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LEARNING THROUGH PARADOX: A PEDAGOGICAL STRATEGY FOR EXPLORING CONTRADICTIONS AND COMPLEXITY

Marianne W. Lewis
University of Cincinnati

Gordon E. Dehler
University of Dayton

...the paradox is the source of the thinker's passion, and the thinker without a paradox is like a lover without feeling, a paltry mediocrity.

—Søren Kierkegaard

Paradox denotes contradictory, mutually exclusive elements that exist simultaneously and for which no synthesis or choice is possible nor necessarily desirable (Cameron & Quinn, 1988, p. 2). Such contradictions are nonproblematic when taken separately, but appear irrational or even absurd when framed together. In the 1990s, paradox has become one of the "two powerful new themes in the study of organizations" (Hatch & Ehrlich, 1993, p. 505), and ambiguity is the other. Indeed, judging by the proliferation of related books (e.g., Barrett, 1998; Johnson, 1992; McKenzie, 1996) and journal articles (e.g., Vince & Broussine, 1996; Westenholz, 1993), this topic has captured the attention of organization scholars. In particular, paradox has been applied to the arenas of organization effectiveness (Cameron, 1986;

Authors' Note: Please send correspondence to Marianne W. Lewis, Department of Management, College of Business Administration, University of Cincinnati, P.O. Box 210165, Cincinnati, OH 45221-0165; phone: 513-556-7124; e-mail: marianne.lewis@uc.edu.

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Meyer & Gupta, 1994) and change (Davis, Maranville, & Obloj, 1997; O'Connor, 1995). According to scholars, rising technological change, workforce diversity, and global competition intensify the appearance of paradox as managers, for example, are asked to get more from less, build individualistic teams, and think globally while acting locally.

As scholars increasingly acknowledge that “disconfirmation, contradiction and nonlinearity are inherent in all organizations” (Cameron & Quinn, 1988, p. 14), more complicated understandings incorporate paradox as a key aspect of the organization milieu. Contemporary conceptualizations often stand in stark contrast to the oversimplified and overrationalized notions of traditional theory, accommodating contradictions to view organizations as systems of control *and* flexibility, of cooperative action *and* political conflict, of stability *and* continuous change, and of purposeful decision making *and* emergent social constructions (Bouchikhi, 1998). Such understandings challenge management practitioners, educators, and students to become comfortable with, and even prosper from, the complexity, ambiguity, and tensions of organizational life.

PARADOX AND MANAGEMENT EDUCATION

Writing in the context of diversity, Gallos (1997) referred to the “power of paradox and contradiction,” contending that a “missing ingredient” in teaching about diversity is “*paradox work*,” and that effective (diversity) “teaching requires a *strong pedagogy of paradox* [italics added]—methods to engage the incongruities and contradictions of the work itself” (pp. 152-153). As management educators, our charge is to “teach others to embrace paradox” (p. 153). This challenge, of course, extends beyond the realm of diversity education into the broader arena of management education. For paradox is not only endemic to organizations and management, it may also provide a “lens through which we can learn” (Palmer, 1998, p. 66).

This premise is certainly not new, as paradox has long been linked to learning. Philosophers from ancient Greeks to Taoists to Existentialists have viewed human existence as inherently paradoxical. Lao-tzu (Barrett, 1998), for instance, instructed his students that “all behavior consists of opposites . . . Learn to see things backward, inside out, and upside down” (p. 18). Similarly, Kierkegaard praised paradox for providing a space for learning, inspiring his insights into the dualities of human nature—love/hate, birth/death, self/other. In his classic study of creativity, Rothenberg (1979) claimed that great scientists and artists share a capacity for paradoxical thinking, an ability to explore this space and shift from either/or toward both/and understandings that make sense of opposites and their interplay. For example,

Mozart and Beethoven explored tensions between harmony and discord for inspiration, and Einstein forever altered perceptions of physics by envisioning a man falling off a building at rest relative to things falling beside him *and* moving relative to sights he passed on the way down.

As “it’s a paradox” becomes the management cliché of our time (Handy, 1994), how can management educators help students develop a capacity for paradoxical thinking? How can we enable students to become comfortable with tensions, view contradictions in a new light, and find truths and rationality in the seemingly absurd? Thinking paradoxically requires working through paradox by exploring conflicting feelings, practices, and perspectives in search of more encompassing understandings. Rarely, however, is there any elaboration of what is meant by “working through” (Smith & Berg, 1987, p. 207). Due greatly to the limitations of written language, most work on paradox resorts to mere telling about paradox. Yet, the classroom offers an opportunity to help students experience paradox and learn to recognize, transcend, and manage contradictions, expanding notions of management from prediction, planning, and control toward more critical, reflective, and complicated understandings.

In this article, we propose learning through paradox as a pedagogical strategy for exploring contradictions and complexity. We begin by describing elements of paradox and by modeling their roles in the learning process. We then suggest three approaches aimed at helping students expand conceptual polarities, recognize their personal contradictions, and manage paradoxical predicaments. Last, we highlight that “paradoxes are paradoxical” (Cameron & Quinn, 1988, p. 13). This strategy requires educators to intentionally generate some degree of uncertainty and confusion, using paradoxical contradictions to foster creative tension while simultaneously maintaining a level of comfort and order that enables students to explore and learn.

COMPREHENDING PARADOX: TOWARD A LEARNING PROCESS

Broadly defined, paradox denotes the simultaneous presence of contradictions, often appearing as mixed messages (e.g., praising teamwork while rewarding individual performance), conflicting demands (e.g., seeking efficient and reliable operations as well as innovation and flexibility), or opposing perspectives (e.g., viewing organizations as economic institutions and mechanisms of domination). Yet, paradoxes are essentially perceptual. As people attempt to make sense of an increasingly complicated, ambiguous, and ever-changing world, they frequently simplify reality into polarized, either/or distinctions that conceal complex interrelationships. We now extend this basic definition, as many scholars claim that learning through par-

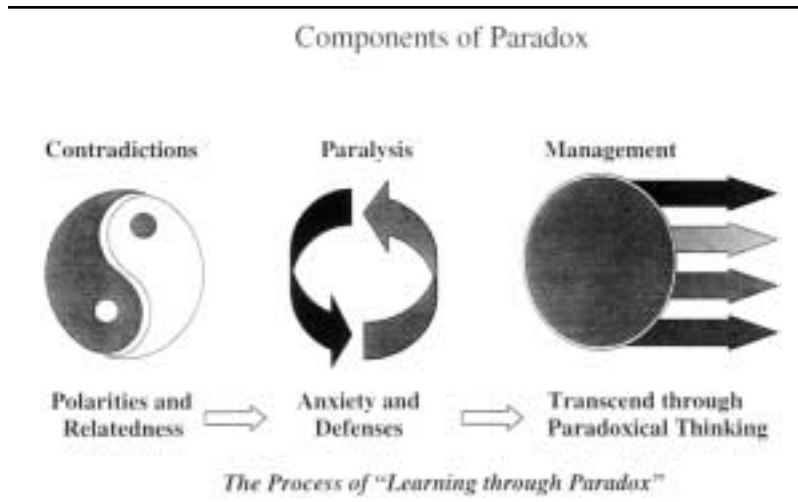


Figure 1: Components of Paradox

adox requires developing a deeper understanding of three elements: the nature of underlying contradictions, the defenses and paralysis that paradoxical tensions often fuel, and their management via paradoxical thinking (e.g., Argyris, 1993; Cameron & Quinn, 1988; Handy, 1994; Smith & Berg, 1987). We detail these components of paradox and model their roles in the learning process (see Figure 1) prior to discussing more instructional issues.

Contradictions, Paralysis, and Management

Comprehending paradox begins with an understanding of contradictions. Unlike continua or either/or choices, contradictions denote opposing sides of the same coin. Yet, people naturally accentuate polarities, interpreting phenomena through simple, dichotomized frames of reference. Bateson (1972) explained that *framing* is a psychological process through which we develop a means of making sense of and representing complex realities. Most frames serve to define phenomena, distinguishing figure from ground and providing an either/or mind-set. By signifying what belongs and what does not, such frames contribute meaning to both sides of a polarity (e.g., trust/mistrust, individual/collective) yet mask their intricate interrelationships (Vince & Broussine, 1996). In contrast, the traditional symbol of Taoism, Yin and Yang (depicting contradictions in Figure 1), signifies a natural wholeness composed of contradictions. When one force (e.g., masculinity, rationality, light) escalates to its extreme state, it retains elements of its opposition (e.g.,

femininity, intuition, dark), eventually reversing the trend (see Morgan, 1997, pp. 238-295, for further discussion of this symbol). Pascale (1992) claimed that by questioning their existing, polarized frames and recognizing relatedness, managers may develop new and more insightful understandings of paradoxical tensions, such as why attempts to enhance group cohesion coincidentally fuel desires for individual expression.

Paradoxical tensions, however, paradoxically foster and paralyze learning. Whereas conflicting demands, feelings, or practices may serve as cues to rethink polarities, people often cling to the security and order of extant frames to avoid recognizing their cognitive foibles. According to Freudian psychology, paradoxical tensions endanger the ego, producing anxiety that naturally raises actors' defenses and inhibits change (Schneider, 1990). Argyris (1993) defined defenses as "any policy or action that prevents someone (or some system) from experiencing embarrassment or threat, and simultaneously prevents anyone from correcting the causes of the embarrassment or threat" (p. 40). Vince and Broussine (1996), for example, described displacement and compromise as two defenses frequently documented in organization studies. Displacement entails projecting a contradictory feeling or attribute onto another, such as a scapegoat or adversary. This defense often appears when organizational coalitions form that mirror opposing sides of a debate but mask their common concerns. Compromise, on the other hand, denotes search for a middle ground that loses the vitality of extremes. For instance, groups may quickly agree to avoid awkward tensions, allowing conflicting views to fester and resurface later, often in more dramatic fashion. Hence, such defenses initially provide some comfort yet inevitably exacerbate tensions, further fueling anxiety and defensive reactions in a vicious cycle.

Learning through paradox becomes difficult because means of escaping paralysis are often counterintuitive (Cameron & Quinn, 1988). Managing paradox requires reclaiming emotions and attributes that have been repressed, polarized, or projected elsewhere to explore contradictions and complexity. Such explorations require immersion within the extremes—moving toward the anxiety rather than struggling against it—to transcend a one-dimensional view of organizations, others, and self toward a dynamic, multidimensional, and paralogical gaze (Barrett, 1998). According to Bateson (1972), through self-reflection individuals may move to a higher level of abstraction where they may question and reframe a previously either/or mind-set. Rothenberg (1979) described this as the capacity for paradoxical thinking: "In an apparent defiance of logic or physical possibility, the creative person consciously formulates the simultaneous operation of

antithetical elements and develops those into integrated entities and creations. It is a leap that transcends ordinary logic” (p. 55). For example, surrealist artist Rene Magritte used jarring juxtapositions to foster creative tension and paradoxical thinking. His painting of a pipe with the inscription “this is not a pipe” initiates a strange loop. Yet, shifting to a higher level of abstraction, one may recognize that it is not a pipe, but a representation of a pipe. Similar yet more complicated examples appear increasingly in organizational studies. For instance, Quinn and McGrath (1985) used the following analogy to depict the complex interactions between societal and organizational cultures:

Usually, one of two perspectives undergirds our analysis. Sometimes in examining the interface we note the dominance of the tide (external culture) and recognize that the fine patterns on the beach (organization) are never the same at any two points in time. At other times we note the dominance of the beach, relatively constant in place, shape, and size and a powerful determinant of how the sea behaves. Occasionally, however, a third, transformational perspective emerges. Here we observe the unique storm. We see a relationship in dynamic tension, characterized by a pattern of furious opposition that leads to a transformation of the elements and of the interface itself. (p. 315)

THE PROCESS OF LEARNING THROUGH PARADOX

In sum, learning through paradox requires analyzing contradictions, experiencing tensions, and experimenting with their management. As a pedagogical strategy, this portends a shift from the traditional teaching paradigm (e.g., lecture-oriented methods) toward learning-centered approaches. Rather than providing students with well-defined problems with clear solutions, the instructor serves as facilitator, fostering creative tension and opportunities for students to critique and rethink oversimplified concepts, assumptions, and issues and develop more complicated and insightful understandings.

Figure 1 simplistically depicts the process, which begins with the juxtaposition of contradictions. By pushing students to define, use, and even exaggerate polarities—fueling their natural tendency to stress contrast over connections—they may experience the tensions and frustrations of paralysis. As class discussions or group activities progress, shockingly unexpected or seemingly irrational behaviors or views of others, for instance, may highlight deficiencies in existing understandings. Helping students manage barriers to learning then requires encouraging self-reflection to question their existing frames and become more aware of the sense-making process, their own and others’ anxiety, and the defensive behaviors it provokes. Ideally, through practice, students may learn to accommodate contradictions and their inter-

play, developing the capacity and propensity for paradoxical thinking. The goal of such a strategy is exploration because it is not necessarily the particular theoretical concepts or class exercises that students will remember but the process of learning through paradox.

CLASSROOM OPPORTUNITIES FOR LEARNING THROUGH PARADOX

The classroom provides a potentially valuable learning laboratory in which students may explore the contradictions and complexity of paradox. In this section, we introduce three differing yet interwoven instructional approaches: conceptual polarities, personal contradictions, and paradoxical predicaments. These approaches help students recognize the processes by which they identify phenomena and attempt to solve problems, as well as examine the impact of their perceptions on subsequent understandings and social interactions. But, as we point out in the concluding section, management educators must be wary of reducing paradoxes to pat techniques in which they lose their genuine quality, appeal, and effectiveness.

Conceptual Polarities: Constructing Complexity From Simplicity

Conceptual polarities denote theoretical constructs composed of coexisting opposites. Exploring conceptual polarities offers an early foray into paradox that helps students recognize how they discern differences by suppressing interconnections. Rothenberg (1979) noted the value of examining conceptual definitions: "Verbal opposition tends to be clearer and more specific than any other mode. . . . Opposition between or among words is easier to define and to assess than other types of oppositional relationships" (p. 197). This approach enables students to develop complexity from superficial simplicity by elaborating initial concepts that form a foundational understanding based on contrast and then examining the interplay between polarities to comprehend how each side reveals distinctions, limits, and advantages of the other.

In organizational behavior and organization theory, polarities are numerous, such as the need to develop local *and* global understandings, to differentiate *and* integrate functions, and to foster autonomy *and* interdependence. The organizational behavior literature repeatedly stresses the need for contradictory yet complementary human characteristics for optimal performance, illustrated by Kolb's (1984) opposing learning styles and their interdependence. Similarly, Smith and Berg (1987) highlighted numerous paradoxes that paradoxically enhance and inhibit group effectiveness. For

instance, managing the paradox of individuality requires understanding that a group becomes strong, resourceful, and cohesive only if the individuality of its members is fostered and expressed. Using an organization theory example, Morgan (1997) strove to foster paradoxical thinking by juxtaposing metaphors (e.g., organizations as machines, organisms, and psychic prisons) that challenge taken-for-granted, conventional, and one-dimensional assumptions with regard to organizations.

Consider the conflicting demands for control and flexibility fundamental to many organization theory concepts (e.g., mechanistic/organic, standardization/customization, tight coupling/loose coupling). Hurst (1984) described his experience with this paradox. Facing a highly disruptive change, his team of general managers recognized the need to simultaneously manage hard “boxes” and soft “bubbles” of organizations: tasks and roles, obedience and trust, and plans and vision. Exploring their own discomfort with control/flexibility tensions helped them reconceptualize boxes as factors that facilitate problem solving, efficiency, and control yet restrain innovation or the ability to “think outside of the box” and reconceptualize bubbles as open, fluid, and flexible necessities that encourage discovery yet are easily “popped.” Similarly, Quinn (1988) juxtaposed seemingly incongruent demands for control and flexibility and an internal and external focus to examine their interplay relative to theories of organizational effectiveness, leadership, culture, and decision making.

Johnson (1992) introduced an approach we adapt to the classroom to help students expand such concepts as control and flexibility from polarities into more complicated and paradoxical typologies. We begin by asking students to identify a concept and its opposite. Unlike dialectical teaching methods (e.g., Dehler & Welsh, 1993), a paradoxical approach seeks to retain anti-theoretical qualities. Students explore the possibility and value of operating simultaneously at the extremes rather than creating a synthesis between the extremes. In class discussion, we ask students to detail the upsides of extreme control and flexibility. Examining their respective downsides then enables expansion from a two-dimensional concept to a four-dimensional polarity map that accents the paradoxical need to tap and avoid aspects of each attribute (see Figure 2).

The following activity demonstrates the complete process depicted in Figure 2. Students’ attention is shifted from a static conceptual issue—a choice between control or flexibility—to an ongoing dilemma: the need for efficiency, stability, and predictability as well as innovation, adaptability, and opportunism. We ask students, What changes might organizations attempt when experiencing the excessive rigidity and mistrust of extreme control? This leads to a discussion of current trends in organizational design—

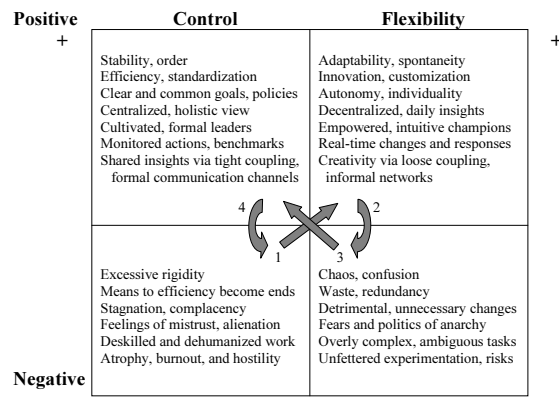


Figure 2: Polarity Map: Constructing Complexity From Simplicity

NOTE: Adapted from Johnson (1992).

self-managed teams, virtual networks, outsourcing, and so on—as organizations work toward the positive aspects of flexibility (in Figure 2, arrow 1 signifies such changes). We then ask, So why have such changes proven so problematic for organizations? Discussions typically revolve around how dramatic changes toward flexibility often neglect the positive aspects of control, causing members to resist the increased ambiguity and risks of new designs. Students may then realize why organizations often soon find themselves in the throes of chaos (arrow 2), which triggers drastic reactions toward the positive aspects of control, such as reinstating or clarifying policies, strategies, and chains of command (arrow 3). Yet, eventually, past criticisms of control reappear as messages of empowerment and trust conflict with control-related mechanisms and behaviors (arrow 4), thereby perpetuating the cycle. For students, the result is a more dynamic and complicated view. Thinking paradoxically entails seeing all four quadrants—managing organizational design requires learning to live within this cycle yet raising it upward to avoid swinging into the negative domains.

Personal Contradictions: Discovering Inner Paradoxes

From a detached examination of conceptual polarities, exploring personal contradictions shifts the pedagogical focus inward. A vital aspect of paradoxical thinking is the ability to self-reflect critically. Psychoanalysis techniques have long addressed inner paradoxes—desires for independence/dependence, introversion/extroversion, and masculinity/femininity. As the under-

lying precept of his work, Jung claimed that “only the paradox comes anywhere near to comprehending the fullness of life,” enabling a more realistic awareness of self and a space for learning (Schneider, 1990, p. 17). Recently, Fletcher and Olwyler (1997) examined how high-performing athletes and entrepreneurs use this space, such as Olympic sprinter Michael Johnson’s ability to maximize his aggression and relaxation simultaneously during a race.

Helping students appreciate their personal contradictions serves at least two purposes. First, it can spur discovery of their ambivalent feelings and conflicting behaviors, enabling students to attain higher levels of personal performance. As Carl Rogers noted, “The curious paradox is that when I accept myself just as I am, then I can change” (cited in Fletcher & Olwyler, 1997, p. 22). Second, awareness of inner contradictions may enlighten students to the tremendous challenges of managing social interactions, as personal paradoxes interact and complicate relationships. By recognizing conflicts among individuals’ perceptions and espoused theories versus theories-in-use, oversimplified notions of leadership, motivation, communication, and politics appear increasingly intricate and paradoxical (see Farson, 1996, for detailed examples).

We have found two exercises to be particularly valuable for helping students explore their personal contradictions. The first applies Fletcher and Olwyler’s (1997) steps toward paradoxical thinking. We begin by asking students to list their most dominant characteristics, pushing them to tap the views of those who love them most and least to develop a diverse list. Next, they examine their list for contradictions, developing a set of personal oxymorons (e.g., loveable curmudgeon, doting tyrant, spontaneous analyst, conforming rebel). To extend their self-reflection, we ask them to choose one and detail the most positive and negative aspects of each side of the oxymoron. Placing themselves on Fletcher’s Pendulum (see Figure 3) illustrates the natural tendency for people to swing from one extreme to the other. We then have them consider a predicament they are attempting to manage, examining how they are currently relating to the dilemma from each side of the oxymoron. Finally, we ask them to define actions that might help them attain a more positive balance, moving up the pendulum by working first on their most negative tendency to reduce the distance of their swings. Examining such actions focuses students on the possibility of profiting from their inner paradoxes.

An alternative exercise entails having students explore their espoused theories versus theories-in-use (Argyris, 1993) to recognize personal contradictions and their potential value in management. We begin by having students complete a simplified Theory X/Theory Y survey. Inevitably, nearly all will rate themselves more heavily as Theory Y. They then discuss their ratings in

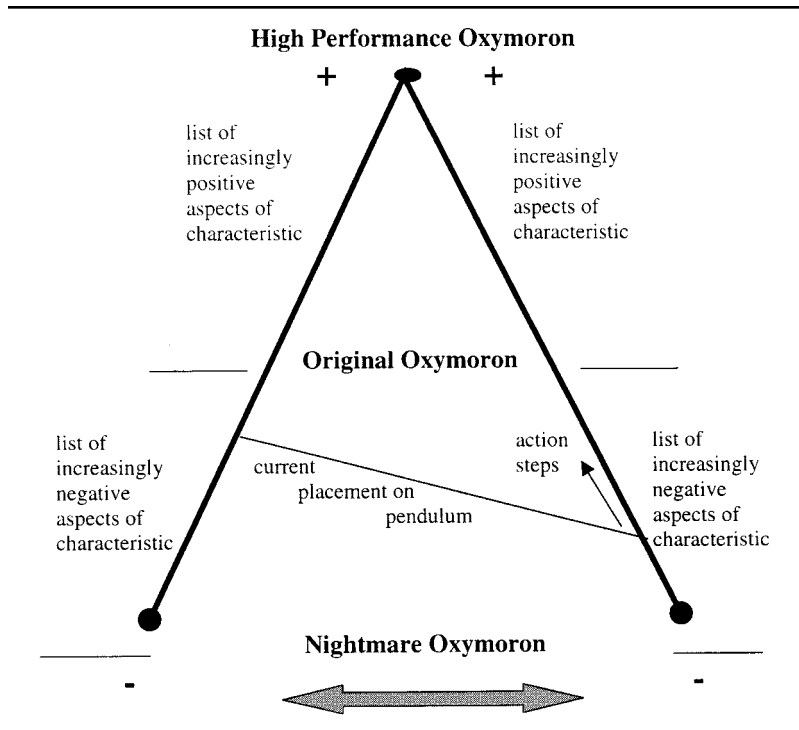


Figure 3: Fletcher's Pendulum: Tapping Personal Contradictions

NOTE: Adapted from Fletcher and Olwyler (1997).

small groups, examining why they hold their dominant leadership model and sharing exemplary work experiences. To their surprise, most groups begin to notice contradictions as members describe behaviors and beliefs clearly in tune with Theory X (students typically call attention to others' contradictions before recognizing their own). For example, students often describe how they manage group projects when a "slacker" is on the team or when the project represents a major portion of the grade by increasing their use of structured deadlines and monitoring others' behaviors. Such inconsistencies push students to defend their treatment of subordinates or peers in an "X-like manner." Fueling this conflict by asking provocative questions or playing devil's advocate, we prompt students to examine their contradictions at a deeper level, recognizing advantages of Theory X as well as potential situational limitations of Theory Y, the model most encouraged by business school training and popular business press. By applying paradoxical thinking, these contradictions appear not only rational but vital to developing a more

complicated contingency theory of leadership. According to Schneider (1990), ineffective managers attempt to suppress this paradox by clinging to one extreme, whereas effective managers define tasks, monitor behavior, and provide firm direction as they empower their employees, encourage innovation, and foster trust—a paradox expressed by classic theories of House; Blake and Mouton; Hersey and Blanchard; and Quinn, among others. Indeed, Peters and Waterman (1982) noted a similar pattern in excellent companies:

On the surface of it, Theory X and Theory Y are mutually exclusive As a leader you are authoritarian or you are democratic. In reality you are neither and both at the same time. Messrs. Watson (IBM), Kroc (McDonald's), Marriott, *et al.*, have been pathbreakers in treating people as adults . . . in providing training and development opportunities for all On the other hand, all of these gentlemen were tough as nails . . . when their core values of service to the customer . . . were violated. They combined, then, a caring side and a tough side. (p. 96)

Paradoxical Predicaments: Learning to “Read” Complexity

The third approach to learning through paradox entails helping students recognize and manage paradoxical predicaments. Johnson (1992) claimed that, unlike distinct and solvable problems for which an either/or decision may be chosen or a creative solution constructed, paradoxical predicaments denote ongoing dilemmas that require an ability to “read” a situation from multiple perspectives. By learning to perceive complexity, students recognize the value and limitations of isolated perceptions, as seemingly contradictory views accent alternative facets of a situation. Paradoxical thinking helps students break free of self-referential cycles (i.e., remaining within their existing frame by identifying and solving problems in ways that merely reaffirm their perceptions rather than accommodating contradictions to manage complexities).

Several methods may help students learn to explore complexity, beginning with basic perceptual activities, and followed by experimenting with more complicated case and analogy exercises. Perceptual exercises foster learning of fundamental reading skills—the ability to recognize opposing views and broaden initial frames to see contradictions simultaneously. A key to paradoxical thinking is gaining a gestalt understanding of figure and ground that moves students from saying “you’re wrong” to “I don’t see it,” a call for aid to recognize the supplementary nature of opposing viewpoints. Barrett (1998) offered a detailed discussion of developing paradoxical perceptions and numerous activities that require examination of an image from

opposing perspectives—backward, upside down—until alternative representations appear simultaneously. His optical illusions stretch initial perceptions, for example, revealing two or more faces hidden within a face, or a cube that appears to flip its tilt and direction by applying different viewpoints. Such exercises help students recognize that their mind manipulates and limits perceptions and yet is capable of multidimensional vision. Morgan's (1989) "mindstretching exercises" offer similar opportunities, requiring students to study an image or a story, construct initial perceptions, then seek and juxtapose contrary views to appreciate their simultaneity. For instance, we read students the following excerpt from Peters and Waterman (Morgan, 1989):

At Foxboro, a technical advance was desperately needed for survival in the company's early days. Late one evening, a scientist rushed into the president's office with a working prototype. Dumbfounded at the elegance of the solution and bemused about how to reward it, the president bent forward in his chair, rummaged through most of the drawers in his desk, found something, leaned over the desk to the scientist, and said, "Here!" In his hand was a banana, the only reward he could immediately put his hand on. From that point on, the small "gold banana" pin has been the highest accolade for scientific achievement at Foxboro. (p. 25)

We ask students to record their immediate reaction to the story, then examine their initial perception and reverse it, constructing an opposing interpretation. In sharing their interpretations with the class, students are invariably intrigued by two aspects. First, results illustrate tremendous variations—ranging from interpretations similar to Peters and Waterman's use of this story as an example of immediately rewarding innovation and fostering organizational cultures that promote excellence, to critique of "goofball" motivation tactics exemplifying condescending managerial behaviors and employee gullibility. Typically, discussions become quite humorous, relaxing students' fears of sounding foolish and sparking increasingly creative interpretations. Second, and more important, students recognize the potential complexity of a seemingly simple social interaction, as each interpretation is equally plausible in isolation and may actually coexist (e.g., a manager interpreting his or her gesture as a heartfelt gift or motivational reward, whereas a worker feels cheated, patronized, or manipulated).

Once students feel relatively comfortable reading opposing interpretations, analyzing more complicated case studies may enable them to magnify partial, contrasting views of organizations. Amenable cases offer real-life situations that may be examined from a wide variety of perspectives, each identifying alternative problems and/or solutions. For instance, Morgan (1997) suggested having students read the "Eagle Smelting" or "Multicom" case,

typically resulting in mechanical and simplistic interpretations replete with trendy management terminology, then reread the case through an opposing lens (e.g., cultural or political) to become skeptical of conventional viewpoints. We also manipulate traditional cases, asking students to defend opposing perspectives to recognize their supplementary nature and interplay. For instance, we have students play varied roles, such as workers, engineers, and executives; view themselves as a production supervisor, managing the interests of their subordinates, plant management, suppliers, and customers; or give students the same case with different introductions. They may then contribute varied understandings to class discussions, sparking complicated debates that challenge students to discern why their views are so divergent. Such exercises illustrate organizational analysis as a complicated and paradoxical interpretive process.

A third type of exercise for helping students read complexity entails using analogies. Unlike case studies, the value of analogies, or metaphors for that matter, lies paradoxically in their outwardly unrealistic nature, which may reduce students' discomfort with particularly emotional and potentially explosive paradoxes. For instance, we often use a "bomb shelter" exercise, popular in numerous variations, to explore the paradoxical insights and prejudices of stereotypes. We give students a list of 12 people with very limited information per person (age, sex, profession, religion, race, marital status), asking them to rank order their entrance into a bomb shelter (the closer to 1 the higher the probability of getting into the shelter and surviving an atomic war). We then ask them to get into small groups to formulate a shared ranking, developed by consensus, not majority vote. Conflicts within groups often become emotional, frustrating, and paralyzing, fueled by members' avoidance of their underlying reasons for different rankings.

Many groups are unable to arrive at a shared ranking, which requires coming to agreement first on a higher mission (e.g., reproduction after a nuclear war, creating an ideal new world), then engaging in an open, self-reflective, and critical discussion of stereotypes. We often provoke such discussions by asking, "What do you know/not know about each individual?" and "How do your images of these people differ and why?" Students often defend the value of their stereotypes, whereas others contradict their generalizations with personal experiences. Most groups eventually recognize the paradox, questioning, "What valuable information and prejudicial blinders do our stereotypes provide?" Comparisons are often made to police being trained to use stereotypes as heuristics, which may save their lives and offer vital clues to a crime yet may also provoke discriminatory practices. In subsequent class discussion, the issue becomes "What link does such an exercise have to management?" This, of course, is the crux of an analogy exercise. For instance, we

often connect the bomb shelter experience to hiring dilemmas—"How much can we actually know from a resume?" Although seemingly simplistic, such experiences can stimulate deep insights, helping students take responsibility for critiquing and expanding their own as well as others' perceptions.

The preceding discussion has elaborated three basic approaches and specific exercises for employing paradox in the classroom. The explicit intent behind introducing conceptual polarities, personal contradictions, and paradoxical predicaments as pedagogical approaches is to increase the level of students' complex-thinking skills. These approaches, however, cannot succeed unless management instructors themselves also embrace the discomfort of paradox in their classroom conduct. The next section addresses this issue.

MANAGING THE PARADOX OF TEACHING WITH PARADOX

Teaching with paradox requires "walking the talk." If students are truly going to be inspired to think outside the box, we need not only to help them critique the box of oversimplified, polarized frames but also to model paradoxical thinking ourselves. As Farson (1996) noted, paradoxical thinking taps the power of uncertainty and ambiguity: "Absurdly, our most important human affairs—marriage, education, leadership—do best when there is an occasional loss of control and an increase in personal vulnerability, times when we do not know what to do" (p. 38). Recalling our earlier discussion of the control/flexibility paradox, the paradox of teaching with paradox lies in the need to provide order and foster creative tension. In this regard, we have found that teaching with paradox offers a valuable learning opportunity for instructors as well as students. By being self-reflective ourselves, we have become highly conscientious of our own defenses—our desire to control the classroom—and the paradoxical need to allow, even cultivate, an element of confusion to enable more insightful experiences. This requires resisting the temptation to overuse teaching paradigm tactics, that is, refraining from merely telling students about paradoxes and regulating their experiences and instead constructing boundaries within which they may comfortably question inadequacies of their understandings. Such needs complement and extend those of other learning paradigm strategies. For instance, Mallinger (1998) recently wrote of the need to give up control, to maintain control when using collaborative learning approaches, whereas Dennehy, Sims, and Collins (1998) examined the conflicting needs of experiential learning.

Ambiguity is necessary so that individuals are personally stretched to apply concepts to real situations. It may seem paradoxical that the pursuit of a conceptual model for debriefing is urged, yet ambiguity is also urged, to meet the subjective needs of individuals. Both requirements (structure and ambiguity),

however, can be met if the management educator is cognizant of . . . the debriefing model and uses it as a road map to facilitate discussion so that all learning states are experienced. (p. 18)

Barrett's (1998) seven injunctions of the "Paradox Mind-Set" remind instructors to be purposeful, open, skeptical, contrary, paralogical, imaginative, and courageous, as they encourage students to do likewise. Modeling paradoxical thinking entails remaining focused on the process and objectives of intentional learning while displaying curiosity, honesty, and self-reflection. By provoking insightful debate, conflict can become a source of creativity, and playing devil's advocate may help students identify their underlying assumptions and more complicated questions to move beyond which alternative is "right" (Dehler & Welsh, 1993). Critiquing oversimplified explanations and taken-for-granted, often nonsensical, conventions, students can be inspired to seek and accommodate opposing views, to creatively make sense of contradictions by transcending either/or logic and overcoming fears of sounding absurd.

Finally, the potential value of students' leaving the classroom with some confusion or dissatisfaction should not be overlooked as a constructive tactic. Palmer (1998) proposed that "good education is always more process than product . . . [and] may leave students deeply dissatisfied, at least for a while" (p. 94). Likewise, French (1997) explained that teachers may use anxiety to foster creative tension and energy while avoiding an excess that freezes students within their defenses. Using the learning space provided by paradox requires staying with the uncertainty long enough to explore contradictions rather than suppress them, examining the ambivalence of mixed feelings, conflicting demands, and uncertainty. Rather than providing oversimplified closure to a complicated discussion, leaving a class with unresolved questions may spur further exploration to reduce confusion and complexity. A degree of unresolved tension or "dissatisfaction may be a sign that real education has happened" (Palmer, 1998, p. 94).

Conclusion

Kets de Vries (1995) claimed that as organizations increasingly manifest a maze of interwoven paradoxes, the Chinese proverb "May you live in interesting times" seems almost too real. In using paradoxes in the classroom, we may begin to simulate the complex nature of organizational life and help our students develop a capacity for paradoxical thinking. Such a strategy focuses not on the traditional development of specific concepts or theories but on

comprehending the learning process as new frames fuel their own contradictions and tensions, stimulating further and deeper discoveries. Hence, our classroom endings provide new beginnings from which students may continue to explore organizations, concepts, and themselves in a new light. As the paradox of progress states—the more we know, the less we know. Smith and Berg (1987) insightfully observed that learning in a paradoxical world is cyclical—a complicated ebb and flow between poles and oscillations among paradoxes interwoven at various levels:

Circles. One cannot escape the feeling that an exploration of paradox is like walking in circles. It is hard to know where you have come from and where you are going. But the more one lives with a paradoxical perspective, the more one develops a tolerance for circles and for the places where two apparently contradictory paths join. (p. 151)

References

- Argyris, C. (1993). *Knowledge for action: A guide to overcoming barriers to organizational change*. San Francisco: Jossey-Bass.
- Barrett, D. (1998). *The paradox process: Creative business solutions—Where you least expect to find them*. New York: AMACOM.
- Bateson, G. (1972). *Steps to an ecology of mind*. San Francisco: Chandler.
- Bouchikhi, H. (1998). Living with and building on complexity: A constructivist perspective on organizations. *Organization*, 2, 217-232.
- Cameron, K. S. (1986). Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, 32(5), 539-553.
- Cameron, K. S., & Quinn, R. E. (1988). Organizational paradox and transformation. In R. E. Quinn & K. S. Cameron (Eds.), *Paradox and transformation: Toward a theory of change in organization and management* (pp. 1-18). Cambridge, MA: Ballinger.
- Davis, A. S., Maranville, S. J., & Obloj, K. (1997). The paradoxical process of organizational transformation: Propositions and a case study. In W. A. Pasmore & R. W. Woodman (Eds.), *Research in organizational change and development* (Vol. 10, pp. 275-314). Greenwich, CT: JAI.
- Dehler, G. E., & Welsh, M. A. (1993). Dialectical inquiry as an instructional heuristic in organization theory and design. *Journal of Management Education*, 17(1), 79-89.
- Dennehy, R. F., Sims, R. R., & Collins, H. (1998). Debriefing experiential learning exercises: A theoretical and practical guide. *Journal of Management Education*, 22(1), 9-25.
- Farson, R. (1996). *Management of the absurd: Paradoxes in leadership*. New York: Simon & Schuster.
- Fletcher, J., & Olwyler, K. (1997). *Paradoxical thinking: How to profit from your contradictions*. San Francisco: Berrett-Koehler.
- French, R. B. (1997). The teacher as container of anxiety: Psychoanalysis and the role of teacher. *Journal of Management Education*, 21(4), 483-495.
- Gallos, J. V. (1997). Editor's corner. On learning about diversity: A pedagogy of paradox. *Journal of Management Education*, 21(2), 152-154.
- Handy, C. (1994). *The age of paradox*. Cambridge, MA: Harvard Business School Press.

- Hatch, M. J., & Ehrlich, S. B. (1993). Spontaneous humour as an indicator of paradox and ambiguity in organizations. *Organization Studies*, 14(4), 505-526.
- Hurst, D. K. (1984). Of boxes, bubbles, and effective management. *Harvard Business Review*, 62(3), 78-88.
- Johnson, B. (1992). *Polarity management: Identifying and managing unsolvable problems*. Amherst, MA: HRD Press.
- Kets de Vries, M.F.R. (1995). *Organizational paradoxes: Clinical approaches to management*. New York: Routledge.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Mallinger, M. (1998). Maintaining control in the classroom by giving up control. *Journal of Management Education*, 22(4), 472-483.
- McKenzie, J. (1996). *Paradox—The next strategic dimension: Using conflict to re-energize your business*. New York: McGraw-Hill.
- Meyer, M. W., & Gupta, V. (1994). The performance paradox. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 16, pp. 309-369). Greenwich, CT: JAI.
- Morgan, G. (1989). *Creative organization theory*. Thousand Oaks, CA: Sage.
- Morgan, G. (1997). *Images of organization*. Thousand Oaks, CA: Sage.
- O'Connor, E. S. (1995). Paradoxes of participation: Textual analysis and organizational change. *Organization Studies*, 16(5), 769-803.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco: Jossey-Bass.
- Pascale, R. T. (1992). *Managing on the edge: How the smartest companies use conflict to stay ahead*. New York: Simon & Schuster.
- Peters, T., & Waterman, R. H., Jr. (1982). *In search of excellence*. New York: Warner Books.
- Quinn, R. E. (1988). *Mastering the paradoxes and competing demands of high performance*. San Francisco: Jossey-Bass.
- Quinn, R. E., & McGrath, M. R. (1985). Transformation of organizational cultures: A competing values perspective. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), *Organizational culture* (pp. 315-334). Beverly Hills, CA: Sage.
- Rothenberg, A. (1979). *The emerging Goddess*. Chicago: University of Chicago Press.
- Schneider, K. J. (1990). *The paradoxical self: Toward understanding of our contradictory nature*. New York: Insight Books.
- Smith, K. K., & Berg, D. N. (1987). *Paradoxes of group life*. San Francisco: Jossey-Bass.
- Vince, R., & Broussine, M. (1996). Paradox, defense and attachment: Accessing and working with emotions and relations underlying organizational change. *Organization Studies*, 17(1), 1-21.
- Westenholz, A. (1993). Paradoxical thinking and change in the frames of reference. *Organization Studies*, 14(1), 37-58.