Everyone, of course, reflects on life events in an effort to learn from experience. New research suggests that guiding the process can enrich the learning.

Learning from Experience Through Reflection

MARILYN WOOD DAUDELIN

T he forces affecting business environments change rapidly, frequently, and unpredictably. Gone are the days when managers could predict the future and prepare themselves to meet its demands with relatively stable, five-year plans. Instead, they find themselves imagining three or four possible future scenarios, then developing action plans that can be modified in response to impossible-to-predict technological or social changes.

How do managers prepare themselves to survive, let alone be successful, in such an environment?

The more traditional avenues of development—MBA degrees, executive education programs, and management workshops and seminars—face the same turbulence. The designers of these educational experiences do their best to predict the kinds of knowledge, skills, and attitudes that will be most helpful. Yet there is an inherent game of "catch up" within this system. By the time these designers understand existing issues and trends, develop cases, write texts, and create workshop designs, a new wave of business challenges appears.

Without question, we need a more adaptable, responsive system of helping managers learn.

Recent studies have shown that the day-to-day experiences of managers as they confront challenges and problems on the job are rich sources of learning—perhaps more appropriate "classrooms" than the traditional venues described above. Consider, for example, recent research conducted by the Center for Creative Leadership in Greensboro, North Carolina. By studying 616 descriptions of experiences that 191 successful executives claimed made a lasting developmental difference, researchers were able to identify 16 types of experiences or "key events" that are critical to the development of specific managerial competencies.

UNCOVERING HIDDEN LEARNING POTENTIAL

The Center for Creative Leadership study recognizes the immense learning potential hidden in everyday experience. But such recognition is not enough. Managers need support in these efforts to make sense out of their developmental experiences. The word "experience" derives from the Latin word *experientia*, meaning trial, proof, or experiment. Thus challenging work experiences may be described as trial-and-error experiments that

produce learning. Viewed this way, what is needed is a process of analysis that explores causes, develops and tests hypotheses, and eventually produces new knowledge.

Rather than creating a new system—with the danger of adding one more fad to those that surface repeatedly in management practice—we turn to a process that has roots as deep as the ancient Greek philosophers: the process of reflection.

Using Reflection to Learn From Experience

Reflection is a natural and familiar process. In school, we wrote papers, answered questions, engaged in classroom discussions, and analyzed cases, all as ways to develop new insights. In the business world, we analyze experiences and summarize our learning in reports, performance review sessions, and problem-solving processes. In our personal lives, we discuss troubling situations with friends, spouses, counselors, or support groups. Reflection occurs in less formal ways as well. We may have experienced breakthroughs while jogging, showering, or mowing the lawn.

Reflection as a way of learning has ancient roots. Socrates may have been one of the first to use this process as he tried to discover the nature of goodness by asking questions of others. He constantly challenged the statements and beliefs of his students, including Plato, whose work developed as a consequence of Socrates' training in how to reflect. Other early proponents of reflection as a way of learning include Sophocles, who declared that one learns by observing what one does time and time again, and John Locke, who believed that knowing is purely a function of thoughtful reaction to experience.

If the process of reflection is so natural and familiar, what keeps organizations from embracing formal reflective practices as a way to encourage learning? One explanation is that managers have always placed a higher value on action than reflection. Twenty years ago, Henry Minztberg wrote in the *Harvard Business Review*, "Study after study has shown



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that managers work at an unrelenting pace, that their activities are characterized by brevity, variety, and discontinuity, and that they are strongly oriented to action and dislike reflective activities." More recently, Rosabeth Moss Kanter identified short-term managerial incentives and demands as forces working against managers' ability to pause and reflect.

Recognizing Existing Reflection Practices

In spite of these tendencies to resist reflection, evidence exists that it is becoming a part of the lifeblood of organizations today. Many of questions from a position of mutual discovery; when they provide the time and the structure to reflect upon challenging work situations, both individually and collectively; and when they are open to and supportive of ideas that emerge from these processes.

Finally, the trend toward greater accountability to external shareholders, to boards of directors, and, most recently, to employee-owners for corporate performance has led to a new examination of the age-old method of planning and evaluating *individual* performance: the performance appraisal process.

Reflection as a way of learning has ancient roots. Socrates may have been one of the first to use this process...by asking questions of others.

the tools taught and practiced in total quality management programs, for example, are actually processes of reflection. They allow individuals to call a halt, at least briefly, to the frantic pace of action and engage in processes that permit individuals to reflect upon important areas such as customer needs, root causes of problems, and dysfunctional work-flow patterns. In many companies, the improvements and innovations resulting from these processes have had a direct and powerful effect on both company profits and employee satisfaction.

Also, the trend toward greater employee involvement in corporate decision making has changed the relationship between leaders and followers in corporations. As the values of empowerment and participation increasingly appear in corporate vision and mission statements, the manager's role has shifted from that of charismatic leader (a person who has all the answers) to that of coach—a person who works with employees to help them discover the answers. This shift occurs when managers use reflective approaches to running the business: When they ask challenging

This examination has, in turn, led to new techniques such as 360 degree feedback (soliciting data on strengths and weaknesses from immediate managers, peers, and direct reports) and customer input processes (collecting performance feedback from internal and external customers). These new practices place more emphasis on the need to reflect on prior performance over the course of a year, or longer. The skills applied in that reflection may then be used to plan for improvements in the following year's performance.

These two key elements of performance management—evaluation and planning—represent two important conditions for learning from experience: developing insights from past events and applying them to future actions.

Thus, as managers use quality improvement tools, as they empower others to participate in decision making, and as they develop procedures to measure performance, they have the opportunity to engage more actively in reflection. Taking the time to formally reflect during these processes is the key to whether the processes become mechanisms

to unearth new and important meaning or simply the latest in a series of new management gimmicks.

The Need for More Formal Reflective Practices

Even though reflection has been an important part of traditional educational experiences since ancient times, its power is just beginning to be harnessed as a deliberate tool of managerial learning. A recent *Fortune* article titled "Leaders Learn to Heed the Voice Within" reports that companies such as AT&T, PepsiCo, and Aetna are developing ways to introduce more introspection into their management development programs. In addition, Exxon, Motorola, General Motors, and Hewlett-Packard are just a few of the companies that are using a system called Action-Reflection Learning (ARL) to explore and find answers to important business problems.

These efforts signal an increased interest in using this powerful tool in corporate decision making. What is now needed is (a) an understanding of the core processes that make up reflection, (b) an understanding of which of these processes are most likely to promote learning from work experiences, and (c) a set of tools to help managers use reflection as a way of learning. The rest of this article addresses itself to these three needs.

THE NATURE OF REFLECTION

Reflection is a highly personal cognitive process. When a person engages in reflection, he or she takes an experience from the outside world, brings it inside the mind, turns it over, makes connections to other experiences, and filters it through personal biases. If this process results in learning, the individual then develops inferences to approach the external world in a way that is different from the approach that would have been used, had reflection not occurred. While the catalyst for the reflection is external, and while others may help in the process by listening, asking

questions, or offering advice, the reflection occurs within the mental self.

Reflection and learning may therefore be defined in this context as follows: Reflection is the process of stepping back from an experience to ponder, carefully and persistently, its meaning to the self through the development of inferences; learning is the creation of meaning from past or current events that serves as a guide for future behavior.

Like many other cognitive activities, reflection is often spontaneous, and, at times, outside an individual's awareness. In fact, the "sorting through" nature of the reflection process is most efficient while we sleep. In his book *Sleep*, J. Allan Hobson, professor of psychiatry at Harvard Medical School and the director of the Laboratory of Neurophysiology at the Massachusetts Mental Health Center, explains that sleep reduces the level of incoming sensory data and allows for the reorganization and efficient storage of information already in the brain, thus better preparing us to handle the demands of our waking hours.

The same sort of spontaneous sorting through of existing information occurs during certain mindless, rhythmic physical activities like jogging, swimming laps, or mowing the lawn; or during habitual routines that no longer need the conscious brain's full attention, such as showering or commuting on the same route each day. Just as it does during sleep, this spontaneous process of reflection allows one to momentarily suspend the intense flow of new information to the brain. This enhances the processing of existing information, thereby better preparing the person to handle the demands of the rapidly changing environment.

The Stages in the Reflection Process

Spontaneous reflection is often stimulated by the nagging, unresolved problems or challenges that are a normal part of any manager's job. Reflection then progresses through four distinct stages: (a) articulation of a problem, (b) analysis of that problem, (c) formulation and testing of a tentative theory to ex-

Jogging for Answers

■ Joe lifts his foot onto the concrete wall bordering the stairs leading from his office building. As he reties the lace on one of his new Nikes, he thinks again how glad he is that the renovation of this building included a shower and locker room in the basement. It was just the incentive he needed to introduce some much-needed exercise into the frantic pace of his work week.

He crosses the busy two-lane highway, turns left onto the jogging path he discovered along the river, and settles in to a comfortable pace and rhythm. The first person he passes raises a hand in hello, and Joe thinks how much this fellow jogger looks like one of his employees, Hector. His mind turns to the performance review discussion he had with Hector earlier this week.

■ Although the review resulted in a fairly positive description of how Hector performed against the defined goals and objectives, it was an uncomfortable session. Joe has been perplexed about the source of the discomfort ever since. He resolves to get at the heart of this before his next three reviews—all with employees who have not been performing as well as Hector.

"What exactly is the problem here?" Joe wonders. It isn't the result: Joe completed the task in a timely manner, and the evaluation was fair, as evidenced by Hector's willingness to sign the acknowledgment at the bottom of the form.

■ Suddenly he remembers comments made at his own performance review last year. Joe's boss, Sally, was trying to express a concern she had regarding the way he managed his people. She felt he did not include them in the decisions that affected them. Maybe this is an example of what Sally meant.

As Joe thinks about what transpired from the time Hector entered his office to the time he signed the bottom of the form, he doesn't remember Hector saying very much. Joe suddenly realizes that his desire to do a good job led him to such a thorough and carefully presented analysis of Hector's strengths and weaknesses that there was little time or opportunity left for Hector's contribution.

■ Joe catches sight of the big steeple clock across the river, and realizes he must head back or he will be late for his project review meeting with Sally. While showering and changing, he resolves to take a few minutes of his upcoming meeting to tell Sally about this insight and enlist her help in working on the issue.

plain the problem, and (c) action (or deciding whether to act).

Let's explore these four stages by considering the hypothetical example in the box, above.

The first stage of reflection, articulation of a problem, defines the issue that the mind will work on during the process of reflection. It is often preceded by what John Dewey calls "a state of doubt, hesitancy, perplexity, or mental difficulty." The clear articulation of a problem is often an insight in itself, and rewarding to the manager who has struggled to identify a vague sense of discomfort or dissatisfaction.

In our hypothetical example, Joe enters this first stage as he realizes what the problem is *not*. It is not the product of the review, which both he and Hector judged to be fair. It is not

the completion of the task, which was timely. It is, in this case, some still-to-be-discovered element of the performance review process that caused a less-than-satisfactory feeling. Joe's process of problem articulation is a result of discarding possibilities and is based on what he defines as a negative situation. Others may find themselves in situations where they must discover what went *right* during a very positive experience, perhaps for the purpose of summarizing their learning in a report, coaching others, or relating past successes to similar but more challenging experiences. In either cases, clarifying the problem or challenge sets the stage for the next step in the process.

The second step, analysis of the problem, consists of a search for possibilities: in Joe's case, possible reasons for the problem as he

has defined it. To quote Dewey once again, analysis is "an act of searching, hunting, or inquiring to find material that will resolve the doubt, and settle or dispose of the perplexity." It may involve asking and answering a series of questions about the situation, put forth by oneself or others. It may consist of searching the memory for similar situations or imagining how someone else might handle the same issue. It involves reviewing past behavior with intensity, as though under a microscope.

When Joe decided to review the hourlong performance discussion from the moment Hector entered the room, he was searching for important clues—ideas that were perhaps stored in the mind but still out of his conscious reach. During this stage, it is important to be ready to grasp elusive but potentially relevant thoughts that may enter the consciousness. In Joe's case, Sally's words from his own performance review came to mind. When he applied them to the current situation, he came up with a tentative hypothesis.

This generation of a hypothesis that addresses the problem is the first part of stage three of the reflection process: formulation and testing of a tentative theory to solve the problem. The tentative theory that Joe developed in stage three is the following: his desire to do a good job led him to such a thorough and well-presented analysis of Hector's strengths and weaknesses that there was little time or opportunity left for Hector's contribution. After testing this possibility against the comments he had received from Sally in the past, it seemed to be a sound theory.

Stage four, action (or deciding whether to act) brings closure to the cycle and is the final "test" of the hypothesis. It is only through this last stage that true learning occurs. Learning, as defined earlier, is the creation of meaning from past or current events that serves as a guide for future behavior. Thus, this final stage involves the articulation of a new way of acting in the future. Even though Joe has been engaged in the process of reflection (stepping back from an experience to carefully and persistently ponder its meaning to the self through the development of inferences) since the beginning of his run, he has not yet truly learned.

We leave him at the end of stage three. Hopefully, as a result of his discussion with Sally, he will be able to develop an action plan that will guide his future behavior in performance reviews. This four-stage reflection process can be applied repeatedly to the many problems or challenges that arise in challenging work situations.

The Power of Questions

One of the techniques for increasing the learning power of reflection is the posing and answering of questions. School systems have long recognized the power of questioning as a tool for reflection and learning. Questions form the basis of class discussions; they become topics for papers; they stimulate debates; they guide case analyses; and, when used in quizzes and tests, reinforce learning. Counselors and therapists use provocative questions to guide clients through the discovery process. And the best managers in corporations realize that posing thoughtful questions is often a better way to gain commitment than providing concise answers.

The types of questions that are most effective in enhancing reflection vary depending on the stage of reflection.

During problem articulation, "what" questions allow one to fully describe the situation: "What occurred?" "What did you see, think, feel?" "What was the most important thing?" These questions are useful in arriving at a thorough understanding of the problem to be solved or the challenge to be addressed.

In the problem analysis stage, "why" questions are most helpful: "Why was that important?" "Why do you think it happened?" "Why were you feeling that way?"

During hypothesis generation, "how" questions allow an individual to begin to formulate a tentative theory to explain or address the problem: "How is this situation similar and different from other problems?" "How might you do things differently?"

Finally, during the action stage, "what" questions become important once again: "What are the implications of all this for future action?" "What should you do now?"

Examples of solitary reflection

- Spontaneous thinking during rhythmic, repetitive, mindless physical exercise (jogging, swimming laps, mowing the lawn) or routine habits (driving an established route, showering, shaving)
- Meditation
- Prayer
- Journal writing
- Business writing (project reports, professional papers, evaluations)
- Assessment instruments

The most useful questions are rarely profound yet often produce powerful results. A simple "what else?" can open the mind to a myriad of possibilities previously untapped. The age-old one-word question "why?" has guided scientists and philosophers to discoveries and insights that have changed our world. Introducing an intervention with the question "may I?" performs the powerful functions of indicating respect, ascertaining readiness, and lowering defensive barriers.

Questions are thus one of the most basic and powerful elements of the reflection experience. They are used in the process of learning from challenging work situations in three ways: to open up possibilities, to clarify meaning, and to structure the progression through the four stages.

Alone or with Others?

Individuals differ in the way they think about and make sense out of their challenges in life. One of these individual differences is whether one tends to reflect alone or with others. In the hypothetical case presented earlier, Joe is an introverted thinker who tends to work out problems by thinking about them on his own. He eventually recognized the need to get help from his boss, but it was not the first and most natural way for him to tackle a challenging situation. Others may do their best thinking out loud, bouncing ideas off trusted colleagues or friends. The box, above, lists a variety of examples of reflection in both categories.

Examples of reflection with helper or small group

- Performance appraisal discussions
- Counseling sessions
- Individual or group therapy
- Problem-solving meetings
- Project review sessions
- Informal discussions with friends/colleagues
- Interviews
- Mentoring
- Feedback discussions

In the case of reflecting alone, a major distinction is whether or not writing is involved. The ability to write out reflections (and the propensity to do so) varies greatly with individuals. In those cases where one is comfortable with the tool, writing can be a powerful vehicle to produce insights during the reflection process.

Reflection with others may be with one other person or in small groups. When only one other person is involved, that person often takes on a helper role. In the world of work, individuals often discuss challenging situations or problems with those who have greater experience (immediate managers, mentors) or with those who are helpful facilitators (career counselors, employee advocates, human resource professionals, organizational development consultants). Outside of work, people turn to clergy, therapists, astrologers, friends, parents, or spouses when they need to think through challenging situations.

When reflection takes place in a small group, ideas are generated by the sharing of different perspectives. For example, self-help support groups that unite people who face similar challenges assist participants in discovering important information about themselves. Although the total discussion time each individual has in these settings is less than in coaching discussions, the total reflection time is no less. While one person is sharing his or her experience, the others are relating the information to their own challenges. Thus, whether conducted alone or with oth-

ers, reflection occurs and learning results if the four-stage process of problem articulation, problem analysis, theory formulation, and action planning takes place.

THE RESEARCH STUDY

Which of these three ways of reflecting—alone, with a helper, or in a small group—is most effective in helping managers enhance learning from challenging work experiences? The experiment described here was designed to answer that question, and thus bridge the gap between our understanding of the nature of reflection and our ability to recommend tools to enhance managerial learning.

The participants in the study were 48 managers from a wide variety of functional disciplines in a *Fortune* 500 corporation. The corporation is an international research, design, manufacturing, and sales organization with approximately 10,000 employees. Head-quartered in the Northeast, it has been in business since 1937 and has recently experienced a large-scale restructuring of its major product lines.

The experiment took place in corporate classrooms at two locations used for company retreats and special meetings. Both locations have a combination of large, appropriately equipped classrooms as well as many small, comfortable break-out rooms. They are located in areas bordering fields and woods, providing a relaxed atmosphere that encourages reflective activity.

The Intervention

The participants were randomly divided into four groups and each group participated in a one-hour reflection session. Those managers assigned to the first group, labeled the "individual" group, engaged in the reflection activity by themselves. The managers in the second group, labeled the "helper group," were asked to bring a coach with them to their reflection session. (We provided guidelines to ensure that the helper was someone the individuals were comfortable with and someone

who had good facilitation skills.) The managers assigned to the third group, known as the "peer group," joined three or four others from the study with whom they had no hierarchical relationship. The fourth group was the control group, consisting of managers who did not participate in a reflection session.

At the beginning of the reflection session, participants in each group were asked to select a current, challenging work experience that fit into one of the five types of experiences identified as highly developmental by the Center for Creative Leadership: (a) building something from nothing; (b) fixing/stabilizing a failing operation; (c) leading a project assignment; (d) managing a significant increase in people, dollars, or functions; or (e) moving from a line to a corporate role.

In each group, participants spent the next hour reflecting on that situation. All groups were asked to follow the same four-stage reflection process described here and to use reflection questions similar to those explored in this article. We provided each group with a set of guidelines for effective reflection.

After receiving general instructions with others in their respective groups, the participants moved to comfortable, quiet, isolated parts of the training center-either alone, in pairs, or in their assigned small groups. The individual group members spent the hour thinking about and writing down answers to the reflection questions. The "helper" groups engaged in a discussion of the situation chosen with the helper guiding the conversation using the reflection questions and the participant jotting down insights as they occurred. The small groups began their reflection with a statement from each member about their challenging situation. They then engaged in an unstructured group conversation beginning with one individual's specific challenge. The sessions were videotaped.

The Questionnaires

At the conclusion of the one hour of reflection, each participant completed a questionnaire. Part Three of the questionnaire asked participants to record the insights or lessons that oc-

curred as a result of the process, and to indicate the meaning that the lesson had for future action. They were directed to use any notes they had taken during the reflection process to help with this task. The questionnaire also asked for responses about the challenging experience they selected, the learning statements they recorded, and the reflection process itself.

Members of the control group completed the questionnaire over the telephone. They identified a challenging work experience and listed their learning from it without having participated in the reflection session.

A follow"up questionnaire was distributed by mail ten days after the reflection intervention to collect information on subsequent learning.

The primary emphasis of the study was to discover the effect of the independent variable: type of reflection (individual, helper, or peer-group) on the dependent variable: amount of learning. "Amount of learning" was measured by counting the number of insights or lessons listed by participants.

In addition, the questionnaire was designed to collect information about the effect of moderator variables (type of experience, length of the experience, importance of the experience, positive or negative nature of the experience) on the dependent variable: amount of learning.

The following additional data were also collected and analyzed:

- Subjects' satisfaction with the learning recorded (amount, quality, impact)
- Subjects' satisfaction with the reflection process (amount of time, performance of researcher, performance of others in group)
- Follow-up data (additional reflection time, discussions with others, additional learning)
 - Written comments under each scale
 - Descriptions of learning
- Videotapes from the three peer-group sessions

The Results

Both the individual and the helper groups had a statistically significant greater number

of learnings than the control group; however, the peer group did not. An analysis of the videotapes and the descriptive comments from the questionnaires provide three explanations for the lower number of learnings recorded by the peer-group members.

First, the members of the small groups tended to search for similarities among experiences, placing less emphasis than the other groups on learning that was unique to themselves. Many interactions were introduced by statements such these: "Listening to you, Paul, a similar thing happened to me. .." and "I ran into a similar situation. .." and "There's a common thread here. .."

Second, the need to discuss several different subjects' experiences discouraged the group from detailed probing that may have elicited more learning. Efforts to ensure that all members had a chance to talk caused members to shift focus before developing depth.

Third, none of the participants in the three separate small groups followed the instruction to take notes or to use the reflection questions in their discussion. This is in direct contrast to the individual group, where each person considered all reflection questions and summarized their thoughts in writing; and to the helper group, where the questions guided the entire discussion, and where participants made note of insights throughout the hour.

This finding reinforces the need to use reflection questions and to capture learning throughout a reflection experience. It also suggests the need for future research into the nature of reflection in small groups. For instance, it would be interesting to know whether the small group could be equally effective with a facilitator and more time. Because the research is inconclusive on this, it is important to withhold judgment about the value of reflection in small groups.

When the learning statements of all three treatment groups were analyzed, statistically significant differences emerged in the type of learning recorded. The individual and helper groups recorded mostly intrapersonal learning, or learning about themselves. Examples of insights recorded for these groups include "I've become even more aware that I need details to function—I need to know how things work and why in order to be satisfied"; "I should spend more time coaching my staff members"; and "I spend too much time 'caretaking' other people's problems, not enough on my own."

The peer-group participants recorded mostly interpersonal learning (learning about others) and contextual learning (learning about the culture of the corporation). Examples of interpersonal learning statements include "The strength of our team came from a good balance of different talents" and "Treat others as you wish to be treated." Examples of contextual learning include, "In our culture, action is rewarded more than planning" and "There is a tendency to resist

faction with the learnings recorded or in satisfaction with the reflection experience. Most participants indicated general satisfaction with both the learnings that emerged and with the reflection process itself.

No statistically significant differences between treatment groups were found in amount of time spent reflecting after the session, nor in subjects' tendency to discuss their results with others. Participants spent, on average, one and one-half hours reflecting after the session, and tended to talk most frequently about the experience with co-workers or spouses.

Finally, there was no statistically significant increase in learning after the session; rather, participants reported a reaffirmation of previous learning. Many participants spent the follow-up reflection time thinking

the results tell us...that just one bour spent reflecting...can significantly increase learning.

change and enhance fadishness—the challenge is to identify what is fad and when change is needed."

None of the moderator independent variables (type of experience, length of experience, importance of experience, negative or positive nature of the experience) affected the amount of learning recorded. Four implications arise from this: first, all five categories of challenging work experiences are equally effective as a focus for the reflection experience; second, just as much can be learned in the beginning of an experience as in the middle or end; third, the relative importance of the experience to one's career in the corporation does not affect the amount of learning derived from it; and fourth, one may learn just as much from negative experiences as from positive ones.

No statistically significant differences between treatment groups were found in satisabout the process of reflection rather than the original work experience or the learning from it.

IMPLICATIONS

What do these results tell us about the role of reflection in learning from managers' challenging work experiences? They tell us that just one hour spent reflecting on one aspect of a challenging situation, using some general questions and guidelines, either alone or with a helper, can significantly increase the learning from that situation. If corporations spent a portion of their training and development budgets on introducing formal reflection practices, they could provide support to managers like our fictional character Joe as they try to make sense out of these learning opportunities.

Management development organizations are in a unique position to provide this support. Reflection processes could be built into classroom training by adding one hour of reflection at the conclusion of each experience. However, as the research described here shows, it is important that the goal of the process chosen matches the outcome desired. If the goal is to reinforce as much individual learning as possible (perhaps for future personal goal setting), reflection should take place individually or with a helper. If the goal is to develop an understanding of the learning of the entire group (perhaps for future curriculum design or group impact studies), peer-group reflection strategies may be more appropriate.

In addition, non-classroom reflection activities could be added to the products and services currently provided by management development organizations. These might include personal learning guides developed and widely distributed for use by managers in two ways: (a) to help them uncover learning from their own challenging work experiences, and (b) to help them assist others in surfacing learning from their experiences. Structured reflection sessions could be established for all managers following challenging experiences such as job rotations, on-the-job training exercises, or external executive development activities. Finally, formal individual and helper-based reflection processes could become a standard element of corporate succession planning activities. Succession planning candidates could use formal reflection sessions to become aware of the learning attained from each job rotation, thus contributing their own assessment of readiness to that of upper management.

A tool called The Reflection Workbook, developed by the author and used in her work with managers at Polaroid Corporation, combines many of these suggestions. It has two major sections. The first section describes the three tools used in the Workbook—the learning journal, the learning log, and the learning conversation—and provides guidelines for their use. The second section contains the journal pages and learn-

ing logs used to explore and record the random thoughts and summary learning statements that occur throughout a work experience

While the Workbook was designed to be used independently or with one other person who acts as a learning coach, an interactive, small-group process was also developed to help users get used to writing in the Workbook and to share their learning with others. The exercise, called "Community Reflection," takes approximately 90 minutes. Participants are introduced to the process, agree to a set of ground rules, then spend 20 minutes reflecting by themselves (using the learning journal, the learning log, or both). During this individual reflection time, they are asked to think and write about their learning in four specific categories using a set of reflection questions as prompts. For the next 50 minutes, a facilitator leads the group through a process that allows participants to share their individual learning. The exercise ends with a brief discussion of additional learning that surfaced as a result of the

As one might predict from the research described earlier, Polaroid managers who are using these tools report surfacing a large amount of personal learning that would otherwise have gone unrecognized. However, one group of managers involved in a particularly challenging new role reported three additional unforeseen benefits of the Community Reflection exercise. First, they found that both the individual and the group reflection time created a sense of fellowship, of "we're in this together." The act of revealing learning from both positive and negative experiences created a sense of trust and friendship that had not previously existed. Second, they indicated that the session provided a much needed opportunity to slow down and reflect quietly and spontaneously on what had already been learned. This proved to be a relief from the rapid and continuous assault of new learning that is a regular part of their particular developmental experience.

Finally, in addition to the personal insights and lessons that were shared, dilem-

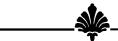
mas and questions emerged that were captured for exploration during future developmental activities.

SUMMARY

Given the fast pace of change confronting managers today, it is critical that they develop capacities to learn from current work situations and adapt this learning to new situations. This need is driven by elaborate techniques and new processes that emerge regularly—initiatives that often require corporate-wide behavioral changes beginning at the top of the organization. In the midst of these time-consuming and expensive initiatives lies the simple and time-tested tool of reflection. To use it effectively, managers need only recognize that it has value, then create

an amazingly small amount of time and structure for it to take place. With this process, managers take responsibility for their own learning—a responsibility that is, in some cases, too quickly turned over to workshop leaders, university professors, or consultants. No matter how qualified these educational providers may be, it is unlikely that any of them could create case studies with greater relevance or challenge than a manager's own work experiences.

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