn the discipline of bringing their differing mental models out into the open.

Organizational or team learning also requires the ability to overcome the fear of conflict so as to challenge one another’s thinking without invoking defensiveness. This is essentially the discipline of dialogue. If people think that they always have to agree, then the intelligence of the overall organization will never be greater than the sum of its individuals’ intelligence. Collective intelligence comes from our differences: we achieve a more integrative understanding by virtue of seeing how different people view a particular situation.

These first four disciplines – personal mastery, building a shared vision, working with mental models and dialogue and team learning – all have to do with building the individual and collective capacity to have a strong conviction about what we want to create as well as the capacity to think together.
What about the fifth discipline – systems thinking?

Peter Senge:

Oscar Wilde said, "For every complex problem, there’s a simple solution. And it’s wrong." How do we really deal with the world without either trivializing its complexity or overwhelming people with all the complexity? This is the third broad capacity, and it’s where the discipline of systems thinking comes in.

Systems thinking has to do with learning how to see the interdependence — the processes of change that are always going on all around us, but which we normally don’t see. In other words, the feedback loops, delays, and other processes that require us to think not in linear, A-causes-B ways, but to focus instead on the pattern of interaction.

Thus, if there is constant friction between the manufacturing and sales divisions, systems thinking encourages us to focus not on the personalities of the respective vice presidents of each division, but on the underlying patterns of interaction between the two units. In so doing, we move beyond simply reacting to the symptoms of the problem to achieving a measure of understanding of its root causes.

Taken together, the five disciplines of personal mastery, building a shared vision, surfacing mental models, dialogue, and systems thinking comprise the three legs of a stool: the capacity to aspire, the capacity for conversation, and the capacity to understand complexity. You need all three legs to create learning organizations; the capacities and the disciplines that support them are interdependent.

Why did you create the Society for Organizational Learning? And which of the member organizations of SoL are particularly good integrators of the disciplines we’ve been discussing?

Peter Senge:

My colleagues and I founded SoL as a continuation of MIT’s Center for Organizational Learning, which was established in 1991. The idea was to move beyond the traditional consulting practice, which focuses on working with individual companies, and to get companies working together — that is, to help companies do together what they couldn’t do by themselves. Today, I guess people would call it a community of practice.

Then, too, after working with many different efforts to build learning capabilities in organizations, my colleagues and I felt that we could begin to detect patterns and recurring challenges across companies — whether they were high-tech manufacturing firms, more traditional manufacturing firms, service businesses, or even public schools. (In The Dance of Change we wrote about these challenges, grouping them into three broad areas: getting started, sustaining momentum, and the more transcendent challenges involved in redesigning and rethinking the nature and purpose of the business.)

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Today, there are SoL networks in more than 30 countries. There are a number of successful enterprises involved in SoL that have made good progress in developing several of the five disciplines. Harley-Davidson was a founding member, as were Intel and Hewlett-Packard. British Petroleum (BP) has been involved for the last ten years. FedEx was very involved for many years; so was Ford. But I try to avoid holding up models because none has gone more than 10 or 20 per cent of the way toward complete integration. This work is not something that you do overnight. You can make progress in the short term, but you never stop — it’s an ongoing journey.

In The Dance of Change, you list environmental intelligence as one of the six key intelligences required for organizations looking to develop a robust systems approach to their impact on succeeding generations. Is environmental intelligence the focus of SoL’s work?

Peter Senge:

SoL isn’t solely about environmental sustainability issues. For example, some organizations that work with SoL are just focused on helping each other implement organizational learning tools. Others concentrate on issues related to manufacturing and product development.
There are also a number of organizations in SoL that see sustainability issues as becoming really increasingly strategic in the world of business. Up until ten years ago, very few businesses felt that way. The SoL Sustainability Consortium started to take off after a famous 1997 speech by BP CEO John Browne, who essentially said, “If we wait until there’s 100% unanimity among scientists about global climate change, we will have waited too long to do anything about it.”

But the basic ideas of organizational learning do still come into play here, as we try to help the companies that are wrestling with systemic problems related to sustainability.

Tell me about the work that the consortium is involved in.

Peter Senge:

Well, BP and several other companies are very concerned about energy and transportation issues. Unilever, which is one of the three or four largest consumer goods companies in the world, as well as the number-one seller of fish products in the world, realized that if radical changes in commercial fishing practices weren’t made, before long their fishing operation wouldn’t be a viable business. So Unilever started the Marine Stewardship Council, whose goal is to establish a certification process that tells you whether the fish you’re buying came from stable fishing practices.

Unilever, along with the nongovernmental organization Oxfam, also started a project called the Global Food lab. For a long time, NGO’s involvement in sustainability issues consisted of throwing rocks at the multinational corporations. Granted, multinational corporations often deserve to have rocks thrown at them, but that rarely produces a solution. Sometimes, it opens people’s eyes and starts a process of change, but a genuine solution requires a lot more people grappling with these very complex systems. So today, Oxfam and Unilever are working with nearly 30 organizations around the world – among them, General Mills, the World Wildlife Foundation, farmers’ cooperatives in Brazil and Mexico, and CYSCO, which is the largest food distributing company in the world – trying to bring about change in the global food system.

Other companies like United Technologies are very active in sustainability issues related to materials. One of the primary reasons that cancer rates are off the charts in advanced countries is the toxins in our everyday materials. The chemicals that are used to make toys, bottles, computers and the synthetic leather in the dashboard of your car would be regulated if they were put into drugs, but there are no regulations about including them in products that people touch or use. So there’s a group of companies looking at how they can work together across complex supply chains to systematically identify and eliminate sources of waste and toxicity.

In addition, Nike started the Organic Cotton Exchange several years ago as a mechanism to bring more organically grown cotton to market. In the process, Nike has managed to eliminate a lot of toxic elements from their products. And Xerox now has a copier on the marketplace that is 94 per cent remanufacturable and 98 per cent recyclable. In other words, they’ve created a sustainable product that has a huge economic benefit. The people who led that Xerox team are very active in the SoL Sustainability Consortium’s work on materials.

So the consortium is involved in efforts related to five key issues: energy, transport, food, water, and materials. The basic idea is that what’s really needed here is not just regulation, but innovation. And the key to the innovation need is to get companies working and thinking collaboratively.

Do you think these sustainability efforts will ever be anything other than work at the margins of the global economy?

Peter Senge:

It’s clearly at the margins today, but that’s always the case with innovation – really new ideas are outside the mainstream. The trick is to find a way of turning the innovative idea into a solid business proposition. You’ve got to get good enough at defining the opportunity, and then technically good enough at executing the idea until it becomes economically viable.

Our aim is to make all these sustainability issues sources of real value. If you talk to companies individually, they’ll say, “No, we don’t want to generate waste. And of course we don’t want people getting cancer because they’re using our products. But what can we do? Everybody in my industry uses that chemical or that material component because there’s nothing else as cheap that provides the functionality. We’re stuck.” Well, if enough companies in that particular industry get together, they can come up with something else that’s economically viable, but they have to work at it together.