The Fifth Discipline

The Art and Practice of the Learning Organization

Peter M. Senge, Massachusetts Institute of Technology

Leader-*full* Organizations!

Change. Like it or not, it's the predominant fact of our age. Patricia Fahey, lead trainer for the 1995 Head Start Phase III management training institute said, **"Shift Happens!"** None of us can prevent it. We can only deal with it.

That institute drew heavily on the work of MIT's Peter M. Senge of the Sloan School of Management and his 1994 book *The Fifth Discipline: The Art and Practice of The Learning Organization.* Senge's five key disciplines are **1**) systems thinking, **2**) achieving personal mastery, **3**) shifting mental models, **4**) building shared vision, and **5**) team learning. Senge says that the five disciplines' convergence creates new waves of experimentation and advancement—and, hopefully, *"learning organizations"* in which "people continually expand their capacity to create the results they truly desire."

The training program focused on helping create or enhance agency environments that engage "systems-thinking," challenge our self-limiting "mental models," fos-

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The Art & Practice of
The Learning Organization

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Learning...*and Staying Calm!*

Our traditional ways of thinking are breaking down" says Peter Senge. That's why we're seeing Washington, D.C., "gridlock," the demise of huge corporations, and the crisis in our schools, he says. Having been taught to break problems down and see things laterally and sequentially, we've lost a sense of **the whole.** And when we try to gather the pieces we've created and see the "big picture," it's futile. "It's similar to trying to reassemble the fragments of a broken mind to see a true reflection," he says.

We must learn to think, interact and see the connectedness of all things in new and different ways. Before we can re-think and re-design, though, we must *see* things differently. Everything we "see" and "know" is filtered through our internal structures Senge calls "mental models." We accept the things that "fit" our preconceived notions of right/wrong, good/bad. Anything that doesn't fit, we just do not see and accept. Senge reminds us of the adage, "The eye cannot see the eye." So, we must learn to see new things

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MANAGING CHANGE—Changing Management

Background on This AACS Publication

Regional Head Start Institute on Learning to Master Change

Head Start today needs high-functioning management teams able to respond quickly and appropriately in an environment of rapid change. "To meet the challenge of rapid expansion, reduced funding, and/or federal policy changes such as welfare reform or block grants, management teams need training of a particular kind: *not* training that will give them the answers to the many and different problems they face, but training that will *build their capacity* to develop their own answers."

"That is the purpose of the training.... *It builds on the in-depth knowledge of management and leadership innovation and seeks to create for teams a 'new lens' that will allow you to see how leadership can help turn challenges into opportunities.* Head Start may have been able to operate effectively under the direction of *managers*, but in the turbulent atmo-

*Inter*dependency Rules and "Wins the Day"

Ours is a highly individualistic culture. In our minds and myths the ideal of the solitary hero facing every challenge and virtually single handedly conquering every frontier dominates our self-perceptions as a people. In reality, we are the product of one great mass movement after another. We are, in fact, almost totally *inter*dependent, not "independent." So are all of our social and economic systems.

Peter Senge teaches us about an MIT market-example simulation called *the beer game.* Like most human systems, that "system" was larger than what was local. The players in that system created their own "crises"—which is typically what people do. They did not consider the "law of unintended consequences." Like most of us, when things seemed to go awry they thought only to do something that had worked for them in the past. When that strategy did not work as expected they only did the same thing again, but more aggressively. Things then got only worse. The reason: *They failed to understand the system in which they operate and then to act "sensibly."* Specifically, they failed to understand the interdependencies within their system and act considerately and patiently.

There weren't any villains, but they blamed each other for the *self-created instabilities* in their "system." Their emotional reactions created "panic" and worsened conditions.

Regardless of where we wish to consider our "place"—in an organization, a family, a community, a nation—we are part of a human system. Peter Senge points out that the nature of these systems is subtle *because we are part of the structure*— and as "the eye can't see the eye"—we're just too close to easily get a proper perspective.

Players in our systems—all of us—look for heroes and when things go wrong, culprits—someone to blame. It's a "kneejerk" reaction—we look for some*one* to fault...and we get upset! Instead, we should look to understand the way the structure of human systems influences our behavior.

Peter Senge lists three lessons for us:

♦ *Structure influences behavior.* "Different people in the same structure tend to produce qualitatively similar results." "...More often than we realize, *systems cause their own crises,* not external forces or individuals' mistakes."

♦ *Structure in human systems is subtle.* "...Structure in complex living systems (as in the human body) means the basic interrelationships that control behavior." It includes *how* we make decisions, including how we "translate perceptions, goals, rules, norms into actions."

♦ *Leverage often comes from new ways of thinking.* Our tendency is to focus on our own actions and ignore how those affect others. They create extreme instability because they don't understand how they are creating the instability in the first place.

So "refine your scope of influence:" How? Be deliberate. *Be a calming influence.*

We must work to see and understand the "systemic structure." That, Senge says, is the "underlying *patterns of interdependency*."

As in the "beer game," if everyone in the system is experiencing virtually the same problem, they *must* have something else in common. And that is the nature of the system itself. The failure to recognize these *systems* in which we function is what tends to make us so often feel like "victims."

The interesting thing about the **patterns of interdependency** is that we tend to be relatively unaware of them. We like to tell ourselves the fables of our independence. It just isn't so. Senge demonstrates his point with the example of the automobile, which he describes as one of our "prototypical example of independence." But contrary to the mythical image, we literally place our lives in the hands of strangers when we drive our automobiles. Our roads are "an extraordinarily *inter*dependent system" which we only realize, it seems, when there is an accident.

"We live our lives in webs of interdependence," says Peter Senge. We must "unlayer" our *mental models* about life, work and society. Eventually we must come to realize the "larger systemic set of forces" rather than blaming *someone* or *something* before we can benefit from systems thinking.

Correcting our problems have mostly to do with **understanding how the world works** and **how we work.** We must begin to think in terms of "how our own actions might be creating our own reality."

A Shift of Mind—Seeing the World Anew: *Whole!*

Systems thinking is the most direly needed discipline in today's complex, often overwhelming, seemingly out-of-control world. Our fragmented, linear, cause-effect, culprit-focused approaches to dealing with contemporary life and its institutions are not working—at least not very well.

"Systems thinking is a discipline for seeing wholes. It's a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static 'snapshots'," says Peter Senge, author of *The Fifth Discipline.* This statement and the previous two segments of this paper simply help set a stage for changing our mind set and helping us, as Senge describes it, "seeing the world anew." He asserts that so much of "the unhealthiness in our world today is in direct proportion to our inability to see it as a whole."

To correct that—even in our little corner of the world—we must develop a sensibility for the "subtle interconnectedness that gives living systems their unique character," he says.

So why do we attempt to solve every problem by breaking it down into unconnected parts and attempt to rebuild each one independently then re-create a new whole? Senge says the roots of this approach lie in our culture—in "linear" Western language and the mind set of the Industrial Age.

But today, things are more "complex" than our ability to comprehend, much less solve. Why? Senge says there are two kinds of complexity, and Western man is good at one, but poor at the other.

The first kind of complexity is *detail complexity*. This is linear, sequential, cause-and-effect, "snapshot" kind of detail. It's like having all the parts and a clear understanding of how to assemble them into, say, a bicycle. It may be a challenge, but we're very good at this kind of detail complexity. The second kind of complexity is *dynamic complexity*. This is more about "process" than tangible product. Its "cause and effect" are subtle at best—and often obscure or totally hidden to us. Its "structures" are the patterns of interrelationships that recur—again and again, but the appropriate interventions are not obvious to us. We're usually not very good with **dynamic** complexity.

Instead of "linear" language in its written form, the *real/ leverage* thinking, as in our dealing with dynamic complexity, says Senge, comes from looking for "circles of causality." This comes from understanding three crucial variables in every "system": 1) *Reinforcing* or **amplifying feedback**, 2) *balancing* or **stabilizing feedback**, and 3) **delay**.

Reinforcing feedback is both the "engine of growth" and the agent of decline—as in the "snowball effect." With reinforcing feedback, "momentum is everything," regardless of its forward/backward, up/down direction.

Balancing feedback is the force—whether pedal or brake—behind all goal-oriented behavior. Life as we know it is a "balancing process." These processes—except for obvious resistance—are difficult to see, so it often looks like nothing is happening when they are at work, whereas reinforcing processes are usually obvious.

The third factor in circles of causality is delay. "Systems seem to have a mind of their own," Senge says. We don't like impediments when we want something done, so as in the "beer game" we've already reviewed, we just do more of what we "know" to do and do it more aggressively. We then expect sure results, but they don't come. In fact, matters usually get worse the more we "proact."

We've already discussed in this series the importance and virtue of **patience!** It's a lesson we cannot learn too well. Senge says that we are in a dynamically complex environment "when the effect of one variable on another takes time." Failure to recognize systemic delays simply produce "overshoot," and thereby, instability and ultimate breakdown. Senge offers this advice: "Things do happen... *eventually*." He concludes: The systems viewpoint is generally oriented toward the long-term view. That's why delays and feedback loops are so important. In the short term, you can often ignore them; they're inconsequential. They only come back to haunt you in the long term.

Reinforcing feedback, balancing feedback, and delays are all fairly simple. They come into their own as building blocks for the "systems archetypes"—more elaborate structures that recur in our personal and work lives again and again.

We are now preparing to move from the "introductory" to the meat of Senge's "Fifth Discipline" thinking. But before we do let's stop and cover what he terms *"The Laws of the Fifth Discipline:"*

1. **Today's problems come from yesterday's "solutions."**

Bibliography

The Fifth Discipline: The Art & Practice of The Learning Organization by Peter M. Senge (1990, Currency Doubleday, New York, publisher); *$18.50* (soft cover)

The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization by Peter M. Senge, Art Kleiner, Charlotte Roberts, Richard B. Ross, and Bryan J. Smith (1994, Currency Doubleday, New York, publisher); *$29.95*

The Fifth Discipline: The Art and Practice of The Learning Organization by Peter M. Senge, four tape audio adaptation of the book—featuring the author (1994, Bantam Doubleday Dell Audio Publishing, New York); *$22.00*

Learning Organizations: Developing Cultures for Tomorrow's Workplace edited by Sarita Chawla and John Renesch, featuring Peter Senge, Fred Kofman, Rosabeth Moss Kanter, Charles Handy, and others (1995, Productivity Press, Portland, Oregon, publisher); *$35.00*

Personal Mastery: Getting What We *Really* Want

The active force in any organization is people. All other resources are just tools. "Organizations learn only through individuals who learn," says Peter Senge. He and his legions assert that we must rethink our corporate philosophies to ensure that we tap the "vast, untapped resource" of our people—the make or break variable of our enterprise. Managers must, he says, "give up 'the old dogma of planning organizing and controlling,' and *realize 'the almost sacredness of their responsibility for the lives of so many people.' "*

This philosophy, if engaged, could go far in uprooting the anxiety felt by so many American workers in this age of "downsizing," "out-soucing," and other "unfriendly" corporate practices.

But workers too have new-found responsibilities: *They must continually attend to their own personal growth and development.* Therein lies their job security and the future of their corporate enterprise. It's about "personal mastery"—the total development of their people.

Peter Senge describes personal mastery as "approaching one's life as a creative work"—"living life from a creative, as opposed to a reactive viewpoint." This involves two "movements": **1)** clarifying what is important to us, and **2)** learning to see current reality more clearly—and more honestly and directly.

Before we go too deeply, let's pause and be sure of what Senge is saying personal mastery is. It is *not* dominance—as over people or things. But is can be a special level of proficiency—as demonstrated by a master craftsman who *coaxes* a work of art from the materials he has at hand.

Senge identifies several characteristics of those achieving personal mastery. These persons have the following:

1. A special sense of purpose that lies behind their visions and goals. Their vision is "a calling," not just a good idea.
2. An inquisitive and committed nature.
3. An ability to see reality more accurately.
4. A sense of connectedness to life, to others and to larger creative processes, which they can influence but not unilaterally control.

These people "live in a continual learning mode. They never arrive." Senge says that personal mastery is *a process* "the journey is the reward"—a life-long discipline. Perhaps paradoxically, people with a high level of personal mastery are also acutely aware of their ignorance, their incompetence, their growth areas—and yet they are deeply self-confident.

How does one achieve their personal mastery, this personal fulfillment? Can we **give** this to people? Can we force it

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on them? No! The desire for personal mastery—as with all true motivation—stems from within each individual. So in an organizational context this is often problematic, for it depends on *each person's personal vision* and his/her own freedom of choice. Organizations do not create visions. **People** create visions. And "visions" don't become compelling until people are truly committed to them. The only thing leaders and managers can do is **1)** be committed to their vision, **2)** see reality as objectively as possible—and the bad news as well , **3)** be open and understanding—not get angry—when others don't share their vision. In this way, one can hope to inspire others to share his vision. "Being around people who have a vision will inspire others, **or it won't.** Ultimately, there is nothing you can do to cause it to happen, but you can increase the odds," Senge says.

Still, organizations must encourage their people's visions, their own deeply held visions. What is a vision anyway? Senge says, "Vision is simply an answer to the questions, *What do I truly want? What is it that really matters to me? What is it that I would truly like to be part of creating?*"

Why must we encourage them? Doesn't everyone have a vision? Actually, no. Senge says most adults have little sense of real vision. They may have goals and objectives, but when asked what they really want through those, they will usually explain what they "want to get rid of." "These are **negative** visions," says Senge. Why? Because we are all the products of "a lifetime of fitting in, of coping, of problem solving." Senge says that a teenager in one of his programs said "grown ups" should really be called "given ups," for that's what their lives' experiences have forced most of them to do.

One's vision is *their* vision simply because it is—despite any and all odds or contrary indications in "real life." And that's precisely what we need people to have and hold dear. Robert Frost once said, "All things are created for their own sake." Senge tells us, *"Organizations will not have visions until individuals have visions."* So let us each and every one ask ourselves and determine the answer to the question, "What is it that I truly want to create in my life?" He encourages a shift from focusing on "realistic goals" (like we've been taught) to focusing on our "genuine visions."

Where does this shift begin? The "bedrock" is caring—that is, that which we *deeply* care about. Vision is more than a sense of "purpose". Purpose is directional, "a general heading." Vision is a specific destination." "Vision is intrinsic, not relative." Purpose can draw one further along and compel one to see a new vision. Accordingly, "personal mastery **must** be a discipline," Senge says. "It is a process of continually focusing and refocusing on what one truly wants, on one's visions."

Vision is the "sexy" part of the discipline of personal mastery. The challenging part is the capacity to see current reality objectively. The integration of the two, "vision" and "current reality," inevitably produces *the principal of creative tension.* Creative tension existswhen there is a gap between what we really want to create—our vision—and what exists today, the current reality.

Creative tension is not the same as "emotional tension."
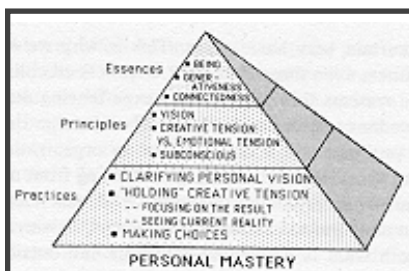
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Shared Visions: Powered By a Common Caring

Shared visions, while held in common, are **not commonplace**. But Peter Senge says that shared visions are the required second discipline for organizations to be truly effective today. And its prerequisite is personal mastery, or *personal vision, as we discussed last month.*

According to Senge, when a vision is shared:

❖ *People have a **similar picture** of the vision—it reflects their own personal vision.*

❖ *People are "**committed** to one another" having that vision.*

❖ *People are "**connected**, bound together by a common aspiration,"* as well as to "an important undertaking."

❖ People are **excited**. Their vision is powered by a common deep **caring.**

❖ **It is growing**—providing the "focus and energy for *generative* learning" and "expanding your ability to create."

❖ It may be *ex*trinsic, that is, focused on a competitor or "territory," or *in*trinsic, focused on inner standards of experience; or a combination of both. Both types can coexist.

A "shared vision" is—must be— **compelling**, or it's not likely to be either **shared** or possess any of the other characteristics, Senge mentions. Beyond that, it's hard to specify exactly what such a vision might be. Kazuo Inamori of the Kyocera Company perhaps explains it best when he says, "It's not what the vision is, but what it does." Senge says, "A shared vision, especially one that is intrinsic, uplifts people's aspirations."

Senge says further that shared visions:

◆ Change people's relationship with the enterprise—it's no longer "theirs," but *ours*.

◆ Allow those previously mistrusting to begin to work together.

◆ Create a commonplace image, identity, purpose, and set of operating values.

◆ Compel courage—and new ways of thinking and acting.

◆ Establish overarching goals.

◆ Foster risk-taking and experimentation.

◆ Foster long-term commitment.

These factors may speak to the great power of "an idea whose time has come." But Abraham Maslow once observed that *shared purpose and vision* were the most striking common characteristics of high performing teams. A Senge colleague, Robert Fritz, said, "In the presence of greatness, pettiness disappears." Senge's corollary is: "In the absence of a great dream, pettiness prevails." But in truth, a shared vision is not just "an idea," but "a force in people's hearts."

BUILDING SHARED VISION
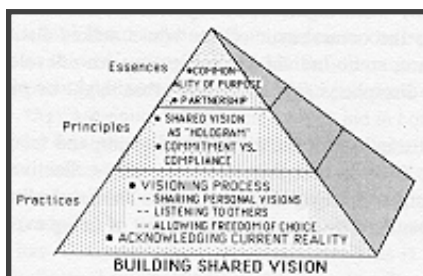
But force needs direction. Peter Senge warns that in the highly complex real world, we must still see both "the forest" and "the trees." We must be able to resolve the problem of complexity, see through it, and organize it into a "coherent story that illuminates the causes of problems and how they can be remedied in enduring ways." He continues, "What we need most are ways to know what is important and what is not important, what variable to focus on and which to pay less 'attention' to—and we need ways to do this which can help groups and teams develop shared understanding."

Many enterprises resort to "strategic planning" to achieve these ends. But Senge also warns that this is no panacea. Why the cautionary note? Because those efforts tend to:

◆ Be reactive and short term in their focus.

◆ Reveal more about today's problems than tomorrow's opportunities.

◆ Emphasize extensive analyses of current *"W-O-T-S,"* competitors, niches, and resources.

◆ Lack "a goal worthy of commitment."

◆ Fail to "nurture genuine vision."

◆ Be top-down or outside-in.

◆ Function like "blinders" to continually new and emerging needs, dangers, and opportunities.

"The plan" will not energize us. From 1987-92, GE nearly lost out as a result of its Strategic Plan. Meanwhile, its foreign competition beat their socks off. Strategic Thinking Consultant Dr. William Corley says that strategic planning is "a skeleton unconnected by muscle, ligaments—worse, it has no heart. It lacks the ability to marshall energy for the 'last kick'." "There are two fundamental sources of energy that can motivate an organization," says Senge: **fear** and **aspiration**. Aspiration drives **positive** visions and is a "continuing source of learning and growth."

Shared visions are a powerful source for that energy. But how do we achieve it? It's more than mere can-do optimism, which Senge refers to as a "thin veneer over a fundamentally reactive view."

People are so used to top-down "marching orders." But Senge says leaders must give up that approach. *Leaders'* visions are just their *personal* visions, **not** "automatically" the organization's vision. It's fine—even important!—for leaders to share their vision, just don't impose them. Leaders should share their visions, and then ask, "Will you follow me?" **Build on people's personal visions,** says Senge. "Official visions" fail to foster energy, commitment, or passion.

Building shared vision results from "a course of action that transcends and unifies all our individual visions"—and even allows multiple visions to exist. Building shared vision is "a central element of the daily work of leaders. "As one CEO said it, "My job, fundamentally, is **listening** to what the organization is trying to say and then making sure that it is forcefully articulated." Senge later refers to "the *art* of visionary leadership."

Mental Models: "The Patterns That Control Events"

Peter Senge wrote a chapter in his book, ***The Fifth Discipline,*** which he entitled "Nature's Templates: Identifying the patterns that control events." He told of a canoer who, having gone over a dam, had capsized and gotten trapped in a backwash at the foot of the dam. He fought the swirl and eventually lost his life. But, Senge said, had the canoer instead dived down to where the current flowed downstream, he would have survived. His only way out was "counter intuitive." This, says Senge, illustrates the essence of the systems perspective: *Structures of which we are unaware hold us prisoner.*

We are bound by these "templates," these structures to react and behave in certain predictable and "intuitive" ways. Like *déjà vu*, though events and circumstances may change, we re-live these experiences over and over again—because we're programmed that way.

Senge advocates reconditioning our perspectives—which he calls "mental models"—so that we are made able to *see* these "structures" at play and understand the *leverage* (a concept introduced in the "Shared Vision" segment) in those structures. He cites two "systems archetypes" that recur frequently and which are "stepping stones to understanding other archetypes and more complex situations:

■*Archetype 1*—**Limits to growth**... "a reinforcing (amplifying) process set in motion to produce a desired result."

■*Archetype 2*—**Shifting the burden**... which concerns our predilection for "easy fixes" over *systems* solutions—addressing "symptoms" rather than underlying systemic causes.

With ***Archetype 1,*** Senge says, "Don't *push* growth; remove the factors limiting growth." Criticize less; find a solution, not a culprit. Identify the reinforcing spirals—both upward and downward spirals, then seek to understand and *use* the "structure" and its *patterns* of behavior. That's what Senge means by achieving *leverage—"the bottom line of systems thinking, seeing where actions and changes in structures could lead to significant, enduring improvements."* Most people push too hard— they attempt to "reinforce the loop." "The worst thing you can do is push hard on the reinforcing process." Senge says "Leverage lies in the balancing loop— not the reinforcing loop. To change the behavior of the system, you must identify and change the limiting factor."

In ***Archetype 2,*** "Beware the symptomatic solution. Solutions that address only the symptom of a problem, not the fundamental causes, tend to have short-term benefits at best," Senge writes. Continuation of a symptomatic approach can

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also cause even our capability for "fundamental solutions" to *atrophy,* he says. "Shifting the burden ... entails *two* balancing (stabilizing) processes. Both are trying to adjust or correct the same problem." The result is only temporary symptomatic relief but, usually, also an amplification of the fundamental problem created by unintended "side effects" of the "symptomatic *solution.*" One such side effect is an increasing reliance on symptomatic or "maintenance" efforts over those which are preventative or corrective.

Senge likens the pattern of this behavior to drinking: *It relieves the problem symptom, gives the person the feeling of having "solved the problem," diverts their attention from the fundamental problem, but simply causes the underlying causes and pressures to worsen.* And as an alcoholic's's health degenerates, his/her self-confidence and judgement atrophies, he/she are less and less able to solve their original problem, notes Senge.

So where is the leverage with this archetype? It must begin with *a sense of shared vision* and *a long-term orientation.* It requires a "willingness to tell the truth about palliatives and 'looking good' solutions." Senge says the Alcoholics Anonymous approach is relevant here: *"They insist that people face their addiction on one hand, while offering support groups and training to help them rehabilitate on the other."* Here, "the symptomatic solution can no longer function in secret."

These two mental model archetypes are but two of many. By studying and using them, though, "we start to *see* more and more of the circles of causality that surround our daily activity."

Whether concerning family, community, business, or any other entity, we do not carry "an organization" in our minds, says Senge. Instead, "What we carry in our heads are images, assumptions, and stories"—*and deeply held internal images of how the world works.*

Senge terms them *Mental Models.* Joel Arthur Barker, building on the work of Thomas Kuhn, popularized the same concept as "paradigms." The "internal images" we hold dear "affect what we *can* see"—for humans "observe selectively," "limit our thinking to what's familiar," "share our perceptions," and "they shape how we act." "Einstein understood this when he said, "Our theories determine what we measure." And Senge states emphatically, "Failure to appreciate mental models has undermined many efforts to foster systems thinking." All too often we simply refuse to run counter to the "conventional wisdom"—which all too often turns out to be *un*true!

"There is more than just intellectual insight that is involved in learning," says Senge. "At a deeper level it is our mostbasic assumptions and our way of putting the information together that is the greatest source of limitation."

"Mental models are very, very powerful. They shape the way we organize information. They don't determine what information we have, they determine the sense we make of information." When organizations get imbalanced and ultimately fail, so often it's because the right information can't "get through" their mental models and their strategies don't

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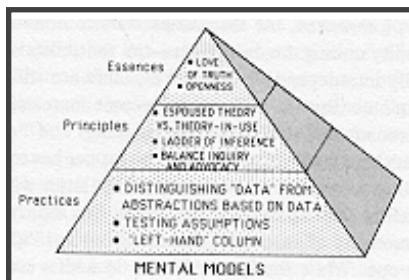
Team Learning: *Practice Makes Perfect*

The Boston Celtics, according to star player—and in 1968-69, its coach—Bill Russell, were a prime example of **team learning**. Peter Senge related this account in his book, *The Fifth Discipline:*

"By design and by talent," wrote basketball player Bill Russell (in his 1979 book, *Second Wind*) of his team, the Boston Celtics. "[We] were a team of specialists, and like a team of specialists in any field, our performance depended both on individual excellence and on how well we worked together. None of us had to strain to understand that we had to complement each others' specialties; it was simply a fact, and we all tried to figure out ways to make our combination more effective... Off the court, most of us were oddballs by society's standards—not the kind of people who blend in with others or who tailor their personalities to match what's expected of them."

Russell is careful to tell us that it's not friendship, it's a different kind of team relationship that made his team's work special. That relationship, more than any individual triumph, gave him his greatest moments in the sport: "Every so often a Celtic game would heat up so that it became more than a physical or even mental game," he wrote, "and would be magical. The feeling is difficult to describe, and I certainly never talked about it when I was playing. When it happened I could feel my play rise to a new level...it would surround not only me and the other Celtics but also the players on the other team, and even the referees...At that special level, all sorts of odd things happened. The game would move so fast that every fake, cut, and pass would be surprising, and yet nothing could surprise me. It was almost as if we were playing in slow motion. During those spells, I could almost sense how the next play would develop and where the next shot would be taken...To me, the key was that *both* teams had to be playing at their peaks, and they had to be competitive...."

Russell's Celtics (winner of eleven world championships in thirteen years) demonstrate a phenomenon we have come to call **"alignment"**— when a group of people function as a whole. In most teams, the energies of individual members work at cross purposes.

Senge explains why the element of team "alignment" is so crucial... "The fundamental characteristic of the relatively unaligned team is wasted energy. Individuals may work extraordinarily hard, but their efforts do not efficiently translate to team effort. By contrast, when a team becomes more aligned, a commonality of direction emerges, and individuals' energies harmonize. There is less wasted energy. In fact, a resonance

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or synergy develops, like the "coherent" light of a laser rather than the incoherent and scattered light of a light bulb. There is commonality of purpose, a shared vision, and understanding of how to complement one another's efforts. Individuals do not sacrifice their personal interests to the larger team vision; rather, the shared vision becomes an extension of their personal visions. In fact, alignment is the *necessary condition* before empowering the individual will empower the whole team. Empowering the individual when there is a relatively low level of alignment worsens the chaos and makes managing the team even more difficult."

"Team learning is the process, the process of aligning and developing the capacity of a team to create the results its members truly desire," says Senge. It builds on the other disciplines we have reviewed thus far—shared vision, personal mastery, mental models (uncovering those hidden images and assumptions which drive us).

"Shared vision and talent are not enough" to ensure success, Senge asserts. "The world is full of teams made up of talented individuals who share a vision for a while, yet fail to learn." Senge's analogy for the desired team model is the great jazz ensemble: *It has talent and shared vision, but what matters is that the musicians know how to play together!"*

"There has never been a greater need for mastering team learning in organizations than there is today," he says. "People who need one another to act are becoming the *key learning unit* in organizations." According to Senge, team learning has three critical dimensions:

1. The need to think insightfully about complex issues.
2. The need for innovative, coordinated action.
3. The role of other team members on other teams.

"None of us is as smart as all of us," the saying goes. Team learning is about tapping the potential of many minds.

Championship teams act in spontaneous, seemingly "uncoordinated" ways. There is a *deep operational trust* "where each team member remains conscious of other team members and can be counted on to act in ways that compliment each other's actions." Indeed, Senge defines a team as "those who need one another to act."

"A learning team continually fosters other learning teams," says Senge. It can begin anywhere in an organization, but it's important that it becomes *contagious* throughout the organization. Most of the results we expect, in an organizational context, are dependent on the success of many "teams" within the organization. *All* teams must continually be learning, growing, sharing, and *thinking*.

The whole team learning process starts, Senge says, with mastering the practices of dialogue and discussion. *Dialogue* involves the "free and creative exploration of complex and subtle issues, a deep listening to one another and suspending one's own views." *Discussion,* on the other hand, involves presenting and defending one's views and "there is a search for the best view of support decisions that must be made at this time." Both are "potentially complimentary," but success-
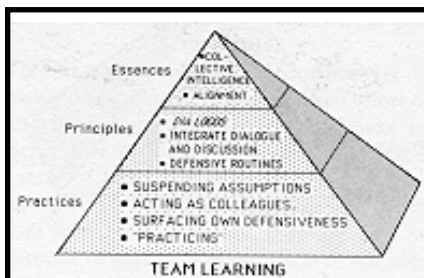
Building a Learning Organization: *Getting Started*

Peter M. Senge, the author of *The Fifth Discipline*, notes that people often ask him for examples of where the five disciplines are being put into practice. He says that he knows of no place where the five disciplines have become "fully integrated into an organization and how it operates." It's all rather new—a work in progress. And that's how it may well likely remain, for this is about *a journey*, not a be-all, solve-all, "endpoint," conclusion to every corporate problem. There is no panacea—and still no "free lunch."

Systems thinking involves a huge shift in idealism, perspective, and tools for managing an enterprise. The "systemic perspective" is one of *wholeness*—a radical departure from our Western tendency to break things apart, to fragmentation. It represents a massive shift in management tasks—focusing more on developing strategy, shaping visions, designing policy and organizational structures. It entails a more dynamic, non-linear "language," non-traditional approaches, and alternative, holistic ways of seeing the world. And it's perhaps risky. Being a "Paradigm Pioneer," to use a Joel Arthur Barker term, always is. But it's the *right* place to be as we move through the transformational "post-industrial" era.

Senge describes the first project, in 1992, undertaken by the MIT Learning Center (established in 1991) to do in-depth studies on how the five disciplines could become integrated into how people actually manage. That project involved the 900-member Ford engineering team developing the next generation Lincoln Continental. Applying the Senge principles and disciplines, the team achieved results previously unheard of at Ford—and comparable to those of the Malcolm Baldridge National Quality Award-winning Cadillac Seville team at GM.

But along the way, their Ford peers were proclaiming they were "out of control," "crazy," and risking their careers. These guys operated "outside the cultural norms." They were *open*—they actually talked about...their *problems*! But they were also enthused; they shared a vision; the creative tension was clear, and they were "a powerful example of how the disciplines can come together." As one described the outcome, "We are starting to demonstrate that you get hard results by all this crazy soft stuff." The previous Ford paradigm was that *hard-nosed* managers *commanded* results.

The first learning organization/systems thinking implementation challenge to overcome is, Senge says, "having some idea of how to get started." But there is no map or formula, just opportunities to learn. Fears? Problems? Sure. But Senge reminds us of the old saying in sailing. "There is only one condition under which you can't sail, and that's when there's no wind." Senge notes, though, that sailors don't learn to sail in any condition overnight. *They practice.* They learn to sail in "someplace safe." So, "adopt a learner's orientation;" "create a safe harbor;" *practice* dealing with things "in a domain where we have a chance of learning." And begin by seeking out "partners."

More than being a process which concerns *business*. The application of the five disciplines is better understood and approached as "a process of community building." And Senge says that his community-building advisor, Juanita Brown, says, "All real communities start when people find something that has heart and meaning to them and they start to come together and they start to say, 'What can we do?' "

Business is traditionally a transactional proposition—something exchanged for another, usually time/effort/creativity for monetary compensation. Communities on the other hand entail what people can *give* more than what they can get. People often voluntarily join communities because they want to contribute to something they care about.

So start asking the questions, Who cares about this or that enterprise? Who really cares about learning? Who cares about understanding deeper systemic causes and learning to create the world they really want to create—rather than just "quick-fixing" readily apparent problems.

Senge says that such questions inevitably draw people to start talking, then forming small groups and a shared understanding of their aspirations. "Basically you start wherever you can start," says Senge. "The principal is that the groups who can start to learn are the groups who have some *power to take action*" in some domain. "Learning is always about taking action...never just in our heads."

"You have to start to look around for where your partners are. This is not a spectator sport, it's a participant sport. This is not a sport you play by yourself, it is a sport you play as a team, so you have to find your local team." Together they start to learn. It's not a well-trodden path, but one they must learn while they walk it.

"The essence of becoming a learning organization involves redesigning the nature of the work itself so that while we are working we are learning," says Senge. He recounts the pertinent advice of Mark Twain who once said, "I never let my schooling get in the way of my education."

"We have to learn how to redesign how work works, so that work is about learning, or to put it slightly differently, work is about being us, about being human, about learning, about growing," says Senge. "So with that sort of principle in mind, we just start off and we start learning how to beat the path as we walk it. You don't need to start with all five disciplines; eventually, all five disciplines are important. You need to start where you start."

Senge likens this to a new interactive computer game his son got. There were 600 megabytes of data on the CD-ROM, but *no* instruction book, just a couple paragraphs of introduction which concluded, "Have fun. You will learn as you go."

That's the way this learning organization/systems thinking "game" is. "All the disciplines matter, but there is no formula for how to put them together. There is *no* formula...It's more or less like life," says Senge. But he does offer this advice: **"If you're not having fun, you're not doing the right thing. And if you're not learning as you go, you won't go too far."**

The people who truly care about this and who form relationships around it stay with it, he says. "Ultimately, no one

ter *visionary* and dynamic energy—and synergy, and strengthen the human capital which drives every organization's long-term success and viability.

That means empowering more people with decision making power—and responsibility, inviting broader input and ownership and focusing on shared visions—which are our consensus-driven outcomes. That calls for a management that works effectively to eliminate the barriers which prevent those outcomes from happening...and which engages all our personnel in *leadership* toward mutual goals.

Organizations must become *less* "rigid" and more like "living organisims." *Rigid structures break or come apart under stress; "living systems" flow around obstacles.* The model for this is demonstrated by flocks of geese flying south for the winter: As one "leader" tires, another, then another and another, moves up to take "the point."

Audubon Area has been a very successful, thinking organization—known for excellence for many years. The thing about "mental models"—also called "paradigms"—is that so often the very things that made you successful in the past blind you from what's needed for *future* success.

We learned of a General Sullivan who commanded U.S. occupation troops in Berlin following World War II. Sullivan said his greatest challenge was "to *change* the greatest fighting force in the world into the greatest fighting force in the world." General Sullivan knew that the world had changed and that a new and different kind of army was needed to *win the peace* than was needed to win the war.

The structures in today's thriving, vibrant organizations are horizontal, not vertical (pyramidal). And they are generally agile, adaptable, accountable, and *leader-full*—not dependent on top-down "control" or charismatic "chieftains." In addition—to use a favorite Aubrey Nehring term, they are "eclectric." That is, they select and use the best ideas, elements, practices, resources and so forth from all available sources; they favor no one in particular. They are responsive to change—and the Japanese *Kaizen* ("continuous improvement") ideal: *"If it ain't broke..., fix it anyway!"* Everything can *always* be improved, made better!

Everyone is accountable in the leader-*full,* visionary, eclectric, functional, learning organization. Peter Block said it this way: "Accountability means to carry the welfare of the organization in your hands." No matter who you are or where you are in the organization, *you are responsible* for the entire organization!

Everyone owns the enterprise! And change? Everyone owns that responsibility as well. All of us are here today because our forebears were *adaptive* and able to master change. We've all got that faculty built into us—over thousands of generations of human experience and mastery of our environment. Why then do people resist change? Do they really? James Kim said, "People don't mind change—they mind *being changed!*"

Part of the Head Start Phase III Institute's purpose was to begin the change process in each organization repre-

sented there. Each agency chose one goal area. A considerable amount of the thirty-hour institute was devoted to formulating plans and actions toward achieving that goal.

Staff are going to be hearing, reading, *and doing* a lot about that in the months and years ahead. We must be nimble, adaptive, and **outcome focused**.

We will be working to implement and make resonant throughtout the organization the kinds of change strategies and support systems identified by Edward Deevy in his 1995 book, *Creating the Resilient Organization:*

■ Create catharsis to help employees unload some of their emotional baggage.

■ Provide evidence of why the change needs to occur.

■ Share "business information" with staff.

■ Treat employees like entrepreneurs.

■ Keep focused on the big picture.

■ Make the "customer" the focal point of process activity.

■ Reinvent your infrastructure as changes are made.

■ Make sure that center managers or other middle managers are on board with the change.

■ Identify the most likely supporters and resistors early on in the process.

■ Communicate that there is no going back.

In addition to the internal change-management strategies sketched out above, the Audubon participants in the institute committed to explaining and utilizing all appropriate means to share what they learned in Atlanta with their Head Start colleagues and sister programs around Kentucky.

The November 27-December 1 change management institute in Atlanta taught some 120 Head Start leaders in Region IV how to manage change effectively. The trainees came from the ACF Regional Office and from "top-functioning grantee" staff—one agency from each of the eight Southeast Region States. The AACS proudly represented Kentucky. In addition to Ms. Fahey, a principle curriculum author for the program, the trainers for the week-long institute included Roscoe Adams, retired from IBM; Elizabeth Taylor, formerly with ACF and the Centers for Disease Control, Atlanta; and Bob Mason, trainer with the Western Kentucky University TASK (T/TAS). Ms. Fahey is associated with the Education Development Center, Inc. of Newton, Massachusetts, and is the lead trainer nationwide for the ACF Phase III change management institute. Edward Deevy was also a "content consultant" in the development of this training.
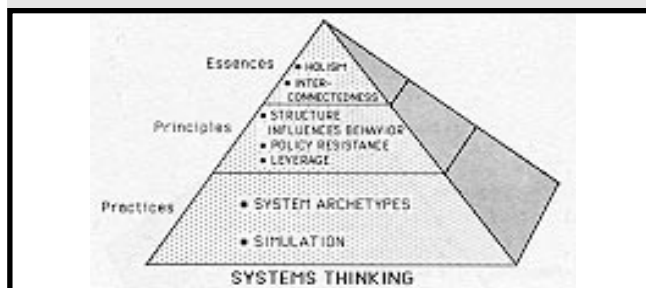
in new ways within a "community of learners" which helps its members gain new insights.

Western culture is linear, individualistic, goal-oriented. We are consumed in visions of heroes and "leaders"—and when things go wrong, culprits. Our idea of the exceptional team is often the one led by a charismatic "chieftain" who is wise, brave, and protecting. We think that when a team fails, it's because someone "goofed up."

Learning is a goal to be attained, then possessed as an object, a treasure. Learning is something that is done—and ultimately it is "finished" and behind us.

Eastern cultures see this much differently. In Chinese, for example, the word "learning" is portrayed by characters which mean **"study and practice constantly."** Thus, learning is never an accomplished end; it goes on forever.

We all have the capacity to *learn*, and we must do so "on a regular, reliable, predictable basis," says Senge. And we must learn as a group—as an organization of people. Only people learn—not organizations. So *our* people will learn best in the context of this group we know as *our organization,* in our case the AACS, Inc.

And learn we must if we are to remain a viable organization and force in today's very *dynamic environment.*

Senge notes that *organizations used to hire "hands."* No more! ***Today the first thing we hire for is the neck up— one's mind!*** *We cannot "build "a learning organization" merely by "hiring learners," though; **we must grow it** as we all **work at learning together.*** That's where the real fun is for all of us! It's also where one's real job security is today. Rosabeth Moss Kanter said it best in her book ***World Class***, "Security no longer comes from being employed, it must come from being employable."

"Real learning gets to the heart of what it means to be human. Through learning we *re*-create ourselves. Through learning we become able to do something we never were able to do. Through learning we *re*-perceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life. There is within each of us a deep hunger for this type of learning. It is, as Bill O'Brien of Hanover Insurance says, 'as fundamental to human beings as the sex drive.' "

But we must surmount the limitations inherent in our Western thinking. Senge calls them *learning disabilities,* and he lists seven:

1. **"I am my position:"** Just do your job, everything will be okay.
2. **"The enemy is out there:"** Blame someone else.
3. **"The illusion of taking charge:"** Shoot, then aim.
4. **"The fixation on events:"** Everything is just cause and effect, sequential.
5. **"The parable of the boiled frog:"** *See* danger coming.
6. **"The delusion of learning from experience:"** Experience is the best teacher.
7. **"The myth of the management team:"** *They* will save us.

Senge shows why these "disabilities" don't work in today's business climate. Each year, MIT runs a simulation called **"the beer game."** It involves a retailer, a wholesaler, and a brewery. Each party makes "any decision which seems prudent to them." Without warning, an aberation is introduced into this system and each party, acting independently, begins a process of action and reaction. After 24 weeks, things are in a terrible mess, everyone's blaming another as the **culprit**.

The simulation's been run repeatedly since the 1960s and it's usually always the same outcome. It mirrors what happens in the real, fragmented world with "characteristic patterns of overshoot and collapse." The simulation demonstrates how "assumptions of 'external' cause are characteristic of nonsystemic thinking"—and just plain wrong—and how the players themselves created the "vicious cycles" by not understanding their own *thinking* and how the *interactions* affected the "system." They didn't understand the system they were involved in, and thought—wrongly— they could make it work for themselves in isolation.

Peter Senge says that the players typically:

♦ Became their *position.*

♦ *Quickly blame* an "enemy."

♦ Become *proactive*–doing the wrong thing more intensively.

♦ Failed to *"see"* the whole.

♦ Failed to *learn* from experience.

♦ Failed to learn from each other!

Like Walt Kelly's "Pogo," Senge said, for the players: "We have met the enemy and he is us."

Systems Thinking shows there are always multiple levels of explanation as to what's going on in any system. The concepts/levels are:

❖ Systemic Structure—what *causes patterns* of behavior.

❖ Patterns of Behavior—what *causes events.*

❖ Events—what we usually react to.

The "systemic structure" is the most powerful force, yet the least commonly recognized. But it is there that we should focus most of our creative energy. Senge writes:

"The systems perspective tells us we must look beyond individual mistakes or bad luck to understand important problems. We must look beyond personalities and events. We must look to underlying structures which shape individual actions and create the conditions where types of events become likely. As Donella Meadows expresses it (in "Whole Earth Models and Systems," 1982):

"A truly profound and different insight is the way you begin to see that a system causes its own behavior."

Senge also says, "We don't see the structures at play much at all. **Rather, we just find ourselves compelled to act in certain ways."**

So what's the answer to "beer game" types of cause-and-reaction, impetus-and-response organizational management? Senge says there are two basic rules—and learning organizations master them:

Interdependency Rules and "Wins the Day" —

The logic is so simple, but we just don't get it easily. The reason? We learned in infancy (playing with blocks) that a consequence immediately follows an action. When consequences are not immediately apparent, we don't get it (the connection). When longer term consequences are not at all what we wanted, we don't see their direct connection to our earlier actions.

People consistently take actions that today make apparent "good sense" based on the limited information and understanding they have, but they don't see the connection with longer term consequences. Indeed, many later problems surely do occur because of our "best efforts." **The problem is more in how we think rather than the situations to which we react.** As Pogo's wisdom says, *"We have met the enemy and they is us."* Senge asks the crucial question, *If we start to think systemically, how might we act different*? Will it make us more able to create what we really want?

"The discipline of systems thinking begins with a shift in awareness. You become aware of interdependencies," he says. Thus aware, realize that you must function at a pace the system can handle. *Acting precipitously, things typically get worse, not better.* The action becomes counter-productive. That's what happened in "the beer game." [Opposite page] Senge also uses the example of a shower with a slow response time. Turn the handle too aggressively and you will freeze then scald alternatively. Haven't we all experienced that?

As expressed in the **"Take two aspirin and wait"** rule (see below, first column), *"the key leverage point is patience,"* Senge says. He continues:

The promise of systems thinking is very simple. If we can begin to learn to shift our ways of looking at the world to begin to see the interdependency that actually exists, we will begin to think differently and therefore, we will begin to act differently. This condition afflicts human civilization worldwide, the condition of working hard and producing outcomes which are *not* what we want to produce. It's having problems all around us and knowing that despite our best efforts these problems persist—and *not* realizing that it may be *because* of our "best efforts."

With systems thinking, we could actually move to be more able to create the type of world we truly would like to live in. After all, we are creating the world we have right now.

Learning...and Staying Calm

1. *Remember the 'Take two aspirin and wait" rule*. We have to wait patiently for the aspirin to take effect because we all know that aspirin works with a delay. So do most remedies to any type of personal organizational ailment.
2. *Don't panic!* Be measured, and disciplined. Without discipline, everyone suffers needlessly.

Hang in there. Be cool. Learn collectively, corporately.

Don't be carried away on *off*-road "whirlwinds." Keep things in perspective. Remember this rule: *Balance and moderation in all things.*

Change is coming. We live in a transformational era when we must adapt to survive, much less to fourish . But we, together, are smart enough, good enough, saavy enough, to come through it with "class" and with our pride intact.

This synthesis, summary and "distillation" of
Peter M. Senge's *The Fifth Discipline* **is**
primarily intended for the edification of the
management and staff of
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Background —

sphere in which programs are currently operating, effective *leaders* are essential for the program to survive. The training synthesizes the principles and best strategies available. Finally, the training adapts these strategies to the complex world of Head Start, integrating theory and problem-solving applications to demonstrate how these strategies can work in the Head Start environment."

That's how Research Assessment Management, Inc. of Silver Spring, Maryland, described the week-long training which eleven AACS policy makers and managers attend November 27-December 1 at Atlanta's Peachtree Plaza.

The five-day "Phase III" management training focussed on four main approaches:

◆Improving communication: Strengthening the ability to ensure accurate, sensitive, two-way communication, in group meetings, supervision sessions, and written exchanges.
◆Changing mental models: Strengthening the ability to understand, articulate, and challenge the core beliefs that drive program operation
◆Using systems thinking: Strengthening the ability to recognize that a Head Start program is a living, dynamic interconnected system.
◆Setting a vision for the future: Strengthening the capacity to look beyond today's problems and consider possibilities for the future.

Only *one* Head Start grantee from each of the eight Southeastern states was selected to participate in this outstanding training offering. The AACS was pleased to be chosen to represent Kentucky. It was a perfect add-on to it's seven modules of management trainings presented over the past $2^1/_2$ years through SEACAA, completed November 13-14, 1995

A Shift of Mind: Seeing the World Anew — *Whole*

Like neighborhood drug arrests, we often merely shift the problem elsewhere.

2. **The harder you push, the harder the system pushes back.** It's called "compensating feedback."

3. **Behavior grows better before it grows worse.** Our "solutions" often make things *look* better only in the short run.

4. **The easy way out usually leads back in.** So why then do we so eagerly embrace non-systemic but familiar "solutions"—even when they are so fundamentally wrong?

5. **The cure can be worse than the disease.** Shifting the burden—as we usually do—is both addictive and dangerous.

6. **Faster is slower.** Just remember the story of the tortoise and the hare. The corollary is, we'll either do our "favorite intentions" or do nothing at all.

7. **Cause and effect are not closely related in time.** "There is a fundamental mismatch between the nature of reality in complex systems and our predominate ways of thinking about that reality," says Senge.

8. **Small changes can produce big results—but the areas of highest leverage are often the least obvious.** It's the difference between our "snapshot" views and the deeper, better understanding achieved through "process" thinking.

9. **You can have your cake and eat it too—but not at once.** It's not "either-or;" real leverage—through a better understanding of "circles of causality"—can improve both over time.

10. **Dividing an elephant in half does not produce two small elephants.** It produces a mess! "Living systems have their own integrity," says Senge. A key principle is: *The Principle of the System Boundary. It's ok to see the parts, but understand the integrity of the whole!*

11. **There is no blame.** Senge asserts: "You and the cause of your problem are part of a single system. The cure lies in your relationship with your 'enemy'." This is wrapped inside an overarching reality, according to Senge, and that is: **"There is no outside."**

As we discussed in an earlier segment, everything in our system—and all systems—is interdependent. As much as at any time before in man's history, this is "the age of interdependence." "Everybody shares responsibility for the problems generated by a system" and "the search for a scapegoat is a blind alley," Peter Senge says. "Nature loves a balance, but many times human decision makers act contrary to the balances and pay the price." The human body requires "homeostasis" to survive, so does any other system, be it an organization or a society.

And, says Senge, "That's one of the lessons of balancing loops, with delays. Aggressive action often produces exactly the opposite of what's intended. It produces instability and oscillation instead of moving you more quickly toward your goal."

Personal Mastery

In fact, personal mastery begins with the ability to distinguish between the two. It consummates with the maturity to subsume our "emotional responses, control our anxiety. Henry Ford once said, "We rush too much with nervous hands and worried minds." Emotion is a "predisposition to action"—"an incredibly powerful force" in each of us, which (usually) "leads to dynamics of compromise" and ultimately to mediocrity. When emotions rule, we "run scared". Thus, "the lesson is that our emotions are often a poor standard of reference for making decisions." That old saying, *"Take ten deep breaths and wait a little bit, has a real basis in the creative orientation,"* says Senge.

Creative tension "draws together two of the most timeless elements of human understanding:"

1. The commitment to what we truly care about.
2. The commitment to the truth.

Senge illustrates these elements with Charles Dickens' *A Christmas Carol.* Through his visitation by three ghosts, Ebenezer Scrooge sees the reality of his past—that which was, his present—that which is, and his future—that which is likely *if* he continues as is. Scrooge had the choice. We all have that choice. He chose to live his life differently. Senge said the Biblical entreaty, "And the truth shall set you free," is a testimony for us all to stop and see current reality *just as it is.* He also notes a phrase out of the Koran, "What a tragedy that a man must die before he wakes up." Henry Ford also said, "I firmly believe that mankind was once wiser about spiritual things than we are today. What we now only believe, they knew."

In the best of organizations, individuals *will* create their own personal visions. And in the best of all worlds, those visions will meld into shared "corporate" visions. In these organizations, vision will be driven by creative tension, not anxiety.

Senge identifies three typical "strategies" we often employ to cope with the *structural conflict* between our visions and our "contradictory beliefs"—such as "powerlessness" and "unworthiness"—which too often limit our ability to achieve what we really want. The first is our tendency to allow our visions to "erode". That is, we begin to pare them back to less ambitious, more "realistic" visions. Second, we create "artificial conflict." Conflict manipulation is the favorite strategy of those who incessantly worry about failure. It also involves "negative visions": Focusing on what we *don't* want rather than on creating what we do want. The third "strategy" is for some to resort to raw "willpower"—to *make* something happen.

None of these will work, says Senge. The only solution is for us to change our underlying beliefs about powerlessness and unworthiness, as we experience our own "personal mastery" over time. In part, that's where the element of truth—as in the story about Scrooge—comes in. But there's something

else. Senge says it comes through using our subconscious minds. "You don't really have to figure it all out," he says. Most of the complex tasks of our lives are handles by our "unconscious" or "automatic mind." Every well-learned task is transferred from our conscious mind to our subconscious mind. From there on, as in driving a car, it is conducted with effortless ease.

All people who are committed to continually developing their personal mastery, says Senge, practice some form of "meditation." "In a quieter state of mind, when we then focus on something of particular importance, some aspect of our vision, the subconscious is undistracted." Personal mastery directs one's *focus on the desired result itself,* not the means. Indeed, we must learn to separate our vision from what we think we must do to achieve it.

Senge recommends the employment of imagery and visualization. First, imagining that a goal *is* already fully realized. Then, he says, look for the "deeper desires"that lie behind that goal. Ask yourself, "What would it actually get me?" In so doing, clarify the result you truly seek. This skill is important, Senge says, because the subconscious responds to a "clear focus". When we are unclear between our interim goals and our more intrinsic goals, the sub-conscious has no way of prioritizing and focusing."

Once again, commitment to the truth is important to developing "subconscious rapport"—which means knowing what it is that is most important to you.

Earlier, we spoke of the importance of caring. What is it you really care deeply about? One of the "subconscious rapport characteristics of masters" is "the deep feeling of it being the *'right'* goal toward which to aspire."

In closing his chapter on Personal Mastery, Senge addresses the need to integrate reason (rationality) and intuition. He cites Einstein who said, "I never discovered anything with my rational mind." Non-linear "systems thinking" gets us "out of the box." It helps us understand the inter-connectedness (interrelationships between) of all things and widen our circle of compassion. It helps us to see the "structures" which are "invisible" to most of us, but which are of our own creation. When these structures are seen and understood, we know "we are neither victims nor culprits but human beings controlled by forces we have not yet learned how to perceive."

Commitment to a vision beyond mere self-interest is the first step toward that destination. This leads into next month's topic—**building shared visions**. But before that can (or will) occur, leaders must demonstrate and foster a climate for personal mastery. Senge says the organizational climate must strengthen the quest for personal mastery in two ways:

1. Continually reinforce the idea that personal quality is truly valued in the organization.

2. To the extent that individuals respond, provide the "on the job training" needed for developing personal mastery.

"*Personal* mastery is the bedrock for developing shared vision. This means not only personal vision, but commitment to the truth and creative tension which are the hallmarks of personal mastery. Shared visions can generate levels of tension that go far beyond anindividual's comfort level. Those who contribute the most realizing a lofty vision will be those who can hold the creative tension. They will be the ones who believe deeply in their ability to create the future, because that is what they experience personally."

—From *The Fifth Discipline* audio tape

His final advice:

"The core leadership strategy is simple: be a model, commit yourself to your own personal mastery. ...Actions always speak louder than words. There's nothing more powerful you can do to encourage others in their quest for personal mastery than to be serious in your own quest."

AACS Management
"Editorial"

The leadership at Audubon Area Community Services is committed to growth—theirs and that of all personnel! We have a choice. We can get up and go to our "job" or we can fulfill our dreams—our deeply held, motivating force, our vision—and respond to our "calling." *Everyone should follow their dream. Life is too short to do otherwise.*

If Audubon is not the place where your vision takes wing, where you can truly be a part of creating that which really matters to you, please seek it elsewhere. For those whose dreams can be met here, dare to boldly envision dreams met and great things accomplished. *"To boldly go where no one has gone before!"* Carve out for yourself a personal vision that truly matters to you. You will, thus, achieve your own personal mastery, thereby find your joy, and achieve success according to your personal measure of it.

Building a Learning Organization: *Getting Started*

can say how far you can go...You will never know until you get started...Get started if you care about it. If you don't, think about it...Find your partners, because without partners you won't go too far," Senge asserts.

He relates a quote by his friend Dick Beckhart, an expert in organizational change, in support of that premise: "One person trying to bring about change in an organization will get creamed. It actually doesn't matter if they are the CEO or a person on the front lines. Two people can commiserate, three people become the beginning of a full-fledged conspiracy."

get properly adjusted.

We must seek *divergent* views before developing a *convergent* conclusion. Senge recommends a divergent approach he learned from E.F. Schumacher's *Small Is Beautiful:* First, work to see issues from multiple points of view. Then identify tradeoffs; make choices, while continually remaining open to discovering errors in one's reasoning.

Be "collaborative inquirers," suggests Senge, *not* forceful advocates. Seek to "surface, expose, and bring into conversation people assumptions...so that *shared mental models* can continually improve. When there is a balance of advocacy and inquiry, mental models are exposed and creative outcomes are much more likely." he says.

Senge offers these suggestions for balancing the discipline of advocacy with the discipline of inquiry:

When advocating your view, make your own reasoning explicit. Say how you arrived at your view and the data upon which it is based. Encourage others to explore and critique your views. Encourage others to provide different views; actively inquire into others' views that are different from your own. When inquiring into others' views, clearly state the assumptions you are making about them—and acknowledge that they are assumptions. Don't bother asking questions if you are not *genuinely interested* in the other person's response! If you arrive at an impasse over differing views, ask if there is any way to design an experiment or bring in other data that could provide a new way of looking at things. Assuming there is a mutual commitment to inquiry—and everyone expressing their views, design ways of overcoming the barriers that naturally crop up in these situations.

Keep in mind that you must be willing to expose limitations in your own thinking. *You must have the willingness to be wrong.*

Senge asserts, "Because it's so hard to see mental models, you may need the help of another person, a ruthlessly compassionate partner. In the quest to uncover the reality of our own mental models, we are each other's greatest assets." Remember the admonition that Hanover Insurance Company's Bill O'Brien shared in an earlier segment: "The eye cannot see itself."

"The Fifth Discipline" is all about *learning.* As applied in the "learning organization," it results in changes in action, not just in forming new ideas, Senge says. "That's why recognizing the gap between what we *say* and our mental models is vital. What's needed is not merely a new language and new concepts but *changed behavior!* Remember, getting where we want to go is largely about vision and truth—the shared vision of where we want to be and a continual commitment to truth about the "gap" between where we are versus "the goal."

And don't let mental models cloud the view. Understand—perhaps for the first time—that "all we ever have are assumptions, never 'truths,' that we always see the world through our mental models and that the mental models are *always*

incomplete, and, especially in Western culture, chronically nonsystemic."

Skills equally pertinent to everyday relationships as well as the business world are essential to helping keep our mental models in check. Senge lists these as **four keys** to *The Discipline of Mental Models*:

❖ Recognizing "leaps of abstraction"—noticing our jumps from observation to generalization
❖ Exposing the "left-hand column"—that is, articulating what we normally do *not* say
❖ Balancing inquiry and advocacy—*the* skills for honest investigation
❖ Facing up to distinctions between espoused theories (what we say) and theories-in-use (the implied theory in what we do).

"The discipline of mental models retrains our natural inclinations so that conversations can produce genuine learning, rather than merely reinforcing prior views," writes Senge.

This entire series on *The Fifth Discipline* concerns and concludes in The Discipline of Systems Thinking. But until we learn to reflect on our current mental models—and "until (those) prevailing assumptions are brought into the open, there is no reason to expect mental models to change, and there is little purpose in systems thinking," says Peter Senge. "If managers 'believe' their world views are facts rather than sets of assumptions, they will not be open to challenging those world views."

He continues:

"Ultimately, the payoff from integrating systems thinking and mental models will be not only improving our mental models (what we think) but altering our ways of thinking: shifting from mental models dominated by *events* to mental models that recognize **longer-term patterns** of change and the **underlying structures** producing those patterns."

"Just as 'linear thinking' dominates most mental models used for critical decisions today, the learning organizations of the future will make key decisions based on shared understandings of interrelationships and patterns of change."

CONCLUSION OF ARTICLE ON...

temically the causes of their problems and how they are a part of those causes." When people accept that, they inevitably say, "Ah, now we understand how we're creating the mess we've got now. Well, what would we like to create in the future?"

"Systems thinking and shared visions," says Senge, "reinforce this underlying shift of mind towards **creating** rather than just reacting."

"Visions that are truly shared take time to emerge. They grow as a by-product of the interactions of varied individual visions. Experience suggests that visions that are genuinely shared require ongoing conversation, where individuals not only feel free to express their dreams but learn how to listen to each others' dreams. Out of this listening, new insights into what is possible gradually emerge," writes Senge.

There are no canned "formulas" for how to find or build shared visions, but Senge offers these principles and guidelines in what he calls...

The Discipline of Building Shared Vision

A. Encourage personal vision and respect individual freedom. "Shared vision is rooted in personal visions."

B. Move from "personal mastery" (personal visions) to shared visions.

C. Spread shared visions through the processes of "enrollment" and commitment, not compliance. Be flexible.

D. Create synergy. Combine shared vision *and* systems thinking. "Vision paints the picture of what we want to create. Systems thinking reveals how we have created what we currently have."

"The only vision that motivates you is *your* vision," says Hanover Insurance CEO Bill O'Brien. Caring is personal. It is rooted in one's own set of values, concerns, aspirations."

Senge likens the process of combining individual visions into shared visions to **a hologram**, which he terms "a three-dimensional image created by interacting light sources." In a hologram, each piece "represents the image from a different point of view" and "each individual's vision of the whole is unique." But Senge says that if you add the pieces, "the image of the whole does not change fundamentally," except that "the image becomes more intense, more lifelike." Each of the parties to the shared vision is *a partner,* co-creator, nurturer, co-supporter.

Senge also presents the variety of possible attitudes one can feel toward a vision. He charts the responses as follows:

◆**Commitment.** "Wants it. Will make it happen." Within legal and ethical constraints, will give "whatever it takes."

◆**Enrollment.** "Wants it," and will offer whatever it takes within **"the spirit** of the law."

◆**Compliance** *(three types)...*

❖**Genuine Compliance.** "Good soldiers." Sees benefits; does what's expected and more. Follows the "letter of the law."

❖**Formal Compliance.** "Pretty good soldiers." Sees the benefits on the whole, but does only what's expected.

❖**Grudging Compliance.** Does enough of what's expected—because he "has to," but he's openly "not really on board." Does not see the benefits, but does not want to risk his job through noncompliance.

◆**Noncompliance.** Does not see the benefits of the vision, will **not** do what's expected. Thinks: "I won't do it; you can't make me."

◆**Apathy.** Neither for or against the vision. Has no interest, no energy. Thinks: "Is it five o'clock yet?"

Clearly, commitment to shared vision is what's most desirable, and apathy is perhaps the worst response of all. So how do we get commitment or at least enrollment? Senge offers this advice to management leadership:

1. Be enrolled yourself. Don't "sell." **Show** your support!

2. Be on the level. Be honest: don't "inflate" the benefits or "cover up" on the downside.

3. Let others choose. Assure "freedom of choice."

"...There is nothing you can do to get another person to enroll or commit," Senge says. Words are not enough. To get others to share a vision, you must "paint pictures of the type of organization we want to be," says Hanover's Bill O'Brien. The vision is *the what,* says Senge—"the picture of the future we seek." That picture, that *vision* along with the *purpose* (or Mission) and *core values* of the enterprise provide its three governing ideas—or "the company creed." They tell me the "what," the "why," and the "how" which moves a group along "the path toward achievement." Taken together, they answer the question, *"What do we believe in?"*

And again, the last principle in the discipline of building shared vision is to synergize your shared dreams with systems thinking:

1. Learn how existing policies and actions are creating the "current reality;"

2. Understand those forces and where there is "leverage" for influencing them; and

3. Accept that "the reality we now have is only **one of several possible realities."**

Finally, Senge gives warnings against those threats which might cause the visioning process to wither. There are always "balancing processes" at work against any force that exerts itself. At least six such processes can affect the building of shared vision:

1. As more people get involved, there's an *increasing diversity* of views—which is **not** necessarily bad.

2. Spells of "*reduced clarity*" can impede the vision's spread. (Conversely, if increased clarity occurs, the spread continues.)

3. *Unmanageable conflicts*—even polarization—may occur. "Diversity of visions will grow until it exceeds the organization's capacity to 'harmonize' diversity," says Senge.

4. *Discouragement.* If unable to bring a vision into reality, people may be unable to "hold" the "creative tension," i.e., commitment to truth and what they really care about.

5. People get overwhelmed by the demands, they *lose focus* on the vision. The current reality is simply too much, they may feel, to overcome.

6. People *forget their connection* to one another. They stop asking, "What do we really want to create?" And they may begin "proseletizing" members toward their point of view rather than continuing the visioning process as a "joint inquiry."

It's daunting, but shared visions are realized somewhere,

ful teams must learn to use both and distinguish between them. Perhaps more often than not, it's dialogue that's needed more than discussion—which often musters up our "defensive routines."

Dialogue, though seldom practiced today, is a very old idea, Senge points out. It was revered by the ancient Greeks, but is "all but lost to the modern world." Thus, we must work harder to achieve it. Too, as Senge notes, "Systems thinking is especially prone to evoking defensiveness because of its central message, that our actions create our reality. Thus, a team may resist seeing important problems more systematically." So pushing for one's own view may become more compelling.

Today's penchant seems to favor an accumulation of knowledge. But already on "information overload," perhaps we should rather seek the assimilation—or verification—of what "knowledge" we have—the re-creation of our "mental maps." Physicist David Bohm asserts that everything in the universe—all we know and experience, is "an indivisible whole that's in dynamic flux." Contemporary thought is often counter-productive, he says "Our thought is incoherent. And the resulting counter-productiveness lies at the root of the world's problems." Bohm asserted, "Since thought is to a large degree collective, we cannot just improve thought individually. As with elections, we must look on thought as a systemic phenomena arising from how we interact in discourse with one another."

So which type of discourse is needed? Discussion, he says, is like a ping-pong game—back and forth until someone "wins." By contrast, dialogue—from the Greek *"dia logos"* (through the word)—involves a free flow of meaning between people until *all* win. That is, until a "pool of common mean-

Shared Visions — *Continued from page 15*

probably many times over each day—and it makes all the difference in some great endeavor(s). And it can happen with us too!

Shared visions come from people. Shared visions take lots of time. "The visioning is the work," says Senge. "It never stops." That's why he calls it **a discipline.**

But once again, **It's not what the vision *is*, it's what the vision *does*.** It's a "conversation that spawns the imagination, the creativity, all the daring things that people do."

It begins with personal visions. And always, people keep **their** visions—not as inflexible "advocates," but as receptive inquirers to others' visions. They "remain open to the possibility for **the** vision to evolve, to become 'larger' than (their) individual visions. **That** is the principle of the hologram."

Senge asserts:

"The underlying precondition for shared vision to exist is that **people must believe** that they can create the future." Systems thinking helps people "understand sys-

ing" is achieved. Thinking—the on-going process—must always challenge "thoughts"—the point-in-time results of that process.

Dialogue is a group exploration of thought. Individuals suspend their assumptions but at the same time they communicate them freely. In doing this, the full depth of people's experience and thought can be surfaced, says Peter Senge. "The purpose of dialogue is to reveal the *in*coherence in our thought." Bohm says, "Thought *presents* itself (stands in front) of us and pretends that it does not *represent*." Like actors playing a role, though, the way we think forces us to "become trapped in the theater of our thoughts... This is where thought starts to become incoherent."

"Reality may change, but the theater continues." We've lost touch with the larger reality because we've created a new reality of our own. "In dialogue, people become observers of their own thinking," says Senge. "Once people see the participating nature of their thought, they begin to separate themselves from their thought. They begin to take a more creative, less reactive stance..."

Dialogue is a quest for coherence in thought. Bohm identifies three basic conditions necessary for dialogue:
1. All participants must *suspend their assumptions.*
2. All participants must regard one another as colleagues.
3. There must be a facilitator who holds the context.

Bohm likens dialogue to the "cool energy" of a superconductor. When everything becomes "discussible," dialogue opens the "window to deeper insights."

Bohm's three conditions are clear and understandable with the possible exception of the last. What Bohm means is that the facilitator must skillfully keep the group in dialogue mode, away from our habitual drift toward "ping-pong" discussions. The facilitator keeps the dialogue moving by continually modeling and demonstrating dialogue to the group.

"Dialogue is playful," says Senge. Its "artistry" is in "experiencing the flow of meaning." The Quakers enjoin members to say only those thoughts that are compelling—which make one "quake from the need to speak them." Dialogue means mastering the art of "holding a position, rather than being 'held by their positions'." It avoids sharing just anything that pops into one's head. Through dialogue, a group begins to think like a team—and that's the objective, not individual "winners" or "stars" but champion teams.

Is there no place, then, for discussion? Senge says that "discussion is the necessary counterpart of dialogue." "Dialogues are diverging," he says. It gives a richer grasp of complex issues. Discussion, on the other hand, is the force of "convergence" when a plan of action is concluded upon. "A learning team masters movement back and forth between dialogue and discussion," he says.

"It cannot be stressed too much," says Senge, "that team learning is a team skill." No group of even highly talented individuals will necessarily produce a learning team. "Learning teams learn how to learn together," says Senge. And the

In Summary...*Training and Tools for the New Way*

Senge says the vision for *The Fifth Disciplines* was born during a morning meditation in the fall of 1987. He said he wanted to "put a stake in the ground" to prevent the concept of "the learning organization" becoming just a *fad.*

He wrote *The Fifth Discipline* in five parts, but not strictly along the lines of the five disciplines...Systems Thinking, Personal Mastery, Mental Models, Shared Vision, and Team Learning. He chose to divide his work so as to first till and prepare fertile ground for sewing those generative kernels.

Part I, "How Our Actions Create Our Reality...and How We Can Change It," challenges the traditional Western approach of fragmenting problems into smaller, understandable parts, then trying to reassemble them to see and comprehend the whole while failing to account for the interdependencies, interrelationships, and interactions of the several parts on one another. Senge also introduces his five new "component technologies"—the five disciplines of a learning organization. Senge then identifies and exposes the fallacies of seven "learning *dis*abilities" which plague nearly all business organizations. He then closes Part I with the intriguing inquiry, *Are we prisoners of the system or prisoners of our own thinking?* He introduces the "beer game" to show that the latter is more true. *We* create "the system," the structures—and we leverage and change them with new ways of thinking.

Part II, "The Fifth Discipline: The Cornerstone of the Learning Organization," presents eleven "laws" of the Fifth Discipline. He introduces us to the concepts of "circles of causality;" and to reinforcing and balancing feedback and delays—"the building blocks of systems thinking." Senge then presents the compelling power of "templates" (paradigms, mental models) which take on lines of their own in our organizations and ourselves; he presents the concept of achieving *leverage* through truly understanding and then using key leverage points in the structures and patterns of behavior we have created. Senge concludes Part II admonishing us to "step back" from situations far enough to see the forest *and* the trees—"shift from seeing the world primarily from a linear perspective to seeing and acting systemically."

Part III, "The Core Disciplines: Building the Learning Organization," deals in depth with the disciplines of Personal Mastery, Mental Models, Shared Vision, and Team Learning.

In **Part IV**, "Prototypes," and **Part V**, "Coda," Peter Senge offers specific advice on some threads or themes which enhance or may even make possible the application of the five disciplines and lead to the reality of a "learning organization." Briefly, let us visit a number of them...

Oneness. "The search for synergy is inevitably perilous," writes Senge. Our previous organizational paradigm was built on the premise that power was a more or less stable, static quality and there was a competition between those who were building (gaining) and those who were "los-ing" power. In an authoritarian, political environment that was/is true. This environment can only be challenged and changed through a genuine sense of common vision which motivates people beyond mere self-interest. "Together vision and oneness are the antidotes to internal politics and game playing," says Senge.

But Senge insists it must be *reflective* oneness—using the skills of dialogue, reflection, inquiry, and dealing with defensive routines—in order to produce synergy. Simple "participative" oneness—allowing everyone to have their say—is not enough; There's no ground for understanding *why* someone feels a certain way. Everyone remains confirmed in their own view. Senge says, "Nothing undermines openness more than certainty." Agreeing to that, "to search for understanding, knowing there is no ultimate answer, becomes a creative process."

"Life comes to us whole. It is only the analytic lens we impose that makes it seem as if problems can be isolated and solved. When we forget that it is 'only a lens,' we lost the spirit of oneness," he writes.

Senge asserts that there are two fundamentally different kinds of problems which we face. They are:

♦ **Convergent problems**—these have *a* solution, and "the more intelligently you study them the more answers converge" (E.F. Schumacher, *Small Is Beautiful*)

♦ **Divergent problems**—these have no "correct" solution—the difficulties lie in the nature of the problems themselves.

Senge again quotes Schumacher, "Divergent problems offend the logical mind, which wishes to remove tension by coming down on one side or the other." Senge's solution? He says, "Only genuine openness allows people to deal productively with them." When practical in a "learning organization," *generative learning* can occur and people can "create something new, something that has value and meaning to people."

Localness. "Learning organizations will, increasingly, be 'localized' organizations, extending the maximum degree of authority and power as far from the 'top' or corporate center as possible...Localness means unleashing people's commitment by giving them the freedom to act, to try out their own ideas and be responsible for producing results," Senge writes. "Localness is especially vital in times of rapid change," he says.

It also offers challenges: 1) conflicts felt by senior managers giving up "being in control;" and 2) concerns about how to make local control work. But Senge says old-style, top-down control is replaced by "control through learning." He writes:

"While traditional organizations require management systems that control people's behavior, learning organizations invest in improving the quality of thinking, the capacity for reflection and team learning and the ability to develop shared visions and shared understandings of complex business issues. It is these capabilities that will allow learning organiza-

tions to be more locally controlled *and* more well coordinated than their hierarchial predecessors."

Senge says that "the perception that someone 'up there' is in control is based on an illusion—the illusion that anyone could master the dynamic and detailed complexity of an organization from the top." "One person dictating orders form 'one end of the line' cannot possible control what happens in a complex organization," he writes. "Giving orders is not the same as being in control."

But he also cautions, "Managers in positions of traditional authority must *want* a more locally controlled organization. Enough people in local operations must truly *want* the responsibility and freedom of greater local autonomy. Otherwise, no lasting movement will occur."

"All healthy organisms have process of control," he says. "However, they are distributed processes, not concentrated..." He likens the ideal to the human immune system—organic control"—which engages many "local" processes to continually respond to threats and change without "permission" from the "central authority." The bottom line is contained in the *"water-line" principle* Senge borrowed from Bill Gore. Gore encourages all his "associates" to "venture out and take risks." But Gore says it is each associate's responsibility to know where the organizational "waterline" is. "If you make a mistake above the water line, it will not sink the ship. But if you are trying something which, if it failed, might be 'below the water line,' it could affect all of us," Gore tells his associates. So each has responsibility for his/her own sphere, but also *shared* concern for the interests of the overall enterprise.

But localness *must* encourage risk taking among local managers, Senge says. "But to encourage risk is to practice forgiveness. Real forgiveness includes 'forgive' and 'forget'...Real forgiveness includes 'reconciliation,' mending the relationships that have been hurt by the mistake," writes Senge.

Leaders' and Managers' Time. One key new element of the new role of corporate or central managers involves *stewardship* for the core values, mental models, mission, and continually evolving visions of the enterprise. The essence of their new role, says Senge, "will be what we might call *manager as researcher and designer.*" No more of the "chain gain" model of management.

"The *only* issues that should reach a senior manager's attention should be complex, dilemma-like 'divergent' issues. These are the issues that require the thought and experience of the most senior people in addition to the input of less experienced people," he writes. "Action will still be critical, but incisive action will not be confused with incessant activity. There will be time for reflection, conceptualizing, and examining complex issues." They will spend much of their time "reflecting, modeling, a designing learner processes." They will search out and pinpoint where there is leverage for change. They will be committed to learning—themselves and for their staff people.

In a separate chapter entitled "Leader as *Designer*" Senge

poses imagining your organization as an ocean liner. "What is your role?" he asks. Captain? Navigator? Helmsman? Engineer? Social director? Senge says, "The neglected leadership role is the *designer* of the ship. No one has more sweeping influence than the designer." There's little credit there, but great influence and impact. Senge paraphrases Lao-tsu to explain why this is *the* powerful role and model for leaders:

> **"The bad leaders is he who the people despise. The good leader is he who the people praise. The great leader is he who the people say, 'We did it ourselves.'"**

Senge also paints the new learning organization leader as *steward* and *teacher...*

A **steward** of the vision, one who continually tells and re-tells the organizations "purpose story." This leader ensures that the *environment* remains "value-based, vision-driven."

A **teacher** whose responsibility is "defining reality" and fostering learning, while continually committed to unvarnished truth he/she too remains *a learner.* "Who are the natural leaders of learning organizations?" Senge asks. "They are the learners."

Flourishing at Work and Home. "There is a natural connection between a person's work life and all other aspects of life. We live only one life, but for a long time our organizations have operated as if this simple fact could be ignored, as if we had two separate lives," Senge writes. We don't. Work and family are "two reinforcing growth processes"—each tending to fuel levels of personal success and growth. Imbalances between work and family are *not* self-correcting, notes Senge. "They tend to grow worse over time."

And here comes one of the spectacular gems in Senge's monumental work. He writes:

"The more I understand the real skills of leadership in a learning organization, the more I become convinced that these are the skills of effective parenting. Leading in a learning organization involves supporting people in clarifying and pursuing their own visions, 'moral suasion,' helping people discover underlying causes of problems, and empowering them to make choices. What could be a better description of effective parenting?"

Senge says there are many important steps to take in developing an organization's capacity, "but the most important step is the first step—acknowledging that one cannot build a learning organization on a foundation of broken homes and strained personal relationships."

"Microworlds"/Learning Laboratories. An interesting extension of Senge's theme, the role of *practice*, is a chapter on "Microworlds: The Technology of the Learning Organization," subtitled "How can we rediscover the child learner within us?" He advises setting up simulations and models which give people the freedom to "play" and rehearse scenarios and options in safe environments. These allow people the luxury and time to "reflect on, expose, test, and improve the mental models upon which they rely in facing difficult

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problems." Senge suggests a number of ways this can be done—learning labs, role playing, personal computer-based "games," and simulations. These playful experiences can give managers and staff opportunities to illuminate for themselves the hidden implications, false dichotomies and irreconcilable differences, contradictions, reinforcing spirals—both vicious and virtuous, opportunities, and key leverage points in a host of options and alternatives that could be employed in given situations.

Senge itemizes several key organizational learning issues that these "microworlds" may address:

- Integrating "real life" into "experiments;" surfacing hidden patterns and assumptions; developing more systemic hypotheses for improving real-world systems.
- Adjusting the pace of action to the pace of the learner can enhance the learning.
- "Compressing space" can help learners better understand consequences of actions in distant parts of a system and help them recognize and react in real life with "the systemic choice" of action.
- Needing to isolate intruding outside variables and learn in a controlled environment.
- Encouraging experimentation in a safe environment.
- Providing pauses for reflection.
- Thinking through and clarifying the implications of alternative strategies.
- Building on past knowledge and experience—on "institutional memory."

Senge notes that just as business meetings reinforce today's focus on coping with present reality, "microworlds" reinforce a focus on *creating alternative future realities.*

In closing, just a couple of quick notes from Senge's "Coda" (Part V):

First, let your editor/reviewer/distiller note a characterization Senge reports from one of his systems thinking converts. That manager says systems thinkers become "looped for life." Simplistic, linear ways become no longer adequate. The unlimited subconscious becomes reprogrammed to assimilate feedback, sort out detail complexly, and to cope with the dawning tasks of understanding dynamic complexity. Rather than seeing just a "chain of events," the subconscious is "subtly retrained to structure data in circles instead of straight lines. We find that we 'see' feedback processes and systems archetypes everywhere. A new framework for thinking becomes embedded. A switch is thrown, much like what happens in mastering a foreign language. We begin to dream in the new language, or to think spontaneous in its terms and constructs," Senge writes.

He continues:

As organizational theorist Charles Kiefer puts it, "When this switch is thrown subconsciously, you become a systems thinker ever thereafter. Reality is automati-

Team Learning: *Practice Makes Perfect*

"missing link" is practice! Dialogue practice.

Business teams need practice. What makes such teams special, Senge says, is that "they practice together, as consistently and intensively as members of a basketball team do... Team learning requires that type of regular practice," yet most organizations sadly lack it. "Imagine trying to build a great theater ensemble, or a great symphony orchestra without rehearsal. Imagine a championship sports team without practice. In fact, the process whereby such teams learn is through continual movement between practice and performance. Practice, performance, practice again, perform again."

Senge offer a a concrete recommendation to helping a team "deelop its joint skill in fostering a team IQ that exceeds individual IQs"... that creates "learning laboratories...."

Dialogue sessions allow a team to come together to "practice" dialogue and develop the skills it demands. The basic conditions for such a session include:

1. Having all members of the "team" (those who need one another to act) together.
2. Explaining the ground rules of dialogue.
3. Enforcing those ground rules so that is anyone finds himself unable to "suspend" his assumptions, the team acknowledges that it is now "discussion" not "dialoguing."
4. Making possible, indeed encouraging team members to raise the most difficult, subtle, and conflictual issues essential to the team's work.

Peter Senge says that the entire concept of team learning remains poorly understood despite its importance. Its occurrence is still largely "happenstance." But "opening the way for the practice of dialogue provides a very concrete step, not only for the discipline of team learning, but for the four other disciplines as well."

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cally seen systemically as well as linearly (there still are lots of problems for which a linear perspective is perfectly adequate). Alternatives that are impossible to see linearly are surfaced by subconscious as proposed solutions. Solutions that were outside of our 'feasible set' become part of our feasible set. 'Systemic' becomes a way of thinking (almost a way of being) and not just a problem solving methodology."

The final chapter, "The Indivisible Whole," focuses largely on astronaut Rusty Schweikart's story of what seeing Earth from high above it meant to him: *"There are no frames, there are noboundaries."*

Senge then wrote:

"The earth is an indivisible whole, just as each of us is an indivisible whole. Nature (and that includes us) is not made up of parts within wholes. It is made up of wholes within wholes. All boundaries, national bound-

aries included, are fundamentally arbitrary. We invent them and then, ironically, we find ourselves trapped within them."

Senge went on to note *The "Gaia" hypothesis*—the theory that the biosphere Earth and all its life "is itself a living organism." Schweikart referred to it as "the *aliveness* of it—of it all." Senge closed his work saying, "Something new is happening. **And it had to do with *it all*—the whole.**"

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