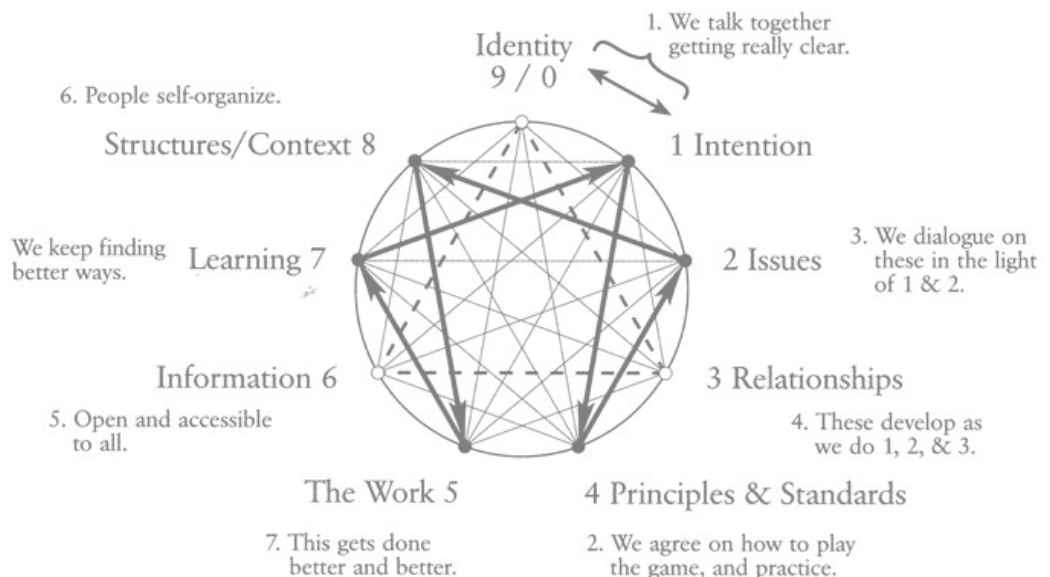




## Engaging the Natural Tendency of Self-Organization

By Dr. Richard N. Knowles, PhD

Dr. **Richard N. Knowles** is a new member of the World Business Academy. Building on 37 years of executive and line positions at DuPont, he has written a superb new book called *The Leadership Dance: Pathways to Extraordinary Organizational Effectiveness*. The book is at once rich, highly readable, and extremely utilitarian. Dr. Knowles lays out a series of models and tools by which organizations can align and make progress toward stated goals using an eclectic approach that draws from natural and systems theory. This white paper, written for *Transformation*, introduces the concept of self-organizing systems and an approach for engaging people's inclination to self-organize, in order to channel their power toward more efficient, effective, and happier organizations. It can improve effectiveness by 30-40 percent.



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**Command and control is like trying to remove the twists and turns from a river.**

All living systems obey a natural, pervasive tendency to “self-organize.” Nature displays this phenomenon at all levels of scale, from tiny bacteria to large ecosystems. A system is loosely defined here as a collection of similar things, a group. Since these things are similar in some way, when endowed with even a rudimentary consciousness, a system develops a kind of shared identity that defines its boundary.

People experience this tendency when they gather to talk, work, play. This phenomenon is so pervasive and subtle that it’s usually unnoticed. Yet it is happening all the time. People incessantly self-organize around anything that holds importance to them.

While powerful, it is also subtle, like the current in a flowing river. Often people join the flow and engage purposefully with this tendency in their countless conversations, in informal gatherings like family reunions, or in high performance work teams.

Many of us who have been managers have often tried to impose our will on people through a command and control approach, when we have a specific task to do or a goal to reach. This is non-purposeful engagement with the natural tendency of self-organization. As we strive to complete the task or job or reach the goal, we contact this tendency to self-organize. Using the command and control approach is like trying to remove the twists and turns from a river and forcing it to flow the way we want. Self-organization exists in organizations of all sorts all the time.

Much of the vast literature on management and leadership deals with ways to impose one’s will on this tendency to self-organize to accomplish necessary objectives. Most managers crave stability, reliability, predictability and control in their organizations. While requiring qualities like these is essential for machines like an airplane, this approach suppresses the purposeful vitality, energy and creativity when managers apply it to people in organizations. When it is pushed too far, the imposition of one’s will becomes command and control management. In this imposing-mode of management and leadership, people in the organizations self-organize in ways that the organization views as non-purposeful. People become lethargic, unresponsive and resistant to change. Such organizations behave as if they are mechanisms that must be pushed and shoved to make happen the things that management actually wants to occur. These organizations behave as if they are *unhealthy living systems: torpid and passive*. This leadership style breeds frustration due to disappointing results, the effort required to keep the business

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moving, the lack of sustainability, and the negative, self-organizing behaviors that people pursue.

Since the early 1960's, much has also been written about teams and how some of them can accomplish extraordinary feats. When we read between the lines, we see that many of those teams that do best are the ones that have learned to purposefully engage people's natural tendency to self-organize. They are called "high performing work teams" because they accomplish so much.

As leaders and managers, we always *choose* how we engage this natural inclination to self-organize—purposefully or by the imposition of our wills. Certain situations dictate that one or the other clearly is more appropriate. However, if we can purposefully engage this natural tendency most of the time, we will be in the most sustainable position. This is truly not about "good" or "bad," but rather, it's about choosing the most effective way to lead in a particular situation, at a particular point in time. Leadership is very much a situational process.

While most managers have learned how to use command and control management and leadership processes, only a few can purposefully engage the natural tendency to self-organize.<sup>1</sup> Often we find such people are unconsciously competent: that is, they intuitively sense that the command and control processes will prove ineffective over the long term.

Increasingly we find a language and models that are extremely useful in working purposefully with self-organization (Knowles, *ibid.*). Combining powerful models and explicit terminology with our intuitive insights in a clear process provides an effective way to purposefully engage the tendency of self-organization. My term for this is this "Self-Organizing Leadership®." Where we purposefully engage the tendency of self-organization, vitality, energy and creativity increase and intensify and our organizations behave as if they are *healthy living systems*. This way of leading is centered on the way managers and leaders choose to engage and be in relationship with the people in their organizations. The fundamental idea speaks to the nature of relationships as they evolve and find expression in conversations. Ralph Stacey is leading explorations into the importance of conversations in organizations in his work on complex responsive processes (CRP).<sup>2</sup>

Much valuable research is now helping us understand the deeper principles that direct self-organization. These theoretical foundations are critical in building a solid groundwork for this important work for leaders. Complex responsive processes (CRP) look at leadership conversations as temporal events. CRP advocates direct engagement with people and no separation from actual events. On the other hand the theory of complex adaptive systems (CAS) looks at systems and organizations as things to be acted upon. With the CAS approach the actors' unifying intentions are more emergent and unpredictable than they are integrated on a commonly purposeful level. Both CRP and CAS approaches are very useful in deepening our understanding of what is happening in organizations, providing that their distinction is understood and made explicit.

**As leaders and managers, we always choose how we engage this natural inclination to self-organize.**

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Interestingly, to purposefully engage the natural tendency of self-organization, all we need to do is simply to start having the important conversations about the critical issues that face us, and invite others to join into the exploration. Three areas provide important conversational pathways and allow us to purposefully engage in self-organization. These three pathways are:

1. Abundantly sharing important, relevant information;
2. Building interdependent relationships and trust; and
3. Helping people find how they and their work fit into the whole picture—discovering meaning in their work.

These are the fundamental pathways for Self-Organizing Leadership. Authentic conversation, one person at a time, begins to weld the connections that are the medium of successful self-organization.

These authentic conversations must cover the questions and issues that are truly important and critical for the success of the work and the goals of the organization. These conversations may be difficult. They require courage, concern, commitment and care to stay in the “heat” and find new ground on which we can build. We have to be open, honest and transparent. *For transformation to occur we need to be engaged within the processes of the organization and not acting on the organization as if it was some external thing.*

There are a number of ways to encourage these conversations. We can just start to share important, relevant information. This builds trust and meaning as we talk and work together. We can engage in dialogue processes. We can ask questions about what we see or sense. We can use storytelling as a way for people to find meaning in what is happening. We can use the Open Space Technology of [Academy Fellow] Harrison Owen<sup>3</sup> to explore people’s interests in a particular subject. We can use the Future Search approach of Sandra Janoff and Marvin R. Weisbord to find out what is important to people and who cares enough to carry it forward<sup>4</sup>. [Academy Fellow] David Cooperrider’s Appreciative Inquiry technique is also a great way to open up the conversation in a positive ways.<sup>5</sup> Sometimes it is about having the hard conversations like Susan Scott talks about in *Fierce Conversations*.<sup>6</sup> Glenda Eoyang believes that exploring the difference makes the difference<sup>7</sup>. The challenge is to keep the conversations open, flowing and authentic over time.

Most people feel stimulated and excited as they develop relationships through these conversations. For many, it is the first time they may have been heard or taken seriously in their entire career. Sharing new ideas, exciting possibilities, discoveries and opportunities leads to significant improvement both in business results and individual fulfillment. Yet only a limited number of ways exist to easily document the conversation, to keep the conversational space open and alive, and to carry it forward to others. As critical questions and issues arise, simple and effective documentation is vital. In that way the “space” remains open, and these conversations carry forward with newcomers who inevitably appear.

One way to effectively address and document the critical questions and issues is through an iterative progression of conversations that develop successively deeper and more coherent insights. In our experience working in

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organizations, we have found that almost all the information that an organization needs to accomplish its work is already scattered among the various individuals within the organization. This open, honest progression of conversations provides a way to develop a shared understanding and awareness of everything we know, for everyone to see and experience. A transformational path for the organization and ourselves appears as the journey moves toward its completion.

A Process Enneagram<sup>®</sup> map (Knowles, *ibid.*) easily maps this spiral progression of conversations to capture the ideas, to keep open the space for future conversations, and to develop a living strategic plan. The progression begins with a conversation intended to collectively define a clear, compelling question or challenge that we face. Then we move to a focused conversation about who we are—our Identity. We then shift to defining our Intention so that we can develop a shared, co-created picture of precisely what we are trying to do to realize the Intention before us. The progression then moves on to conversations about the Issues and Tensions facing us and the dynamics of how our co-created Principles and Standards of behavior will enable us to work together more effectively. Co-created Principles and Standards will profoundly affect our Relationships as well as many of the issues we have already identified. The next focus is specific tasks and Work we'll do to achieve the Intention. Then we look at how we will continue to share meaningful Information and Learn and Grow and discover our future together. Finally, as we complete the initial cycle, we look at how to best Structure and organize ourselves to accomplish the tasks needed to address the opening question. As we carry forward into more and more cycles and widen the conversation, other insights will emerge which can be added to the map we are creating. In this cyclical process we move up a spiral of learning and growth. This cyclical progression of conversations enables the development of a very high level of coherence, purposefulness, sustainability and will for action.

Control shifts from management edicts and pronouncements to the co-creation of what I term "the Bowl" (Knowles, *ibid.*). The Bowl consists of the mission, vision, expectations, principles and standards of performance. The Bowl provides both order and focus for the organization and within the Bowl people work with a high level of freedom to accomplish the tasks before them.

As we purposefully engage the natural tendency of self-organization in this way, the energy and creativity of people flows and the effectiveness of the organization usually improves significantly—often over 30-40 percent. Resistance to change virtually disappears.

## Some Thoughts on Emergence

As leaders engage the people in their organizations, it is useful to look at the sorts of behaviors that might emerge as the mode of engagement shifts. As mentioned earlier, leadership is very much a situational or temporal process, and each moment is new.

In Knowles (*ibid.*, pp. 169-176), behaviors emerging from three different leading processes are described. These leading processes are embedded

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in the Process Enneagram and each comprises three interdependent ideas (Knowles, *ibid.*, p.30). In actual practice, these processes always run concurrently, but it useful for this analysis to take a reductionist approach and examine them as if they were separate.

The most basic leadership process is the Self-Organizing Leadership process consisting of the interaction of Identity, Relationship and Information. These conditions for self-organization first emerged for me in a Berkana Dialogue with [Academy Fellow] Margaret J. Wheatley and a number of others in February 1993.

Identity, Relationship and Information emerge as we engage in dialogue about questions and issues that are very important to us—when we engage with the natural tendency of self-organization in purposeful ways. In reflecting on the importance of these conditions for self-organization I began to look at them from the perspective of their three-fold relationship described below.<sup>8</sup> They can be seen and experienced as forces that are interacting all the time. In their interaction new behaviors emerge:

- When we have a clear sense of our Identity and an interdependent Relationship, as new Information becomes available, we can move into *action*;
- When we have an interdependent Relationship and an abundance of Information, as we become more clear on our Identity, *meaning* emerges;
- When we have a clear sense of our Identity and an abundance of Information, as our Relationships become more interdependent, *trust* emerges.

*Action, meaning and trust* are critical to releasing energy, creativity, and making extraordinary things happen.

A second leadership process that is embedded in the Process Enneagram is Operational Leadership that relates to the Issues we are facing, the Structures we create to try to address these Issues, and the Work we must do to solve the problem. From time to time, every organization needs to use this process. However, if it is used to excess, it becomes command and control oriented. This is the non-purposeful engagement with the natural tendency of self-organization.

When the organization needs to move into the Operational Leadership mode, the dialogue around the Process Enneagram has created clarity and coherence, people are involved, and they know what is going on:

- When the Work is focused on fulfilling the Intention, and the Issues have been examined, as the Structure becomes more self-organizing, a *sense of urgency* emerges;
- When the Structure is self-organizing and the Work is focused on fulfilling the Intention, as the Issues are examined, a *clarity of purpose* emerges;
- When the Structure is self-organizing and the Issues have been examined, as the Work is focused on fulfilling the Intention, a *sense of purposefulness* emerges.

When the organization needs to move into the Operational Leadership mode, the management engages with the natural tendency of self-organiza-

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tion in non-purposeful ways where the level of incoherence is high, people aren't involved, and they don't know what is going on:

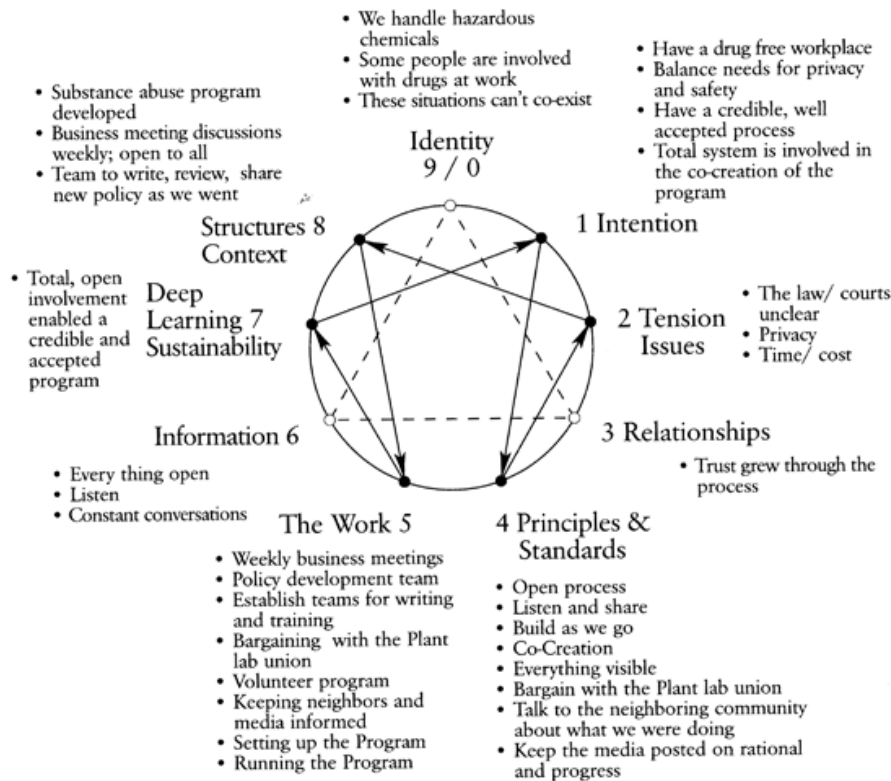
- When the Work is unfocused and the Issues are unexamined, as Structure is imposed *fear* and *anxiety* emerge;
- When the Structure is imposed and the Work is unfocused, as they address the unexamined Issues *confusion* emerges;
- When the Structure is imposed and the Issues are unexamined, as they engage in unfocused Work *struggle* emerges.

Depending on the leader's choice in engaging the natural tendency of self-organization, the organization will experience vastly different outcomes.

A third leadership process that is embedded within the Process Enneagram is the Strategic Leadership Process. This relates to the organization's Intention, its new initiatives, and its Principles and Standards of behavior that are needed to support the new initiative and the Learning and Potential that can come out of their Work.

Depending on the choice of the leader's mode of engagement with the natural tendency of self-organization, very different outcomes emerge.

When the organization needs to move into the Strategic Leadership Process, it has purposefully engaged the people in the organization, the level of clarity



**Editor's Note: An Enneagram-type model is one of the valuable tools presented in *The Leadership Dance*. Dr. Knowles applies these to a very broad range of applications. This example describes how an organization could get mind-altering drugs out of the workplace, almost always a daunting challenge in manufacturing environments.**

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and coherence are high, people are involved, and they know what is going on:

- When the people are open to learning and the Intentions are clear as they engage in co-creating the new Principles and Standards, *hope* emerges;
- When the people have clear Intentions and their Principles and Standards have been co-created as they are open to new learning, *growth* and *potential* emerge;
- When the people have co-created Principles and Standards and are open to learning as their Intentions become more clear, *new possibilities* emerge.

When the organization needs to move into the Strategic Leadership Process, management has engaged the natural tendency of self-organization in non-purposeful ways where the levels of incoherence are high, people aren't involved, and they don't know what is going on:

- When the learning is imposed and the Intentions are unclear as confusing Principles and Standards are imposed, *cynicism* emerges;
- When the Intentions are unclear and they have confusing Principles and Standards as the learning is imposed, *frustration* emerges;
- When they have confusing Principles and Standards and the learning is imposed as they address unclear Intentions, *resistance to change* emerges.

Therefore, if leaders purposefully engage with the natural tendency of self-organization, the people in their organization will tend to exhibit a mixture of qualities like:

- A sense of urgency,
- Purposefulness,
- Hope,
- Growth and potential, and
- Openness to new possibilities.

On the other hand, if leaders choose to engage with the natural tendency of self-organization in non-purposeful ways, the people in their organization will tend to exhibit a mixture of behaviors that reflect:

- Fear and anxiety,
- Confusion,
- Struggle,
- Cynicism,
- Frustration, and
- Resistance to change.

The choice is simple, but the execution can be difficult.

## Some Examples

The first example relates to a crisis like a fire, power outage, or major storm. When a manufacturing plant where I worked experienced a fire, it was remarkable to see how people self-organized around extinguishing it, cleaning up, and getting back into production. People did extraordinary work in teams that formed and re-formed as the tasks changed. Energy and creativity abounded in

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every activity. The management was so busy with all their tasks that they were not able to try to do everything themselves; hourly workers stepped forward to accomplish what was needed and did it quite successfully. However, once the crisis ended the normal command and control management resumed. Energy dropped and creativity vanished.

You may have experienced this when you were living through a crisis. I expect that a lot of self-organization took place during the big hurricanes in 2005, but the media mostly reported the problems arising from the command and control efforts used by the Federal, State and Local governments.

Another example from the workplace illustrates these ideas. When we began the project to convert from pneumatic to electronic process control systems at our DuPont Plant in Belle, WV, we deeply involved the people in the communication and planning. We intended to convert to the new chemical process control systems without maintaining parallel systems for transition and backup; in other words, the transition had to work right the first time. This was a high-risk approach so we knew that everyone needed to be involved in the weekly project status reviews, planning sessions, design meetings, etc.; many of the operators and mechanics were sent to Honeywell School for computer training. All the information was shared on a continuous basis and interdependent relationships developed. There was a lot of give-and-take in these meetings as everyone tried their best to make the project a success. At the end of the project, the unit was started up without incident and made quality product in record time. This approach cut the investment costs and implementation time in half from the original estimates of \$6,000,000 and two years. Then 15 more projects were successfully put into place in record time and at lower than forecast investment, without running any parallel processes, clearly demonstrating the success of these involvement-centered processes.

In a third example using engagement processes like these, the Niagara Falls, NY Leadership Team worked together with the mayor in a process that resulted in cutting \$15,000,000 from a \$62,000,000 budget over a four-year period. This was the first time in the city's history when the Leadership Team collaborated in this way. Sharing information, building interdependent relationships and getting very clear on our mission to make the city as strong as possible were keys in this success.

Surely, most of you reading this paper can think of instances when top management initiated well intended projects with high expectations but little provision for employee involvement. People resisted the changes and things slowed down to the point where the organization lost energy and interest, ultimately abandoning the effort. This experience compares to many of the quality improvement efforts over the last 20 or so years. It's not the poor quality of the technology, but rather the lack of deep involvement of the people, that dooms these efforts to failure.

## Conclusion

As leaders, we choose how we encourage and engage the natural tendency to self-organize. While, historically, leaders and managers have tried to impose

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their wills and resisted this proclivity (and there will still be a few occasions when we need to do this), we are finding that purposefully engaging the natural inclination to self-organize produces vital, coherent, energetic, creative, highly effective and more sustainable organizations. Self-Organizing Leadership provides pathways for leaders to effectively and purposefully engage the natural tendency of self-organization.

## Notes

<sup>1</sup> Richard N. Knowles. *The Leadership Dance: Pathways to Extraordinary Organizational Effectiveness*. Niagara Falls, NY, USA, The Center for Self-Organizing Leadership, 2002.

<sup>2</sup> Ralph D. Stacey. *Complex Responsive Processes in Organizations*. London, Routledge, 2000.

<sup>3</sup> Harrison Owen. *Open Space Technology, A User's Guide*. San Francisco, Barrett-Koehler Publishers, 1991.

<sup>4</sup> Marvin R. Weisbord and Sandra Janoff, *Future Search*. San Francisco, Berrett-Koehler Publishers, 1995.

<sup>5</sup> David L. Cooperrider, Diana Whitney, and Jacqueline M. Stavros, *Appreciative Inquiry Handbook*. San Francisco, Barrett-Koehler Publishers, 2005.

<sup>6</sup> Susan Scott. *Fierce Conversations: Achieving Success at Work and in Life, One Conversation at a Time*. New York, The Berkley Publishing Group, 2002, 2004.

<sup>7</sup> Edwin E. Olsen, Glenda H. Eoyong, Richard Beckhard, Peter Vaill. *Facilitating Organizational Change: Lessons from Complexity Science*. New York, Jossey-Bass/Pfeiffer, 2001.

<sup>8</sup> Anthony G. E. Blake. *The Intelligent Enneagram*. Boston and London, Shambhala, 1996.

## About the Author

**Dr. Richard Knowles** Ph.D. worked in the DuPont Company for 37 years in many different leadership positions, including Plant Manager and Director of Community Outreach. He has had outstanding success in leading organizational change and making other leadership improvements while in DuPont and now as a world-known guide and teacher. He's worked extensively with people in steel mills, sugar mills, chemical plants, brick and tile factories, pipe and beam factories, wall board factories and quarries, an accounting firm, with the City of Niagara Falls, NY, with school boards, with children's homes and homes for the homeless, and in many other community efforts. His focus is helping the people and their organizations achieve more effectively what they want to become. Over the last six years, his work has carried him from the US to Australia, New Zealand, China, Canada, and the United Kingdom. His associates have also carried this work to Singapore, Malaysia, and South Africa.

Learn more at his website [www.centerforselforganizingleadership.com](http://www.centerforselforganizingleadership.com).

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