ESSENTIAL SKILLS FOR LEADERS: CREATIVE PROBLEM SOLVING

ABSTRACT

A strong leader must have the capacity and skills to anticipate, identify, solve, prevent, and learn from problems that occur in the work environment. Creative problem- solving skills require positive processes that incorporate strong communication skills, respect for all parties involved, and innovative approaches. When problems are viewed as "opportunities," the benefits for both leaders and staff can be highly positive.

LEARNING OBJECTIVES

Upon completion of this chapter, students will understand the following concepts:

- C Qualities of good problem solvers.
- C Positive communication skills and techniques that enhance problem solving.
- C Practical approaches to creative problem solving.
- C How do deal with difficult staff in problem situations.

INTRODUCTION

We are bogged down. We keep going over the same old ideas. We desperately need a new approach . . . —Edward DeBono in Six Thinking Hats

Problems arise in any group or organization. The question is: What does a leader do with those problems? A leader can either react to problems and the resulting change or look ahead and visualize the future with creative problem solving. Effective leaders anticipate change and learn how to facilitate and manage it. A leader does not have to wait until problems come to him/her. Good leaders know to seek solutions before the problems land on the doorstep. "Individuals who get startled by the future," says Gary Hamel (2000), "weren't paying attention."

In *Leading the Revolution*, Hamel (2000) says, "You can, and must, regain your lost curiosity. Learn to see again with eyes undimmed by precedent." When leaders allow their assumptions and value judgments to get in the way, they stifle their own creativity and find themselves thinking predictable thoughts. In *Quantum Creativity*, Pamela Meyer (2000) states "Judgment paralyzes. Abstaining from judgment removes the obstacles to the natural and passionate flow

of your creativity. To free yourself of these chains, you need to fiercely confront your learned blocks."

When work is all-consuming, it is easy to lose perspective on the future and how to make it better. Keeping an open mind can be difficult when one works in a Crime Victim's Unit and has to respond to victims' immediate and crucial needs every hour. When a claims specialist with a victim compensation program must produce a certain number of claims per day, creativity may be the last thing on his/her mind. However, it is certain that whatever the individual is doing now will eventually change for one reason or another. Maybe claims aren't being produced fast enough to keep up with the demand, or perhaps more indictments each month result in more crime victims needing notification. New problems face leaders daily; the choice is either to be overwhelmed or to make solving the problems meaningful.

The way to handle change is to problem solve creatively—to be open to new possibilities and avenues that may not, at first, even seem plausible. "Thinking outside the box" may now be old news. Hamel (2000) says the leader should throw the box away altogether. Innovation is more than coming up with new ideas or assembling a creative business plan or a creative approach to a problem. Innovation is learning to see what is not obvious, developing a sixth sense for change, and being totally open to new thoughts and unconventional ideas.

Edward DeBono (1985), in *Six Thinking Hats*, states the concept simply: "We need creativity because nothing else has worked. We need creativity because we feel that things could be done in a simpler or better way. The urge to do things in a better way should be the background to all our thinking." He goes on to say that "there are times, however, when we need to use creativity in a deliberate and focused manner. It may be necessary to put forward provocative ideas that are deliberately illogical."

Unfortunately, leaders often find themselves surrounded by staff who may be complacent and comfortable with the procedures that are currently in place. The need to produce more work in a smarter, faster way is sometimes not the priority of the staff. Sometimes the priority of the staff is maintaining the status quo. Leadership then has to be not only innovative in solving the problem at hand but also creative in how s/he helps the staff to adjust to the new procedure.

Helping the staff to become comfortable and also to "own" the new procedures takes a great deal of energy, time, and finesse. Although in some businesses and organizations, this process may not work, in most, it will be advantageous to have the staff participate in the problem solving. Staff members, like crime victims, want to be heard. Most staff members do not expect nor demand to set policies or solve problems themselves. Usually they just want input and are most often understanding of the fact that management will consider their opinions, but not necessarily adopt them. However, if staff members are never consulted and their input is never considered, morale decreases and the feeling of working in a dictatorship begins to prevail.

It is also important to note that staff members themselves, if helped to tap their creativity, can be the best problem solvers since they are usually the ones doing the majority of the work.

They know the techniques, how long processes take, the types of interferences they usually experience, and all the other issues surrounding the jobs they do every day. However, when they are asked to become involved in the problem-solving process, it is oftentimes difficult for management to refrain from identifying barriers to each solution. Good leaders can help the creative juices begin to flow through themselves and their staff members by using certain techniques, as described below.

QUALITIES OF GOOD PROBLEM SOLVERS

In his book, *The 21 Indispensable Qualities of a Leader: Becoming the Person Others Will Want to Follow*, John C. Maxwell (1999) describes the five qualities of leaders with good problem-solving ability. They—

- C *Anticipate problems*. Problems are inevitable and good leaders anticipate them. Have a positive attitude but plan for the worst.
- C *Accept the truth.* Denying problems only prolongs the agony. Be willing to look at the issues honestly, accept responsibility, and move forward.
- C *See the big picture*. Have a vision of the future and be able to see where the organization can be in five or ten years. Do not be overwhelmed by emotion or bogged down with details. Have someone trustworthy ferret out the details.
- C Handle one problem at a time. Eat the elephant one bite at a time.
- C Don't give up on a major goal when they're down. See life as a roller coaster—sometimes up and sometimes down. Don't give up on the vision just because some glitches occurred.

A significant key to creative problem solving is the capacity and willingness to view problems or challenges from a new perspective and to seek innovation in exploring potential options.

TECHNIQUES FOR INNOVATION

Gary Hamel (2000) lists seven tips for becoming more innovative and regaining curiosity:

- C Be a novelty addict.
- C Find the discontinuities.
- C Search out under-appreciated trends.
- C Find the big story.
- C Follow the chain of consequences.
- C Dig deeper.
- C Know what's not changing.

Pamela Meyer (2000) extols the virtues of intuition as a way to become innovative. While many discount *intuition* for the more preferred *logic*, Meyer reminds us to get back in touch with our natural curiosity and allow ourselves to restore a "lively awareness of possibilities." Edward McCraken, Chief Executive Officer of Silicon Graphics, says, "The most important trait of a good leader is knowing who you are. In our industry very often we don't have time to think. You have to do all your homework, but then you have to go with your intuition without letting your mind get in the way." In order to treat intuition with respect, a leader must first learn to listen to it. Sometimes that small voice is trying to tell the leader something, but s/he is ignoring it. It is imperative that leaders learn to listen.

The more respected an individual is in his/her field, the more resistant s/he may be to listening. Formal education, research, experience gained from working for years, and information gathered from meetings and conferences all help when making decisions. But the most important information comes from within. Innovation needs an open door and an open mind.

PROBLEMS AS OPPORTUNITIES

Good leaders start with a plan and know that they need to be willing to throw that plan out at any time in response to a new discovery or idea. Life is full of changes that don't fit into the plan. A leader must be willing to dance with the change. If the leader resists it, the change will still persist in one way or another.

Viewing the problem as an opportunity to create new procedures that will improve service paints a positive picture and one that is a little more palatable to staff and clients. For example, the files in a large state's crime victim compensation program were taking up so much space that additional rooms were needed to hold them. In researching how to archive the files, it was learned not only that the files could be imaged onto disks that would be easily accessible, but also that the document imaging process could help the workflow which would eventually decrease the time it took to process claims from crime victims. The problem of space opened the door to an entirely new and faster system of processing claims.

When a problem presents itself, it can become an opportunity for staff in one section to learn more about the inner workings of another section. When departments or sections collaborate on problem solving, thus can learn about the problems each faces on a daily basis and they can better understand how their work affects the others. When one piece of the system changes, it can affect several other pieces. If staff members are not consulted in the problem-solving effort, changes can cause a great deal of resentment and make the management of the change much more difficult.

THE NEED FOR A POSITIVE APPROACH

If problems are approached from a positive point of view and are seen by the leadership as opportunities to review procedures and policies and to creatively adopt new ideas, the staff is more likely to also view the change from a positive point of view. For example, when the

administration decides to ask the staff to make their cubicles look more professional, the approach taken can be a positive or a negative one. The "spin" can make all the difference in whether the staff accepts the change or grumbles, complains, and fights.

If middle management takes the approach, "I don't like it either, but I'm just doing what I've been told so you have to make the change," staff are not likely to accept the change without grumbling. On the other hand, if the approach by middle management is positive and the changes are couched in a way that lets the staff know that they are professionals and that "our leadership encourages us to look and act our best at all times," staff may be more likely to accept the change.

Whether or not the organization works within teams, the leader can develop a "team" mentality by a positive approach. When staff members feel that they are a critical part of something bigger than themselves, they sense an importance to their jobs. They feel needed; studies have often shown that an individual's need for significant work ranks above the need for higher pay. Leaders who develop a team spirit can use that camaraderie to nurture employees and enhance productivity.

In *Supervising and Managing People*, several guidelines are offered to help improve staff spirit:

- C *Select people who are right for the organization*. Over time transfer or even let go people who tend to tear the team or the organization apart. Like a coach, the leader can't develop a winning team without having the right team members to put forward a coordinated, highly motivated effort toward an agreed-upon goal.
- C *Work to create a supportive environment for the team or staff.* The entire organization can reward cooperative, collaborative work methods.
- C Challenge the team or staff to help the organization as a whole. Team spirit thrives in an atmosphere filled with short-term assignments, medium-term goals, and long-term missions linked directly to the organization's health and survival. When the team or staff knows its work is important and valuable, each member tends to feel a stronger commitment level.
- C Create a unique team or staff identity. When a strong spirit and a good productivity level exist, people tend to carry the same goals and work toward them together.
- C Encourage the team or staff to use its initiative and creativity. Tackling problems and handling resources according to its own best judgment will boost the positive spirit.
- C *Make the team or staff accountable*. Part of taking responsibility for success is being willing to have effort measured and evaluated. The spirit of a team increases when members recognize that their contribution is a significant part of the success (First Books 1996, 27).

REFRAMING PROBLEMS

Having a positive approach to problems, big and small, creates an environment that is open, participatory, and creative. An essential part of a positive approach is the ability to view problems as opportunities for learning and growth, not disasters that must be avoided at all costs. The key to *reframing* problems in this way is "keeping your eye on the end of the matter." (Mackoff and Wenet 2001, 41) When problems are viewed as ends in and of themselves, they become larger than they are, more powerful than they are, and essentially isolated and removed from the underlying goals and objectives of the organizations. When the focus remains on the "end," e.g., the guiding values and principles articulated in an organization's mission statement, along with the end goal of the specific project or undertaking underway, then the problems become stepping stones that simply must be negotiated. They are lessons to be learned along the way and can have a tremendously beneficial and positive impact on the shaping of future actions and directions.

Esther Torres is the Director of the Community Development Corporation, an organization dedicated to assisting eighteen-to-twenty-year-old former foster youths in achieving constructive self sufficiency. Foster youths leave the system at the age of eighteen and suddenly experience a world in which they are on their own with no support of any kind; statistics show that this population has a 50 percent chance of ending up on the street within six months of coming of age (Ibid. 42). One of the programs developed by the Community Development Corporation is the HOME program in which the youths work in revitalizing dilapidated housing in east Los Angeles.

Ironically, Torres' grandfather left the troubled neighborhoods of east L.A., with his family, over six decades ago, in search of a more peaceful life in the rich farming regions of the San Joaquin Valley. Although he spoke no English and had little resources, in time he became one of the largest landowners and farmers in the valley. The lessons Torres learned from her farming childhood created the work ethic that guides her daily approach to the challenges she faces in helping the youths and neighborhoods to which she has returned.

Torres uses a farming metaphor in describing the opportunities for learning that present themselves with all challenges:

On the farm there are physical indicators that things don't work: The plant dies, the cotton doesn't grow. You can work with your heart and soul, and the season wipes you out completely. You don't unravel and wonder, Was it worth it? You ask, What is the lesson here? What can we do together so our time will be more productive? Where would we like to be in five years? And what are the avenues we can take to get there? (Ibid.)

Opening up the channels. Another farming metaphor used by Torres is "opening up the channels." Leaders utilize their vision in looking for new "channels" or solutions, or reframing existing channels to address particular problems. The leader's role is first to identify and then to ensure that the channels are addressing the problem:

When you are a farmer, unless you channel the flow of water to flow through the rows to nurture the trees or crops, they are not going to grow, and they are not going to bear fruit. you've got to channel that water. There could be water everywhere, but if it doesn't go to the right place, you don't have a crop. (Ibid. 43)

It takes openness and creativity to identify the channel that will best address any given problem faced by an organization. In Torres' creation of the HOME project, the particular channel she utilized was opening up the communication between two county agencies, the Community Development Commission and the L.A. County Department of Children's Services. These two agencies had never worked together, but through Torres' *opening up of the channels*, a new partnership arose that addressed significant community needs in a highly beneficial way. Housing was refurbished and made affordable, and youths with little odds for success were given opportunities and the tools for burgeoning self sufficiency.

EFFECTIVE AND ONGOING COMMUNICATION

Effective communication is key to any type of relationship—marriage, children, work. Miscommunications and misunderstandings often cause wasted time, hurt feelings, and negative outcomes. Ongoing communication between the leadership and the staff is one element in helping workers to feel that their jobs are significant and their job setting is comfortable.

As simple as it sounds, effective communication is not easy. Saying to staff, "I have an open door policy—come talk with me about anything" is wonderful, but it doesn't go far enough. Communication must flow freely and comfortably to bring about a positive and constructive workplace environment. It is invaluable for individuals to know that they can go to their supervisor with problems, concerns, or innovative ideas and be heard.

Staff members want to be heard. They have opinions that have been developed over time, based upon their cumulative work experience. They appreciate being asked to share their opinions. Most employees understand that the leader of an organization must make the final decision but having input is a huge morale booster.

Staff members also want to be informed. If a new policy is on the horizon, they want to know why it is needed, when it will be implemented, who will be implementing it, how their jobs will be affected, and so on. To hear about the new policy on the day it is being implemented is not effective communication. Offering staff a chance to provide input and to ask questions is the preferable way to communicate a new policy.

In Win Win Management: Leading People in the New Workplace, George Fuller (1998) explains that workers today are recognized as valuable contributors to fundamental decisions about how the job is to be done. Although it isn't always possible to achieve a consensus within the group, it is important that workers recognize that open discussions are encouraged and to know they will be heard, even though every employee suggestion cannot be implemented. As Fuller states, "After all, no matter how much teamwork and cooperation there is, the buck always has to stop somewhere. By the way, there is no requirement for

overall agreement in every workplace decision." He goes on to make the important point that employees themselves don't necessarily want to be decision makers. What they do want is to be a part of discussions that involve their jobs. This type of communication helps set the stage for workers to accept the changes that they may not agree with. Simply giving them input lets them know they contributed to the process.

Don't make the mistake of soliciting input when the decision has already been made. Employees usually know when the supervisor is manipulating a situation by pretending to receive input when in reality the decision has already been made.

An important follow-up to allowing employees to be heard is listening, and it is often a much harder task. Peter F. Drucker (1990) in *Managing the Nonprofit Organization* identifies listening as one of the basic competencies of a good leader. Drucker defines listening not as a skill but as a discipline and says good leaders have the willingness, ability, and self-discipline to listen. "Anybody can do it. All you have to do is keep your mouth shut." For most, that is much easier said than done. Listening sounds like an easy task, but few people really know how to listening effectively.

Often during social conversations, for instance, one or more of the people involved begin to look around the room or worse yet, turn away and begin talking to someone else. Leaders should take note of their listening skills and see if they need improving—then practice listening to their employees.

Besides face-to-face listening, there are other ways of "listening":

- C Hold staff meetings in which the differing of opinions is encouraged.
- C Hold small meetings; they are more conducive to allowing people to talk openly.
- C Request written comments or thoughts.
- C Keep a suggestion box with anonymous input.
- C Go individually to employees' offices to solicit input.
- C Periodically survey staff for their ideas and input (with anonymous responses, if desired).

ATTUNEMENT

Attunement is defined as listening in such as way that one learns from those one is leading (Mackoff and Wenet 2001, 125). It is important to never underestimate the impact of truly listening to another individual.

When Dr. Mitchell Rabkin took over as CEO of Beth Israel Hospital in Boston, his first official decision was somewhat unorthodox in the world of hospital administration—he abolished the doctor's dining room. In so doing, he sent a clear message to doctors concerning his expectations that they stayed "tuned in" to their fellow hospital employees as well as the

patients. It also conveyed his high regard for every individual in the hospital, regardless of position or status (Ibid.).

Being truly attuned to another individual allows the listener to begin to understand the experience of that individual in a way that may never have been possible before. Another policy instituted by Rabkin was to require first-year medical students to spend their first three days in the hospital wearing a nonmedical uniform and trying to do the job of someone in social services, housekeeping, or laundry. His goal was to show these students, from the very first moment of embarking upon their medical career, that the hospital depended on a multitude of individuals, some of whom are never heard or even acknowledged by the upper level medical staff. Equally important, it allowed them the opportunity to understand the point of view of other hospital staff members.

True listening is difficult, and like any skill, it must be learned and practiced. Leaders are constantly setting examples in the way they function and operate on a daily basis and the way they listen to others within their organization, no matter what level that person may be, has a tremendous impact on how well the organization will ultimately be able to achieve its goals.

THE BENEFITS OF LEARNING AND USING A MORE COOPERATIVE STYLE THE SEVEN CHALLENGES TO COOPERATIVE COMMUNICATION SKILLS

Effective communications skills are essential to identify and resolve conflicts. In *The Seven Challenges: Cooperative Communication Skills Workbook and Reader*, Dennis Rivers (1999) identifies "the seven most powerful, rewarding and challenging steps" to connect with people:

- 1. *Get more done, have more fun*, Living and working with others is a communication-intensive activity. The better a leader understands others' feelings and wants, and the more clearly they in turn understand the leader's goals and feelings, the easier it will be to make sure that everyone is pulling in the same direction.
- 2. More satisfying closeness with others. Learning to communicate better involves exploring two big questions: "What's going on inside of me?" and "What's going on inside of you?". Modern life is so full of distractions and entertainments that many people don't know their own hearts, nor the hearts of others, very well. Exercises in listening can help a leader to listen more carefully, and reassure conversation partners that s/he really does understand what they are going through. Exercises in self-expression can help the leader ask for what s/he wants more clearly and calmly.
- 3. *More respect*. Since there is a lot of mutual imitation in everyday communication (She raises her voice; he raises his voice, etc.), adopting a more compassionate and respectful attitude toward conversation partners invites and influences them to do the same.
- 4. *More influence*. When the leader practices the combination of responsible honesty and attentiveness, s/he is more likely to engage other people and reach agreements that everyone can live with. The leader is are more likely to get what s/he wants, and for reasons that won't be regretted later (Rivers, n.d.).

- 5. *More comfortable with conflict*. Because people have different talents, there is much to be gained by their working together, accomplishing together what no one could do alone. But because people also have different needs and views, there will always be some conflict in living and working together. By understanding more of what goes on in conversations, a leader can become better a team problem solver and conflict navigator. Learning to listen to others more deeply can increase the leader's confidence so that s/he will be able to engage in a dialogue of genuine give and take and thus be able to help generate solutions to problems that meet more needs.
- 6. *More peace of mind*. Because every action a leader takes toward others reverberates in minds and bodies for months (or years), adopting a more peaceful and creative attitude in interactions with others can be a significant way of lowering stress levels. Even in unpleasant situations, a leader can feel good about his/her skillful response.
- 7. A healthier life. In his book, Love and Survival, Dr. Dean Ornish (1998) cites study after study that point to supportive relationships as a key factor in helping people survive life-threatening illnesses. To the degree that a leader uses cooperative communication skills to both give and receive more emotional support, s/he will greatly enhance chances of living a longer and healthier life.

Learning to listen and communicate in cooperative and effective ways is key to uncovering one's own unique capacities for creative problem solving.

ACCESSING CREATIVE PROBLEM-SOLVING POTENTIAL

Just as one can learn to lead by accessing his/her own unique leadership qualities, positively inspiring and energizing those around him/her, so too can one learn to access his/her own potential for solving problems in ways that are constructive, innovative, and creative. Identifying and refining leadership style as well as utilizing positive approaches to identifying and solving problems are the keys.

IDENTIFYING PROBLEM-SOLVING STYLE

Problem-solving style is only one aspect of overall leadership style. However, problem-solving style can fit into the four categories of leadership style found in *Leadership and the One Minute Manager* by Ken Blanchard, Patricia Zigarmi and Drea Zigarmi (1985):

- C *Directing*. The leader provides specific instructions and closely supervises task accomplishment.
- C *Coaching*. The leader continues to direct and closely supervise task accomplishment, but also explains decisions, solicits suggestions, and supports progress.
- C *Supporting*. The leader facilitates and supports subordinates' efforts toward task accomplishment and shares responsibility for decision making with them.

C *Delegating*. The leader turns over responsibility for decision making and problem solving to subordinates.

Leadership in today's workplace requires a balancing act between knowing when to be assertive and when to step back and let employees solve the problem. "Cooperation and teamwork succeed best when employees are empowered to take responsibility for their work and to participate in oversight and guidance to keep everything in focus. The trick is to do so in such a way that you won't seem to be still making all the decisions." (Fuller 1998) There is a diplomatic way of getting an idea accepted without it being obvious. Fuller cites a situation in which several employees are trying to solve a problem. They are at a standstill when the supervisor decides to share his opinion. He does so very carefully and cautiously to let the group pick up on his idea.

Boss: "I got here late so you've probably already discussed this option, but what if we combined step 3 and 4 and gave Mary step 5. It seems like the workflow might be smoother that way."

Staff Member: "That's a good idea. We didn't discuss that possibility yet, but that might work. What do you all think?"

By being diplomatic, the supervisor avoids appearing dictatorial and doesn't assert his authority. On the other hand, when the problem-solving style of *directing* is used, the group will feel that lip service is being given to their suggestions and that in the end the supervisor will do what s/he wanted to do in the first place.

Problem-solving styles, like leadership styles, differ because problems are different and staff members are different. Each problem cannot be tackled in the same way, nor can each employee be treated the same. Each has his/her different style of working and each requires different responses from his/her supervisor.

THE PROBLEM-IDENTIFICATION PROCESS

(The following section is adapted from *Teamworks Module: Problem Solving* by Barbara O'Keefe, n.d., <www.vta.spcomm.uiuc.edu>.)

Groups that find themselves having difficulties solving problems might want to back up and try to determine if any of the difficulties stem from inaccurate assumptions about what group members perceive the problem to be. At this point, it may be helpful to follow the procedure outlined in *Problem-Solving Group Interaction* (Patton and Griffin 1973). While identifying the concerns of other group members may seem intuitive, many give up on the whole problem-solving process as soon as they realize that others don't seem to share their concerns. Patton and Griffin stress that there are many alternatives available to the group before abandoning its efforts, including:

1. *Identify possible concerns*. The leader should begin at the most obvious level and start by probing the others in the group to find out their orientation toward the problem. The key here is not to defend one's own concern as the most important, but to find out what the

issue means to the group, and explore other facets of the problem that may otherwise not have been considered. It is important to avoid taking sides this early in the discussion.

- 2. Determine mutuality of concerns. Ideally, the group will be able to identify one overarching concern as the most important. Realistically, this is not always the case. One should not take it personally if others have a different orientation toward the problem but rather appreciate that everyone has a different background and different life experiences that have significant bearing on how he or she is oriented toward a particular situation. If it is imperative for the group to reach consensus about what the one major concern should be, then it may be useful for members to stop here, and consider various conflict management tactics for compliance-gaining before proceeding with the discussion.
- 3. *Identify complementary goals*. Many groups can function quite productively even if mutual concerns cannot be identified. For example, if one can help others in the group achieve their goals while, at the same time, the group can help him or her with separate goals, then there is no reason to call problem-solving efforts to a halt. Many times, this can be a much more efficient strategy than dissolving the group and looking for others who share one's one particular concern.
- 4. *Identify superordinate goals*. If the group decides it can't help each other achieve their own goals separately, there is another alternative before giving up. Members should look for superordinate goals by broadening their perspective to include the concerns of others beyond one's own particular concern. While this is very similar to identifying complementary goals, there is an important psychological difference between the two: In identifying superordinate goals, one is willing to accept others' concerns as his or her own, and work to resolve them in addition to any other concerns he or she has. The key is that others' needs actually become one's own as well. While time and resources may make it impossible to take on everyone else's needs, the group may be able to reap greater benefits than was possible otherwise by making this commitment to multiple goals.

REFLECTIVE PROBLEM SOLVING

(The following section is adapted from *Teamworks Module: Problem Solving* by Barbara O'Keefe, n.d., <www.vta.spcomm.uiuc.edu>.)

No decision-making team follows exactly the same procedure for solving problems as another team. Regardless of how leaders and staff members approach a problem, however, most effective decisions are reached by performing certain functions. Reflective problem solving emphasizes the importance of basic tasks:

- Defining concepts.
- Identifying needs.
- Identifying and evaluating solutions.

Groups using reflective problem solving cover these key tasks. From this perspective, there are five key sub-tasks involved in problem solving:

- 1. *Defining the problem*. The leader makes a list of resources—people, books, Web sites, etc.—that have some connection to and information about the problem. The leader then uses these resources to clarify any unfamiliar terms or concepts, and to clarify for the group what s/he understands the problem to be. At this point, the leader is looking for symptoms—the evidence that a problem exists—not causes of the problem.
- 2. Analyzing the problem. After the group has discussed the evidence for the existence of the problem and defined what the problem is, the leader turns his/her attention to analyzing the evidence more thoroughly, looking for relevant data that may explain why the problem exists, evaluating the data collected and the sources of the data.
- 3. Establishing criteria for evaluating solutions. The leader sets an objective with the group that all proposed solutions should strive for. Based on the definition of the problem and analysis of its cause(s), this objective should be the one specific goal that any acceptable solution should attain. If the problem is too complex to set only one objective, another way is to make a list of *musts* and *wants*. "Musts" are those basic requirements without which the solution will be unacceptable. "Wants" are those qualities that are desirable in any solution, and should be prioritized from "most desirable" to "least desirable." A "musts" and "wants" checklist may help the group maximize the effectiveness of any solution without omitting any essential requirements.
- 4. *Proposing solutions*. After the leader has established some basis for evaluating solutions, he/she can try brainstorming solutions (see the "Brainstorming" section of this chapter for additional information). From the list of solutions that emerge from the brainstorming session, the leader develops a realistic range of solutions and selects the one that best fits needs according to the evaluation criteria.
- 5. *Taking action*. The leader writes an action plan that details the steps and the resources needed to implement the solution.

How the group performs these necessary problem-solving tasks is incidental, as long as each function is addressed. Some groups find it helpful to follow a more detailed and systematic procedure for problem solving to help keep them focused. If the group is having difficulty staying on track, following the above step-by-step process may help reach the goal more efficiently and effectively.

CONFLICT-BASED PROBLEM SOLVING

(The following section is adapted from *Teamworks Module: Problem Solving* by Barbara O'Keefe, n.d., <www.vta.spcomm.uiuc.edu>.)

Many problems that groups face are complex and ambiguous, and so there may be several possible alternative solutions. These problems require a thorough examination of both the assumptions and inferences that underlie them and their solutions. In this situation, many managers and strategic planners use two important conflict-based problem-solving techniques: dialectical inquiry and devil's advocacy.

Such conflict-based problem-solving models stress critical evaluation over group harmony. While group morale and interpersonal relations are always at some risk whenever individuals

engage in conflict, many problem-solving teams find that structured conflict can yield high quality results.

Dialectical inquiry. In the dialectical inquiry process, the team uses the same set of data to make two separate and opposing recommendations, and then formally debates these recommendations based on the assumptions that were used to derive them. The philosophy behind this method is that a clearer understanding of the situation and an effective solution result when the assumptions underlying each recommendation are subjected to intense scrutiny and evaluation. (Refer to Appendix C-2 for an interactive exercise).

Devil's advocacy. Much like dialectical inquiry, the process of devil's advocacy for problem solving and decision making relies on structured conflict to ensure a high quality decision. A solid, well-supported argument is made for a set of recommendations and then subjected to a grilling evaluation by another person or sub-group. Those who use devil's advocacy assume that only the best plans will survive such extensive censure. (Refer to Appendix C-3 for an interactive exercise).

Using conflict effectively. In both dialectical inquiry and devil's advocacy, structured conflict is central to understanding the soundest recommendations and the assumptions that underlie them. There is, however, always risk involved when individuals engage in conflict, and therefore it is important to develop the right attitude for conflict activity.

- C First and foremost, don't be afraid of conflict! Remember that this is a structured debate. While the leader will have to either give or receive criticism, s/he does not have to be confrontational and antagonistic to do it.
- C Remember that critical evaluation is the crux of conflict-based models of problem solving. Don't mistake legitimate criticism for a personal attack.
- C Refrain from basing criticisms on the character of another group member. In other words, keep the focus on the recommendations themselves, not who made them or why.
- C Always keep in mind that the goal of subjecting recommendations and assumptions to an intense critique is to develop better ones, and to ensure that the team's plan will ultimately be able to survive the same sorts of critiques from outsiders. Strive for quality.

CREATIVE PROBLEM SOLVING

(The following section is adapted from *Teamworks Module: Problem Solving* by Barbara O'Keefe, n.d., <www.vta.spcomm.uiuc.edu>.)

Many teams find that a more creative, less rigid approach to solving problems often yields the highest quality solution. However, the leader needs to understand what factors make creative thinking work best. Creative thinking, otherwise known as the "association of ideas," is the process by which imagination feeds memory and knowledge to cause one idea to lead to another.

Requirements for creative thinking. The key factors that influence team success in any creative thinking session are:

- C *Suspend judgment*. By far the most important characteristic of effective, creative problem solving is to have an open mind. The leader and the team should work on creating a supportive environment where judgment and criticism are not permissible. These qualities stifle creativity.
- C *Self-assessment*. In order to develop a more open mind, it may help to determine tendencies to cling dogmatically to ideas and opinions.
- C *Develop a positive attitude*. Have enthusiasm and optimism for all ideas, even if they seem wild and unrealistic. Develop an attitude that all ideas are good ideas; cynicism will only inhibit creative thinking.
- C *Use checklists*. The team should write down *every* idea, no matter how far-fetched it might seem. It sends the message to the team that everyone's ideas are valued, helping to create a supportive environment. Recording all ideas ensures that nothing important is forgotten, and gives the team an opportunity to go back and combine parts of one idea with parts of another, letting ideas feed off each other.
- C *Be self-confident*. Remember that many of the world's greatest ideas were ridiculed at first. Have faith in creativity! Some of the most basic scientific principles, such as "the earth is round and revolves around the sun," never would have been advanced without the confidence and courage to go against the grain.
- C *Encourage others*. Praise and encouragement are the fuel for creativity. It enables ideas to flow freely and motivates team members. Instead of criticizing or rejecting an idea, offer praise and encourage the team to "keep up the good work!".

The creative thinking process. Figure 1 summarizes the stages of creative thinking. These stages resemble the steps in the reflective approach to problem solving, with adjustments to encourage creativity and exploit brainstorming:

STAGE	PROBLEM-SOLVING TASK
Orientation	Setting the stage for creative thinking.
Preparation and analysis	Gathering data and determining relationships among facts.
Brainstorming	Generating possible solutions.
Incubation	Taking a break to encourage illumination.
Synthesis and verification	Combining ideas and testing the solution verification.

Figure 1

- C *Orientation*. This step sets the stage for a productive session, i.e., making sure all the necessary requirements for an open and creative group process are available.
- C *Preparation and analysis*. This stage is primarily devoted to fact finding. While gathering facts is important, it is necessary to gather only those facts that will serve to further creative thinking. Getting bogged down in too many details may actually restrain creative thinking efforts. There will be time later to go back and fill in needed facts.
- C *Brainstorming*. The philosophy behind brainstorming is that the more ideas there are on the table, the more likely it is that a suitable solution will emerge. This stage is a "freewheeling" exchange of ideas to list all possibilities.
- C *Incubation*. Incubation is the "time-out" stage of the process in which group members disperse for a period of time to let ideas grow and to encourage "illumination" of the correct solution. While a time-out may not always be practical for every problem-solving initiative, it is nonetheless considered an important part of the creative process so as not to shortcut creativity by overworking the mind.
- C *Synthesis and verification*. Out of all the possibilities the team has generated during its brainstorming session, the ideal solution should be a combination of the best qualities of each idea. While during the orientation and analysis phases of the process, the team's job was to break apart the problem, the task at hand now is to construct a whole out of the ideas generated by brainstorming.
 - One good way to do this is to make a list of all the desirable qualities or disadvantages that a solution might have, and then rate each idea accordingly. Each quality or disadvantage can be weighted in terms of its importance, or applied without weighting. The idea with the best overall profile is then identified.
- C *Verification* is the final phase, and requires testing the solution the team has chosen to see if it achieves all of the team's goals.

SWOT ANALYSIS

(The following section is adapted from "SWOT Analysis," 2000, Mind Tools Book Stores, <www.mindtools.com>.)

One of the easiest and most effective approaches to identifying problems, as well as potential solutions, is through SWOT analysis. Often utilized for organizational strategic planning, the SWOT process helps identify *strengths* and *weaknesses* as well as the *opportunities* and *threats* an individual or organization faces.

The SWOT process is accomplished through individual thinking and reflection, followed by group discussion and brainstorming. A SWOT analysis seeks answers to the following questions:

C Strengths.

- What are the leader's advantages?
- What does s/he do well?

Answers to these questions should take into consideration the points of view of both the leader and the people with whom s/he works. The leader should not be modest, but realistic. If the is difficulty with these questions, listing the leader's characteristics or those of the organization may be helpful. Some of the characteristics will be strengths.

C Weaknesses:

- What could be improved?
- What is being done badly?
- What should be avoided?

Again, this should be considered from an internal and external basis. Do other people perceive weaknesses that the leader doesn't see? It is best for the leader to be realistic and face any unpleasant truths as soon as possible.

C Opportunities:

- Where are the good chances facing the leader?
- What are interesting trends?

Useful opportunities can come from changes in:

- Technology and markets on both a broad and narrow scale.
- Government policy related to the field.
- Social patterns, population profiles, lifestyle changes, etc.
- Patterns of clientele or constituents.
- Support systems, such as human or financial resources.

C Threats:

- What obstacles does the leader face?
- If there is competition, what are they doing?
- Are the required specifications for the agency, job, or services changing?
- Is changing technology threatening the leader's position or the program?
- Are laws or policies perceived to be detrimental?
- Are there have concerns about funding?

The SWOT analysis is an effective tool in any democratic organization and one that a leader can effectively use to move into a more in-depth problem-solving or brainstorming session with input from all participants.

BRAINSTORMING

Nearly every individual has the capacity and skills to brainstorm. Consider for a moment a hot summer day from early childhood. All of the neighborhood kids are bored and looking for something to do. The kids begin to suggest what they can do—some ideas are rejected, others accepted. This is "brainstorming."

Brainstorming is a group process to develop creative solutions to problems. Through brainstorming, participants "push the envelope" on creative approaches. No idea is a "bad idea"; every idea is welcome. A solutions is generated from the best idea or a combination of ideas.

The following rules are important to successful brainstorming (adapted from <www. mindtools.com> January 2001):

- C A leader should take control of the session, initially defining the problem(s) to be solved or issue(s) to be addressed with any criteria that must be met, and then keeping the session on course. He or she should encourage enthusiastic, uncritical participation by all members of the team. The session should be announced as having a fixed length of time, and the leader should ensure that no train of thought is followed for too long. The leader should try to keep the brainstorming on subject, and should try to steer it toward the development of some practical solutions.
- C Participants in the brainstorming process should come from as wide a range of disciplines—with as broad a range of experience—as possible. This brings many more creative ideas to the session.
- C Brainstormers should be encouraged to have fun, coming up with as many ideas as possible, from solidly practical to wildly impractical, in an environment where creativity is encouraged and welcome.
- C Ideas must not be criticized or evaluated during the brainstorming session. Criticism introduces an element of risk for a group member in putting forward an idea, and may dissuade others from participating. This stifles creativity and cripples the free-running nature of a good brainstorming session.
- C Participants should not only come up with new ideas, but also "spark off" other people's ideas.
- C A record should be kept of the session—minutes, tear sheet notations, or a tape recording.
- C Individual worksheets should be provided for participants to record their ideas prior to sharing them with the group. This approach is helpful for creative people who are somewhat shy in public venues, and can also provide useful data that may not be shared with the full group due to time limitations.
- C The group's ideas and findings should be subsequently studied for evaluation.
- C Findings or outcomes from the session should be shared with all participants.

Individual versus group brainstorming. Brainstorming can be carried out by individuals, groups, or both:

C Individual brainstorming tends to produce a wider range of ideas than group brainstorming, but tends not to develop the ideas as effectively, perhaps because individuals on their own

- run up against problems they cannot solve. However, individuals are free to explore ideas in their own time without any fear of criticism or domination by other group members.
- C Group brainstorming develops ideas more deeply and effectively. When difficulties in the development of by one person's idea are reached, another person's creativity and experience can be used to break them down. Group brainstorming tends to produce fewer ideas (as time is spent developing ideas in depth), and can lead to the suppression of creative but quiet people by loud and uncreative ones.
- C Individual and group brainstorming can be mixed, perhaps by defining a problem, and then letting team members initially come up with a wide range of possible solutions. These solutions could then be enhanced and developed by group brainstorming (<www.mindtools.com> January 2001).

Establishing ground rules for brainstorming sessions. All participants should be given an understanding of what is expected of them, and what types of behavior(s) are unacceptable. While ground rules should be established by *all* members of the group at the beginning of the brainstorming session, there are some general ground rules for consideration:

- C No idea is a bad idea or, conversely, every idea is a good idea.
- C Everyone is encouraged to participate, but nobody is encouraged to over-participate at the expense of others.
- C Individual work sheets will be provided, utilized, and collected to ensure that every idea is captured.
- C Building on ideas from others is helpful.
- C Repetition of and/or repeating ideas is okay.
- C Ideas will be captured (on tear sheets, by a note taker, or by an audio or video recording).
- C All participants should respect other participants' ideas, even if they disagree with them.
- C People should not interrupt others when they are speaking.
- C Breaks will be taken when a consensus is reached that one is needed.
- C The time line for the session is (number of minutes or hours).
- C A summary of focus group findings will be provided to all participants by (person responsible) by (deadline).

While many of these ground rules may appear to be obvious and simply good common sense, it is extremely important to articulate ground rules at the outset of a group process. The buy-in by the individual group members and recognition of that fact by the group as a whole is the foundation for sticking to ground rules and engaging in a truly constructive and creative group session.

DEALING WITH THE CHALLENGE OF "STAFF INFECTION"

One result of poor communication is rumors. When staff members are not informed of what is going in within the organization, they sometimes create their own version of the truth. This can happen even when the leader thinks s/he has communicated very well.

Sometimes the rumors are not caused by a lack of communication but are the result of a personality problem within the office. In many offices anyone can tell without hesitation who the office gossip is and who starts the frequent rumors. Often these rumors, having no basis in fact, can cause a great deal of disruption.

When miscommunication occurs, employees are usually hesitant to go directly to their supervisor to clear up the matter. Instead some employees will go to every other employee to discuss the misinformation and get his/her opinion. When this type of behavior occurs, the flow of effective communication is disrupted and other side effects begin to occur. For example, the office gossip overhears the supervisor complaining about the time it is taking a project to come to completion. The gossip goes to the employee who is handling the project and tells him/her—confidentially—about overhearing the boss say he was dissatisfied with the employee's work. The gossip will couch the overheard comments in negative terms and make the employee feel that it would be impossible to go to the boss and ask him to share his concerns directly.

What then follows is an "infection"—employees think the boss talks about them behind their backs, is never satisfied with anyone's work, and so on. Without any clear communication, employee dissatisfaction increases and eventually results in people taking sick leave, resigning to take other jobs, and showing other signs of overall unhappiness.

"Staff infection" may also be seen when a new policy is implemented but is not acceptable to the staff. One disgruntled employee can stir up others to such a degree that soon no one is on board with the new procedures and everyone is "infected" with a negative attitude that eventually causes the downfall of an otherwise healthy organization.

Although "staff infections" can occur over any issue, not just policy changes, some employees are just resistant to change. They are not devious, just set in their ways.

Workers resist changes within the workplace for many reasons (these are addressed more fully in Chapter 5, *Essential Skills for Leaders: Facilitation of Change*). Some employees resist *all* changes and cannot be persuaded to accept anything new. Sometimes a leader doesn't even realize that s/he is dealing with this type of person until s/he has done everything within his/her power to help the employee accept the change(s). In other instances, the employee makes it clear right up front that s/he plans to continue in the old pattern. George Fuller (1998) states that apart from outright insubordination, this situation presents an additional challenge: one employee can negatively affect other employees who aren't particularly enthusiastic about the new procedure either. Fuller recommends the following techniques

when a leader has to deal with an individual who adamantly resists doing something differently:

- C Confront the individual in a calm and reasonable manner to determine his/her objections to the change that's being made.
- C Challenge the reasons given for not accepting the change. Don't let excuses as to why the individual won't comply go unanswered. Otherwise, the employee will take this as agreement with his/her position.
- C Give the employee explicit directions that the change must be complied with.
- C After allowing time to comply with instructions, confront the worker if there is noncompliance. State calmly but firmly that further refusal to perform the work in accordance with the new procedures will be grounds for possible disciplinary action.
- C Keep the boss posted about the problem if it appears that disciplinary action may become necessary. It also makes sense to coordinate with the Human Resources personnel to be certain the correct procedures are followed in terms of disciplinary actions in general and termination of the employee in particular.

EARLY DETECTION, IDENTIFICATION, AND PREVENTION OF POTENTIAL PROBLEMS

Being aware of the circumstances that are likely to bring about morale and system problems is the first step of a good leader. Recognizing that there are many issues that cause morale problems and learning when the organization is experiencing one (or more) is helpful in preventing future problems. For example, if a non-profit agency loses grant funds, workers are likely to begin worrying about the security of their jobs. Even though the supervisor may know that the lack of funding will not affect the salaries, the staff may not know that. Often, in a political setting, a new administration will make massive changes. A good leader will recognize that employees may become concerned about their job security after the elections. When a colleague is terminated, other staff may become nervous about what is expected of them; tensions increase. Maybe workloads are increasing. Even a change in the number of holidays has caused dissension in the ranks.

Early detection of the problem can be very difficult. Sometimes a rumor gets back to the supervisor and, although not true, can alert the supervisor that there is a problem. Sometimes it is an employee who feels comfortable talking to management who brings the problem to the attention of those in charge. If this is the case, involving the employee in resolving the dilemma promotes the type of cooperation the leader hopes to foster.

Fuller (1998) says that there are a number of practical benefits from having employees bring bad news to the leader's doorstep:

C Prevents minor problems from becoming major ones.

- C Allows remedial action such as providing additional training.
- C Encourages employees to take risks without fear of criticism.
- C Promotes cooperation with subordinates.
- C Prevents unpleasant surprises because s/he wasn't informed.
- C Minimizes damage by allowing prompt action to prevent repetition.

To accurately identify the problem, the leader must have input from more than one person. Those involved must be able to communicate the problem and discuss it openly to reach a resolution. A leader must not fall into the trap of allowing employees to come with confidential information that they want the leader to have but then ask him/her not to act on the information. This ties the leader's hands and frustrates everyone.

If the problem is a one employee who is continuously causing trouble, deal with him/her swiftly and within the guidelines created by the Personnel Policies and Procedures. Document, document, document! Be prepared to handle the situation, not ignore it. It won't go away! The problem employee will cause even more trouble as s/he continues to affect co-employees; the problem employee must be handled swiftly and according to policy.

If the leader detects a problem, one of the first actions to take is to bring the problem to the attention of his/her boss. This isn't easy, since it is always hard to bring any form of bad news to the boss. The leader may feel uneasy due to a fear that the boss will think this is something the leader should be able to handle him/herself. However, most likely, the leader's good judgment will help him/her decide which issues warrant going to the boss, and the boss will appreciate being kept informed. It may be that upper-level management policy is causing a morale problem. But since morale can destroy not only productivity but also eventually, the essence of an organization, the problem should be brought to the attention of the boss.

PREVENTION OF THE PROBLEM

Some problems can't be prevented. The leader should not feel guilty thinking s/he could have prevented a disaster that occurred in the past. Some people are simply devious and the problems associated with those people are unavoidable.

However, the leader can prevent additional problems and prevent prolonging the agony of certain situations. How? There are several techniques the leader can master:

C *Recognize the problem*. The leader must stop denying what s/he senses, listen to intuition, and face the facts. An employee is negatively influencing the work environment. Take off the rose-colored glasses and deal with the harsh reality that people like this do exist. Stop asking "How could someone be out to get *me*?" "What have I ever done to deserve this?" The leader must realize that the situation is not about logic or fairness and that it is time to face the fact that a problem exists that must be dealt with swiftly and fairly.

- C Look for an alternative placement for the problem employee. The leader may uncover a perfect solution that suits the leader, the problem employee, and everyone else. Perhaps the problem employee could be moved to another department, another floor, another agency. Make the move into a positive one but without it becoming a promotion. If co-workers sense that a problem employee received a promotion to get him/her out of the way, the wrong message is sent.
- C *Eliminate the position*. Eliminating the position means the leader doesn't have to be the bad guy and fire someone.

Other prevention techniques.

- C *Keep communication lines open*. As already mentioned, clear and frequent communication with staff is the best way to prevent problems. Trust develops between leader and staff when they know the leader has nothing to hide.
- C *Ask for staff input and seriously consider their suggestions*. A trouble-maker who complains that the boss never listens will not gain much sympathy from co-workers who know otherwise.
- C Develop a screening process when hiring employees that helps distinguish emotionally healthy workers from those with personality disorders. Talk with other Human Resource people whose main job is to screen potential employees. Talk to therapists who know how to quickly recognize personality disorders; they can help develop evaluation skills so that potential problems might be a little easier to recognize.
- C *Steer clear of developing friendships with staff members*. Keep the lines clear between employer and employee. The respect that is shown to the leader can dissipate when s/he becomes social friends with employees.

WHEN PROBLEMS ARE OUT OF CONTROL

There are two things to remember when discussing out-of-control problems. They may actually be out of control *or* they may simply feel out of control.

When problems are truly out of control, whether a result of personnel difficulties, workflow difficulties, policy complications, or a variety of other issues, time is of the essence. The worst action a leader can take is no action. When the person in charge does nothing but sit and think about the situation for weeks or months, the problems don't get solved *and* staff morale drops.

The leader should do something, even if it doesn't totally solve the problem. S/he takes action and lets the staff know that s/he is in control and accepts responsibility for the outcome. For the staff to know that someone has taken charge and is in control can be a huge step towards preventing panic and confusion.

A leader pulls together a team to help problem solve. It takes more heads than one to solve major problems. The added benefit to the leader is that the staff feel that their opinions are worthy of consideration. Use their creativity to solve the problem.

Problems may simply *seem* out of control. Pamela Meyer (2000) describes what she terms "chaos." Her advice? Embrace chaos. Her premise is that positive organizational transformations and individual growth cannot happen without chaos. Much opportunity is found within the midst of chaos. Leaders must be open to change, and therein lies the problem. Because leaders tend to hang on to their illusions of control and stability, they often view chaos as disorder and lack of control.

Meyer (2000) says that two of the most important aspects of chaos are persistent instability (constant, unpredictable change) and self-organization (integrity maintained in the midst of change). "Chaos is persistent instability." When a great deal of time and energy is spent resisting chaos, chaos is allowed to continue. When chaos is viewed as an opportunity to grow, the problem takes on a positive feel. In a self-organizing system the events that challenge the status quo are, in fact, the most useful to its evolution and the things that came along unexpectedly become not something to overcome, but the most important part of the process.

Staff need to understand the concept that growth comes from chaos and that problems within the organization are to be expected and can be an opportunity to make positive changes. The benefits to the leader of taking time to help staff understand his/her view are tremendous.

CONCLUSION

"Life without problems" might appear to make the leader's job simpler and less stressful. However, as this chapter has emphasized, a leader can *learn* and *grow* from the problems that arise on the job, and utilize each challenging experience to hone his/her leadership skills.

As one long-time victim advocate notes, "A passion for problems has given me tremendous passion and insights into the difficulties and challenges that *crime victims* face on a daily basis. My skills as a problem solver help me as a leader in my field but, perhaps more important, they help my colleagues and me to achieve our fundamental goal of helping victims better recognize and address the many problems that result from personal victimization."

CHAPTER 3 REFERENCES

Blanchard, K., P. Zigarmi, and D. Zigarmi. 1985. *Leadership and the One Minute Manager*. New York: William Morrow.

- DeBono, E. 1985. Six Thinking Hats. New York: Little, Brown.
- Drucker, P. F. 1990. *Managing the NonProfit Organization: Principles and Practices*. New York: Harper Collins.
- First Books for Business. 1996. *Supervising and Managing People*. Los Angeles, CA: McGraw-Hill.
- Fuller, G. 1998. Win Win Management: Leading People in the New Workplace. Paramus, NJ: Prentice Hall.
- Hamel, G. 2000. Leading the Revolution. Boston: Harvard Business School.
- Mackoff, B., and G. Wenet. 2001. The Inner Work of Leaders: Leadership as a Habit of Mind. New York: Amacom.
- Maxwell, J. C. 1999. The 21 Indispensable Qualities of a Leader: Becoming the Person Others Will Want to Follow. Nashville, TN: Thomas Nelson Publishing.
- Meyer, P. 2000. Quantum Creativity. New York: NTC Publishing Group.
- Mind Tools Book Stores. 2000. SWOT Analysis. < www.mindtools.com>.
- O'Keefe, B. n.d. Teamworks Module: Problem Solving. <www.vta.spcomm.uiuc.edu>.
- Ornish, D. 1998. Love and Survival, chapter 2. New York: Harper Collins.
- Patton, B., and K. Griffin. 1973. *Problem-Solving Group Interaction*. New York: Harper & Row.
- Rivers, D. 1999. *The Seven Challenges: Cooperative Communication Skills Workbook and Reader*. <www.coopcomm.org>.
- Rivers, D. n.d. Conversation with communications skills teacher Marshall Rosenberg.

- Ackoff, R. L. 1986. Management In Small Doses. New York: John Wiley & Sons.
- Blanchard, K., and R. Lorber. 1984. *Putting the One Minute Manager to Work*. New York: William Morrow.
- Bracey, H., J. Rosenblum, A. Sanford, and R. Trueblood. 1990. *Managing from the Heart*. New York: Bantam Doubleday Dell.
- Danzig, R. J. 2000. The Leader Within You. Hollywood, FL: Frederick Fell.
- Findley, B. F., Jr. 1999. *Management: Processes and Paradigms for the 21st Century*. Pensacola, FL: Professional Management Resources.
- Uris, A. 1986. 101 of the Greatest Ideas in Management. New York: John Wiley & Sons.
- Wren, D. A. 1998. Management Innovators. New York: Oxford University Press.