Directions: For this application exercise, read the article following this page. Answer the following questions and bring your answer sheet to class on the assigned day.

1. What are 3 types of leaders Senge identifies as part of a leadership community? Do you agree with his assessment of each type? Why or why not?

2. Why are people more comfortable with investing in “physical capital” rather than “human capital?”

3. How should you approach senior leaders when you want them to begin a change effort?

4. What is the difference between having an answer and true learning?

5. What is the relationship between team learning and individual learning?

6. Why has the change to learning organizations been hard for people?
It is a whole lot easier to talk about a “learning organization” than to create one. Peter M. Senge knew that even in 1990, when he introduced the concept to the business world in his landmark book *The Fifth Discipline: The Art and Practice of the Learning Organization* (Doubleday/Currency). But a decade of feverish effort on the part of Senge and his many disciples has shown the task to be considerably more formidable than he anticipated. The frustration shows in the subtitle of his latest book, *The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations* (Doubleday/Currency, 1999), co-authored with several colleagues.

*The Fifth Discipline* sold 650,000 copies, a home run by business-book standards, and catapulted Senge, director of the Center for Organizational Learning at the Massachusetts Institute of Technology’s Sloan School of Management, into the first rank of management gurus. In that book, he described the successful organization of the future as an “organism” with the developed capacity to continually enhance its capabilities and shape its own future. At its core, a learning organization is a company, association, church, school or government agency that understands itself as a complex, organic system. It has a conscious vision and purpose. It is aware of its feedback systems and alignment mechanisms, and deliberate about the way it uses them.

Throughout the 1990s, the learning organization has been a particular cause célèbre for trainers and organization development specialists, and not just because “learning” is in the name. Trainers also are attracted to Senge’s championship of human values in the workplace, to his view that teams are the core performance units in organizations, and to his insistence that leadership is something that occurs at many levels in an organization, not just in the executive suite. Indeed, he argues that line managers and even non-managers must function as leaders in order for any meaningful and lasting organizational change to occur.

At 51, Senge maintains his position at MIT, has a busy consulting practice, and is a member of the Society for Organizational Learning, a research group comprising both companies and individuals. But for all the action and energy around the idea of the learning organization, it remains a slippery concept to put into practice. TRAINING’s senior editor Ron Zemke caught up with Senge by phone.

**TRAINING:** What bottom-line results are you seeing that can be attributed to people putting your ideas to work in their organizations?

**SENGE:** You can never prove anything. You can do a million things right in an organization and then, through bad luck or due to conditions outside the organization, there is a business downturn. It’s like asking what’s the impact of all the technology an organization is investing in? No one can ever say. An organization is a complex system – and you never get to see what would have happened if you hadn’t made the change.

The difference between a technology investment and a learning-organization investment is that people are more comfortable investing in physical capital than in human capital. You can run a bunch of numbers on either investment, but they are always based on a lot of assumptions. They “prove” little. What we do is work to build long-term relationships within organizations to keep the process live over time. People aren’t stupid. They won’t keep doing things over a long period of time if they don’t think they are getting something out of it.
TRAINING: So how do you know if anything substantive has taken place as a result of an effort to turn a company into a learning organization?

SENGE: There are a lot of examples in *The Dance of Change* and in “The Learning History” [a series of case studies housed on the Society for Organizational Learning’s Web site: www.sol-ne.org]. We cite people who finish products a year early, people who have taken all kinds of time off [the process of building] a new manufacturing facility, sales organizations that have developed a radically different approach to working with their customers.

I was reading an article about Federal Express that talked about their consultative approach to sales and building relationships with customers. It’s based not just on selling, but jointly solving complex global logistics problems. That was a project we started at FedEx six years ago. Nobody talks about return on investment on a project like that. It’s just part of the way they do business.

TRAINING: How should someone who wants to begin a change effort go about getting senior management to take an interest?

SENGE: We tell them not to waste time on that. Everybody’s trying to convince other people to do things they don’t want to do. Convincing isn’t very effective. The way to engage people is to ask them what their issues are: What are they working on? Where are they stuck? Where are they solving the same problem over and over again? Then you help them reflect a little bit, and you go to work with them. People aren’t looking for new things they ought to do, they are looking for help with important issues.

TRAINING: You say a major key to the learning organization is systems thinking. People like Herbert Simon and Buckminster Fuller and Ken Bolding were talking about systems thinking in the 1960s, so the concept shouldn’t be entirely new to everyone in the business world. Conceptually, at least, don’t most people understand that things affect each other? Don’t they already know that their organizations are complex systems?

SENGE: There is a big difference between an idea and a capability. Reading an article about nuclear physics doesn’t make me a nuclear physicist. This is a problem we have in business all the time: People go off to a two- or three-day training program and think they can do something. The only thing you can do after two or three days of training is something trivial – by definition.

The issue is how to move from concept to capability. It’s been the death of many good ideas. The problem is that you and I have spent our whole lives being nonsystems thinkers. That’s not easy to change. But if you can shift your assumptions and really embrace systems thinking – the way you see yourself and the world around you – you begin to see that no one is ever in control. Organizations revolve around someone trying to be in control. Complex systems aren’t controllable. They can’t be figured out. Systems thinking is a radical shift, and it can’t be brought about by rational analytical tools.

That’s why we talk about the five disciplines. You have to master the disciplines if you are going to be open to the idea of complexity and real systems insights. You’ll spend a lifetime working at it. It’s hard to accept that we don’t have control of the systems we’re part of. Control is only possible with machines. Control is not possible with human beings and living systems.

TRAINING: Yet the defining business icon of the ‘90s has been the heroic CEO who sits astride a giant corporation – a huge system – and steers it brilliantly along the course he chooses. Michael Eisner at Disney, Jack Welch at GE, Bill
Gates at Microsoft, John Reed at CitiCorp, Mike Armstrong at AT&T… the list goes on and on. Are you suggesting these people aren’t really very important to the success of the companies they run?

SENGE: I’m not saying they’re not important. There is a big difference between saying that GE’s success is not due entirely to Jack Welch and saying that Jack Welch doesn’t matter. But the fact is, much of the renown these CEOs have gained is an artifact of the media. It’s hard for *The Wall Street Journal* to write a story about General Electric; it would be a story about thousands of people doing thousands of things. But it’s easy to write a story about Jack Welch. The business media is addicted to this cult of the hero leader. Leo Tolstoy had an incisive critique about 150 years ago in *War and Peace*. He said that we don’t have any idea how to talk about the forces of history, so instead we talk about a few individuals and pretend this is an explanation.

It is more helpful to talk about leadership communities. There are three different types of leaders in such a community. Executive leaders are one, and they do matter. But they matter in ways that aren’t treated very well in the public discussions. They are designers and mentors. They’re ultimately responsible for the climate or the overall environment.

The most important leaders are line leaders – local managers who decide how people spend their time and whether or not innovations really get integrated into the business. CEOs make speeches and reorganize, but they have little impact on the day-to-day operation in any kind of business. That’s why you see so many reorganizations. It’s one of the few things a CEO can do.

The third type of leader is hard for most people to understand. We’ve called them networkers – people who spread new ideas.

TRAINING: Line managers – the second type of leaders you mention – are deluged with ideas about how to run or how to change an enterprise. How do they sort out all the possible things they might act on? How do they decide what to do?

SENGE: The real question is, Are people serious enough to start to develop their own capability? If they’re looking for an answer, they should go find a consultant who will sell them an answer. And they’ll get another answer next year, and another answer the year after that. Or, they can start to think that there are some deeper issues that are causing problems for them – problems caused because of how they think and how they interact with people. They can start thinking about things at that deeper level and then start to make some headway. But managers are under pressure for quick fixes: “Tell me three things I need to do!” And there will always be someone out there to sell it to them. Oscar Wilde put it very well: For every complex question there is a simple answer, and it’s wrong.

TRAINING: So trying to line up the variables that may be influencing a situation, and sorting them out rationally or logically or statistically – that sort of thing doesn’t help?

SENGE: What I mean is that you can’t fight complexity with complexity. You have to fight it with learning, with know-how. Take something simple you know how to do, like walking. Write down three steps to explain walking. You can’t do it. Michael Polany, the famous philosopher, had a wonderful line about this kind of personal knowledge: “We know far more than we can ever tell.” That’s the essence of personal knowledge, of human know-how – it can’t be reduced to simple how-to answers and steps.
Learning occurs when people engage in complicated undertakings and find a way to reflect on how they’re doing it – and perhaps engage a coach or mentor who has some tools and methods for learning. Those tools are different from answers. Answers are for lazy people who don’t want to learn how to use a thinking method to learn how to deal with a practical problem. I have zero respect for trying to find an “answer.” There is a profound difference between having an answer and having an approach you can use to deal with a complicated and difficult practical problem.

TRAINING: People seem confused by the difference between organizational learning and personal learning. Some even seem to talk “learning organization” to mean that people in an organization should go to a lot of classes. Can you clarify?

SENGE: Some people have embraced the cause or organizational learning because it is a great excuse to increase their training budgets. But the fundamental learning unit in any organization is a team, not an individual. The basic premise has always been that when we are talking about organizational knowledge, skills and capabilities, they are embedded in working teams. Otherwise, they don’t exist.

A working team, of course, could be a management team, or it could be a product-development team, or a sales team. Whenever a group of people really need one another to get something done, it’s a team. There has to be a need for a synergistic outcome for the team to exist.

Knowledge generation, I feel, primarily occurs in working teams. Individual learning is a byproduct of what goes on in really innovative teams. But individual learning is not the goal. In fact, if it becomes the goal, you are in big trouble.

Now, obviously, the group can’t have any skills if some of the individuals don’t have any skills. But it does not follow that if an individual or individuals are skilled, then the group will be good. The team is the cornerstone of the learning organization. What really matters is how people make decisions and take action – how the team thinks and acts together.

TRAINING: What have you learned in the last 10 years about the challenge of bringing the idea of the learning organization into reality?

SENGE: The first think that comes to mind is the matter of perspective. These are times of extraordinary cross-currents and countering forces. One of the most sobering things we’ve seen is that teams that really accomplish things within a larger organization are at the most risk. The more they accomplish, the more they seem to be working against the immune system of the organization. If you are successful, you aren’t necessarily going to be loved. People won’t necessary say, “That’s wonderful! Teach us!”

Challenging people’s deepest assumptions makes their lives miserable and puts them under stress. This does not make people open to fundamentally new ideas. It makes them defensive – closed.

So, practically speaking, my advice is, you can’t go it alone. Find your real colleagues, your natural network of like-minded individuals. The biggest challenge, though, remains the diffusion process: getting ideas and information out on a large scale. These ideas are so threatening that diffusion is difficult. We’re finding again and again that the guiding principle is that significant innovations must be diffused through informal, self-organizing networks, through horizontal communities of practice. How you strengthen
these communities is the key to how you disseminate innovation and maintain the innovators.

The Big Five

What, exactly, is a learning organization? In his 1990 blockbuster The Fifth Discipline, Peter Senge defined it as one “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.” He proposed that the building blocks of such an enterprise are five “disciplines” that must be mastered by the people in the organization.

1. **Systems Thinking**. This is the “fifth discipline” of the book’s title, singled out because it underlies the other four. It is a learnable, habitual thinking process that allows one to look at events in an organization – or life – and see the patterns of complex interrelationships. With conceptual tendrils stretching from environmentalism to Zen philosophy, systems thinking takes the doctrine of the interconnectedness of everything and brings it to bear on organizational life.

2. **Personal Mastery**. This is the discipline of continually clarifying and deepening one’s personal vision of what could or should be, and remaining clear about how that vision differs from reality. The disparity should cause a “creative tension” that motivates us to change. Meditation or other contemplative methods can be used to tap into one’s subconscious to develop clarity of vision.

3. **Mental Models**. Mental models are deeply ingrained assumptions, generalizations or images that influence how we understand the world and how we choose to respond to various situations we face. We all have mental models. The “discipline” is to understand and clarify them, and to distinguish between those we espouse and the ones we actually use to guide our actions – our “theories-in-practice.” Unearthing our own internal pictures of how things work allows us to challenge and modify those mental models. It also helps us understand and appreciate the thinking of others.

4. **Shared Vision**. Better understood as a group competency than an individual skill—this is the practice of developing a vision for a team or an organization. It has to do with discovering a shared picture of the future that will foster genuine commitment and enrollment rather than just compliance.

5. **Team Learning**. The key to this discipline is a phenomenon called “dialogue,” in which members of a team suspend their assumptions and take up a “think together” mode that embraces the collective good and eschews individual self-interest.