

THE  
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S E R I E S

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UNDERSTANDING EXECUTIVE EDUCATION:  
A FRAMEWORK FROM ADULT LEARNING THEORY

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## Executive Summary

Human beings tend to view new experiences through the lens of the past in an effort to maintain a sense of coherence and control. The paradox is that when we need most to explore new ideas, we are often shackled by the past. Thus, the central challenge of executive education, like that of adult education generally, is to use executives' rich life experience as a lever for growth and not a straitjacket. At its best, executive education is about the kind of personal transformation that leads to organizational advancement. It entails the right balance between reflection and action, theory and practice, structure and serendipity. The following report synthesizes the most recent developments in adult education and in executive education to help educators meet that challenge.

A review of the unique characteristics of adults as learners frames the discussion. Types and purposes of adult learning are offered to show that most executive education falls into the category referred to in the literature as "emancipatory" learning. Within that domain, the report distinguishes the three dominant theoretical models that drive approaches to education: behavior theory, humanistic theory, and cognitive theory. Cognitive theory is presented as the most complex of the three with the greatest potential to enrich executive education. The report breaks cognitive theory into three families: cognitive development theory, social constructivism, and expertise theory. The question of what we mean by "knowledge" is integral to the discussion of all three domains of cognitive theory because different conceptualizations of knowledge determine the orientation and outcomes of education.

Following discussion of the contributions of key figures in each of these theoretical families, implications for executive education are offered. There are two main themes in these implications. First is the critical need to foster what cognitive psychologists call metacognitive thinking, or the ability to think about thinking, and what social constructivists would call "grounded theories of practice." Without the ability to stand back from immediate experience in order to recontextualize it and retheorize it, often from multiple perspectives, executives cannot learn successfully. Second is the importance of embedding learning in the context of experience, whether the experience is actual field-based work or simulations. Although executives are fairly impatient learners, a rich learning experience is one that draws on everyday experience to introduce and apply provocative new knowledge.

The report concludes with an extensive bibliography.

## **Understanding Executive Education: A Framework from Adult Learning Theory**

*Adult development is seen as an adult's progressively enhanced capacity to validate prior learning through reflective discourse and to act upon the resulting insights. Anything that moves the individual toward a more inclusive, differentiated, permeable (open to other points of view) and integrated meaning perspective, the validity of which has been established through rational discourse, aids an adult's development.*

—Jack Mezirow  
*Transformative Dimensions of Adult Learning*

*Adult learning's primary objective is to help those whom society deems fully responsible for their acts to become more reflective in posing and solving problems, to become more critically self-reflective, to participate more fully and freely in rational discourse and action, and to move developmentally toward more reliable perspectives.*

—Patricia Cranton  
*Understanding and Promoting  
Transformative Learning*

*Today, workers at all levels are called upon to think differently and more deeply about themselves, their work, and their relationship to the organization. This is nowhere more evident than in the ranks of managers, whose very survival is threatened by mergers and acquisitions, downsizing, and flattening of the organizational pyramid. Frequently trained to implement policies rationally, managers are being called upon to make subjective judgments, take risks, and question the assumptions on which they have operated.*

—Victoria Marsick  
*Action Learning and Reflection  
in the Workplace*

## Preface

Adult education is a huge field that includes everything from adults who pursue high school equivalence certificates to assembly line workers learning how to install parts; from wine-tasting courses in continuing education programs to executive retreats on leadership; from programs hosted within traditional classrooms offering course credits, licenses, certificates, and degrees to workshops and seminars sponsored by professional firms. The literature on adult education often fails to distinguish among its many contexts and audiences and often assumes, without stating, that adult education takes place within some type of higher education institution. Since adult education emerged as a field of study in the 1960s, it has been criticized—and has criticized itself—for the absence of theoretical frameworks that might better organize its practice and inquiry (Cross 1991).

The 1990s were characterized by various attempts to articulate the assumptions, methods, goals, and challenges for adult education in ways that would more provide the conceptual tools needed to organize and clarify the field (Cranton 1991). This document reflects that drive to make sense of a diverse and unruly field, and to do so in a way that focuses on the particular audience of adult learners served by professional education firms such as Lore: executives and the professionals who advise them. However, given the needs of this particular audience, this document also goes beyond conventional work in adult education to include studies of executive development and theories of multiple intelligence to provide a richer and more comprehensive picture of the possibilities and implications for executive education.

## Characteristics of Adult Learning

The first effort to define the unique mission of adult education emerged in 1970 with Malcolm Knowles' attempt to distinguish the characteristics of adults as learners from those of children and adolescents. Although his theory of "andragogy" has been modified continuously since it was first presented, Knowles' work—and the term itself—is still used to refer to essential features of adult learners. Those features, adapted to executive learners, follow.

### Assumptions about adult learning

- *Self-concept*—self-confident, empowered, experienced as a learner, holds equal status with teacher, active and self-directed within the learning context provided
- *Experience*—brings rich life experience to the learning situation and uses it as both a driver for pursuing learning and a filter for testing or implementing new concepts
- *Orientation to learning*—often problem-centered but often exploratory (learning for its own sake)

### Instructional design

- *Climate*—collaborative and nonhierarchical with teachers and other learners; framed by organizational culture—its needs, values, expectations, operating styles
- *Objectives*—assumptions, values, and goals are transparent for learners; often mutually established and agreed upon

- *Learning design*—new knowledge is framed by learners' experiences as opposed to the content domain of the subject; often inquiry based; frequent opportunities for interaction with teachers as colearners to process, apply, or critique new material; frequent opportunities for reflection
- *Evaluation*—self-assessment typically related to impact on self-understanding or development, and/or applicability to professional situation; frequently enhanced by peer feedback from colleagues, faculty, and/or colearners

### Categories of Adult Learning

Although the terms vary, adult educators agree that there are different kinds of adult learning and that it's useful to distinguish among them because the distinctions open up differences in instruction and even audiences. Three categories of adult learning are usually identified:

- *Instrumental/subject-oriented*—Primary objective is the acquisition of content knowledge (i.e., leadership theory, theory of multiple intelligences, new accounting systems, etc.) with the instructional design driven by need to cover the territory. The teacher is in the position of expert, although the "teacher" may be a computer program, web site, or other technology.
- *Communicative/consumer-oriented*—Emphasis is on the acquisition of new skills (i.e., how to use new computer software). Learning design is often self-constructed, self-directed, and self-initiated. Teacher is in the role of facilitator, or learning may be entirely independent.
- *Emancipatory*—Primary objective is the acquisition of knowledge about the self in

relation to oneself; to others; or to political, organizational, or cultural systems. Learning is framed by concepts as opposed to information and process of learning involves the exploration of the self in relation to new concepts or frameworks of meaning. The objective is some degree of self-transformation with the teacher serving as facilitator and peers serving as important collaborators to explore ideas and implications, test hypotheses, provide a rich learning environment, and offer feedback.

Although executives, like everyone else, have continuing needs to learn new material and master new skills, most formal executive education falls into this third category.

### Learning Theories Behind Approaches to Adult Learning

#### Behavioral Theories

Learning occurs in the context of stimulus and rewards. Programs that are formed around stated and measured behavioral objectives are grounded in behavioral theory, as are programs that are organized according to self-contained modules that must be mastered in a predefined series. Rewards drive learning. This theory is so prevalent that it's hard to tie it to any one practitioner after Skinner and has certainly become the sine qua non of American education with its emphasis on testing, measuring, validating, credentialing, licensing, penalizing, and rewarding. (Consider George W. Bush's proposed approach to education with its heavy emphasis on testing and accountability, and their ties to funding.) European education looks and feels very different perhaps because of the different social values. The appeal of behaviorism to education at all levels may be because of its

somewhat naïve connection to democratic principles—that everyone seemingly has the same opportunities for achievement and reward. Education approaches that emphasize transfer of information, particularly through technology, also derive from behaviorist principles as opposed to education based on the development of knowledge or development of the person. [See John Seely Brown and Paul Duguid’s discussion of education in *The Social Life of Information*: “Teaching, in this view, is a delivery service, and schools a loading site. . . Moreover, the delivery view leads people to think of educational technology as a sort of intellectual forklift” (219).] Nevertheless, behavioral theories are especially useful within the instrumental category of adult learning, or in consumer categories in which the development of fairly discrete skills is involved.

### Humanistic Theories

The foundational premise of humanistic psychology is that the self is always in the process of moving toward self-actualization (Maslow 1971; Rogers 1961). Continuous learning is central to that process. Meaningful learning is self-initiated and self-directed with educators as facilitators of this naturally occurring process. Rogers argued that an environment of acceptance and encouragement (what he termed “unconditional positive regard”) stimulates learning because such an environment fosters risk taking, creative thinking, and honest reflection.

If behavioral theories provide the invisible but driving frameworks for much elementary and secondary learning in schools, humanistic theories drive much adult education and executive education, in particular with their emphasis on

personal growth. Jay Conger, in *Learning to Lead* (1992), describes the two basic premises of personal growth approaches to leadership training as follows: “First, many of us have lost touch with our inner-most values, talents, passions, and sense of power because of societal work-life experiences . . . Second, our fears of failing or of rejection are the major reason we are out of touch with our inner potential . . . The link that these programs make to leadership is the following: leaders are individuals who are deeply in touch with their gifts and passions. Therefore, only by tapping into and realizing one’s passions can a person become a leader.”

Although Conger distinguishes personal growth approaches to leadership education from feedback-based approaches and what he calls “conceptual” approaches, it’s clear that all three types of education have to do with clearer self-understanding in relation to the challenges of leadership. After extensive study of all three approaches, he argues that to be most effective, leadership education ought to make even more extensive use of the personal growth (that is, the humanistic) model because it offers “powerful tools to help managers overcome ineffective interpersonal behaviors that block their leadership ability; to foster changes in managers’ worldviews, opening them to the possibility of greater vision; and to build managers’ self-esteem and confidence and in turn encourage them to take the initiatives associated with leading” (Conger 1992).

### Cognitive Theories

By far the largest category of adult learning theory is the cognitive theories. Because this is such a

large territory, we've divided it into three kinds of cognitive theory: Cognitive Development Theory, Social Constructivist Theory, and Expertise Theory.

### **Cognitive Development Theory**

According to this perspective, cognitive development unfolds in universally occurring stages. The Swiss psychologist Jean Piaget was the first to frame the developmental position with his studies of childhood and adolescent development. But in the process, he put in place an understanding of the principles and mechanisms that drive the stages of development and he cautioned against what he called “the American heresy”—the urge to speed up and shape what is a naturally unfolding process. Nonetheless, subsequent work in stage theory explores that very question of what drives development and how it can be optimally shaped. This “interactionist” position in cognitive development, as it has come to be called, is that development can be spurred along by interventions from the environment (e.g., teachers, educational programs, feedback).

Higher stages of cognitive development are marked by increased abstraction in thinking, the ability to think in relative terms as opposed to absolutes and either/ors (Perry 1970), consideration of ethical implications of actions (Kohlberg and Mayer 1972), development of reflective judgment (King and Kitchener 1994), and greater awareness of context as opposed to absolutes—the “what” gives over to the “way” (Perry 1970). From the developmentalist’s perspective, learning is driven by appropriate mixes of challenge and support. Teachers carry

the responsibility to help learners reach successive stages of development.

It’s also worth pointing out that stage theorists generally agree that people are bound by the limits of the stage they are in. In other words, they can work within a stage, and they can begin to appreciate the new ways of thinking represented in the stage just ahead of them. But they cannot understand the thinking that characterizes intellectual operations more than one stage ahead of where they are. Confronted with such thinking, they may actively resist it, may be mystified, or may even regress to the stage at which they are more comfortable. “Ambiguity, paradox and exploration of implied, underlying meanings are likely to seem vague and a waste of time rather than being seen as clues to innovative agendas, genuine collaboration and new stages of development” (Fisher and Torbert 1995). This finding has enormous implications for designing educational experiences that can promote growth rather than freeze it. We return to this concept in our discussion of implications for adult learning, particularly for program participants in their 20s and early 30s.

A brief review of Lawrence Kohlberg’s stages of moral development will be useful here, not just to illustrate stage theory in general but to lay out issues of high-level moral development that relate to executive and leadership education. Kohlberg formulated three levels of moral reasoning: preconventional, conventional, and postconventional, with two stages in each level. The overall movement is as follows:

**Stage 1:** Threat of punishment and external authorities enforce rules. Interpersonal

orientation is egocentric, and behavior is based on one's own best interests without awareness that others' interests may be different.

- Stage 2:** Rules are followed when they are in one's immediate interest. Right is defined as exchange, thus the interpersonal orientation admits the possibility of differing interests but satisfying the self remains the primary goal.
- Stage 3:** Good behavior is motivated by maintaining the regard, trust, loyalty, or respect of significant others, internalizing others' regard with a desire to be a good person in one's own eyes. Interpersonal orientation shows beginning ability to put oneself in another person's shoes.
- Stage 4:** Good behavior shifts from an interpersonal to a social basis as one behaves well to uphold society or particular institutions. Individuals are now understood in the context of larger systems, but following rules is still based on one's having agreed to do so.
- Stage 5:** This first of two stages of postconventional moral reasoning is grounded in the realization that rules are relative to the individuals or group holding them, but those rules prevail because they maintain a social contract that operates in the best interest of everyone. Having reached this

understanding, the individual still finds it difficult to reconcile conflicting values.

- Stage 6:** Kohlberg's final stage of moral development emphasizes morality as self-chosen. The individual maintains respect for legal and other moral systems because they are seen to derive from more abstractly defined ethical systems that exist apart from the group that holds them. The Stage 6 thinker also adheres to a personal commitment to oppose laws or systems that violate moral principles. Kohlberg's research convinced him that moral principles of justice, equality, a sense of membership in the human community, and respect for the dignity of humans as individuals were universal.

In a study of managers' intellectual development, Fisher and Torbert (1995) found that only about 10% of the managers were at a level of development they call "strategists," which they define as follows:

"The Strategist frame is a frame that sees other frames as valid, relevant and usable. This frame thus brings into view the possibility that people's differing frames—however disparate, unique and internally inconsistent they may be—can be understood as valid from their own differing points of view. The Strategist is attuned more deeply than managers holding any of the prior frames to the uniqueness of persons and situations."

And in a passage that seems to draw heavily on Perry's description of the highest level of intellectual development, Fisher and Torbert (1995) expand their description this way:

"The Strategist realizes that all frames, including his or her own, are relative. With this realization, the Strategist . . . is open to the possibility of 'reframing' his or her viewpoint and purposes in a situation, and helping others to 'reframe,' consciously seeking and choosing new frames that accommodate the disparities and paradoxes, and fluidity of multiple frames." From Kohlberg's perspective, these strategists would be postconventional thinkers (Stages 5 and 6), and these researchers report that 80% of all strategists were at the most senior levels of management.

Kohlberg's work remains an important counterpoint to the moral relativism of much contemporary life, and it sets a high standard for executive education in which ethical development and ethical problem solving are central. It should be noted, though, that Kohlberg is not without critics. His colleague and coauthor, Carol Gilligan, eventually found that Kohlberg's emphasis on the solitary, rational moral philosopher was part of the established tradition in Western thought that represented male experience as universal experience. As Gilligan extended Kohlberg's work to an understanding of women's moral development, she found strong evidence that in place of a male standard for principled rationalism was what she called an ethic of care in a world defined by mutuality as the moral driver for women. Gilligan's work opened up a continuing strand of research on women's intellectual and ethical development and is often used to highlight the continuing and often bitter debates around

questions of essentialism or universalism versus questions of knowledge, morality, even gender itself as socially constructed.

If Kohlberg and Gilligan map the territory of intellectual and moral development, Roger Kegan's work describes the psychological engine that traverses this landscape. Like Piaget before him, Kegan uses the image of the helix to illustrate the spiraling, recursive, and somewhat paradoxical nature of cognitive growth. With the emergence in early adulthood of metacognition—the ability to think about our thinking—we may confront the same old dilemmas repeatedly in our lives, but we confront them as changing and changed people, so those old dilemmas are never really the same. Kegan describes development as a series of truces between the need to achieve differentiation from others and the need to be embedded. Independence, autonomy, detachment, separation alternate with interdependence, inclusion, and integration; the assertion of the self seeks balance with interpersonal harmony. In a sense what you have is the polarity posed by the work of Kohlberg and Gilligan. Kegan, though, addresses himself to the messy arena of understanding oneself in the context of understanding others, and hence has broad applicability to questions of leadership development. The following quotations from Kegan (1982) are useful in illustrating these challenges:

"If you want to understand another person in some fundamental way, you must know where the person is in his or her evolution . . . Because the way the person is settling the issue of what is 'self' and what is 'other' essentially defines the underlying logic (or

psychologic) of the person's meanings. Since what is most important for us to know in understanding another is not the other's experience but what the experience meant to him or her, our first goal is to grasp the essence of how the other person composes his or her private reality.”

Kegan’s interest in describing adult development in the context of interpersonal relations extends conventional notions about the personal growth dimension of executive education as articulated by Conger (above).

Cognitive development theory is key to adult education because it provides an understanding of what mature adult development looks like. As the quotations that open this document indicate, adult education practitioners (although they may be influenced by other theoretical positions as well) would generally agree that fostering continued professional development means fostering cognitive, intellectual, ethical, and social development among adult learners.

### **Social Constructivism Theory**

Although cognitive development theory argues that development is largely a function of the individual's interactions with elements of her environment, theories of social construction go one step further. The self makes meaning in its own way, transforming existing knowledge into its own perspective while moving toward higher levels of consciousness (Mezirow 1991).

Social construction approaches blend humanistic and developmental theories with an emphasis on learning as a naturally occurring phenomenon driven by the need to self-actualize and achieve greater freedom (emancipation). However, social

construction also reflects the postmodern concern with how the individual is shaped by and shapes cultural systems, particularly systems of power (Freire, 1968). It is this awareness of differences in culture (organizational, national, disciplinary, etc.), differences in social status, and hence differences in educational access and achievement as they are determined by social class, ethnicity, and gender, that distinguishes social construction from behaviorism. Brown and Duguid’s analysis of how “communities of practice” simultaneously create knowledge and identity sits squarely within the social constructivist camp: “. . . learning needs to be understood in relation to the development of human identity. In learning to be, in becoming a member of a community of practice, an individual is developing a social identity. In turn, the identity under development shapes what that person comes to know, how he or she assimilates knowledge and information. . . . What people learn about, then, is always refracted through who they are and what they are learning to be” (Brown and Duguid 2000).

Adult education theorists like Jack Mezirow, who initially worked with women returning to college, are primarily interested in transformations of the self. Theorists like Freire, who worked in literacy education among the dispossessed and oppressed peasants of South America, are most interested in how learning can promote social and political change. For our purposes, Mezirow’s work has tremendous applicability to executive education, so a great deal of attention will be devoted to his theory of transformative learning.

Mezirow’s central premise is that adults’ life experience is both the key strength and the

vexing challenge of adult education: its strength because adults bring vast life and work experience and the insights and inquiries that accompany this experience into their learning; its challenge because of the human tendency to reframe new experiences according to old ones, thereby limiting perceptions and reinforcing old assumptions and theories: “Normally when we learn something, we attribute an old meaning to a new experience. In other words, we use our established expectations to explicate and construe what we perceive to be the nature of a facet of experience that hitherto has lacked clarity or has been misinterpreted. In transformative learning, however, we reinterpret an old experience (or a new one) from a new set of expectations, thus giving a new meaning and perspective to the old experience” (Mezirow 1991).

Mezirow identified ten phases of transformative learning:

1. A disorienting dilemma, such as promotion to a new position that entails broader responsibilities, a crisis within an organization, radical strategic change within an organization, loss of a job, loss of an important relationship, along with a host of personal life changes. Disorienting dilemmas challenge one’s values and beliefs or one’s sense of one’s capacities to respond effectively. They can be caused by changes in the environment or even by feedback that challenges previously held notions about the self.
2. Self-examination. Honest self-examination depends on a sense of confidence, freedom from judgment, security, and possibly support

by others to feel empowered to engage in the process and achieve resolution.

3. Critical assessment of internal assumptions accompanied by a sense of alienation from usual social context.
4. Relating to others’ experience to see commonalities
5. Exploring options
6. Building competence in new roles
7. Developing a plan of action to resolve the dilemma
8. Acquiring new knowledge and skills to implement the plan
9. Making provisional efforts to try out new roles and obtain feedback
10. Reintegrating self into social situation

Critical reflection is at the core of transformative learning. It involves uncovering the distorted assumptions (what Freire would have called “false consciousness”) that led to the disorienting dilemma in the first place. Distorted assumptions can occur in three domains of meaning: the psychological, or what you know about yourself; the sociolinguistic, or what you know about social norms; or the epistemic, or what you know about knowledge (assumptions about what knowledge is, how one gets it, why one needs it). Questioning assumptions is potentially a “psychologically explosive” process that involves 1) identifying what those assumptions are,

2) examining the sources and consequences of assumptions, and 3) questioning the validity of assumptions. Giving up old assumptions is often a painful process marked by resistance, but the ease of transition is also influenced by the self-confidence, readiness, or needs of the learner. Key roles for teachers and colearners are to set the stage for critical self-reflection, to support the process, and to facilitate transitions into new sets of assumptions that help to resolve the initial dilemma and that result in an increased sense of personal empowerment.

In summary, the theory of transformative learning argues that significant changes in adults will occur only if educators recognize how deeply embedded in the self are the values and assumptions that drive our behavior. Mezirow's work offers an analysis of the process for altering the meanings that enable adults to change their behaviors. It is an approach useful for situations that anticipate—indeed, require—significant personal growth and change.

### **Expertise Theory**

Equally powerful for executive education is the growing body of material on the development of expertise. Ironically, this body of work doesn't normally find its way into the adult education literature, even though by definition it is about how adults learn to become expert in their professional practice. Studies of the development and meaning of expertise, and distinctions between novice and expert practice, are a different order of theory but occupy an important place in understanding workplace learning. The contribution of this literature is its treatment of how expert practice is embedded in practice itself, not isolated in a classroom. It speaks to a

dilemma that no literature has fully resolved but that all adult education theory seems to circle around; that is, the relationship between what we know and what we do.

Expertise research has been conducted in a wide range of fields, including nursing, academic disciplines, management, and architecture and design. This body of research is close to cognitive development in its descriptions of mature thought processes, but it does not rely, as the developmentalists do, on a reconstruction of stages in life span development. Rather, it gets at the thought practices of experts. Expertise theory grows out of the work of philosopher Michael Polyani, notably his 1958 book *Personal Knowledge*. Polyani was one of the first to explore what he called "tacit knowledge," the knowledge that is so deeply embedded in our day-to-day activities that we don't know we have it. Experts hold deep reservoirs of tacit knowledge that drive their problem solving, their decision making, and even what they pay attention to and what they ignore. Understanding and conveying expert practice involves unpacking that tacit knowledge to make it available to the novice.

A key contribution of this literature is its challenge to the notion that learning proceeds from simple to complex in a linear fashion, that each step can be evaluated along the way, and that mastery of the early steps is essential to mastery of later steps. Instead, research into expertise has established rather convincingly that expert practice is of a different order than the work of novices. The work of James Voss (1983), for instance, showed how the problem-analysis work of experts in foreign policy differed not just in

content but also in form and structure from the work even of advanced graduate students grappling with the identical problem. Bereiter and Scardamalia (1993) sum up the distinctiveness of expert practice as follows:

*“The difference between experts and experienced nonexperts is not that one does things well and the other does things badly. Rather, the expert addresses problems whereas the experienced non-expert carries out practiced routines . . . The career of the expert is one of progressively advancing on the problems constituting a field of work, whereas the career of the non-expert is one of gradually constricting the field of work so that it more closely conforms to the routines the non-expert is prepared to execute.”*

The work of Voss and others provokes thought about how experts make that qualitative leap into the expert domain. Expert thinking is usually described as more complex, more contextual, more multi-dimensional, more nuanced, more historically grounded, and more self-conscious than the thinking of novices. Conceptualizing expertise from a more developmental perspective, Bereiter and Scardamalia (1983) offer this thesis: “in order to be experts, people must choose to address the problems in their field at the upper limit of the complexity they can handle. And they must make this choice early in their careers, or perhaps even earlier, as school children. For it is through such working at the upper edge that people develop the deep knowledge that makes expert performance possible”.

*The Lessons of Experience*, a study of over 200 managers and executives, lends some interesting support to Bereiter and Scardamalia’s claim about timing. They emphasize the transformative value for leadership development of fast-track careers, with rapidly changing assignments that are incrementally difficult and require line-of-fire ingenuity. Citing another study of 700 CEOs, McCall et al. report an intriguing and somewhat disturbing finding, that “leadership is a skill that can be learned only through actual experience, preferably before the age of thirty” (McCall, Lombardo, and Morrison 1988). Slow growth, they argue, doesn’t yield much—a dilemma we return to later when discussing gender differences and executive development.

The questions that the researchers on expertise explore concern the nature of “deep knowledge”: what experts learn to pay attention to, how experts organize information and act on it, relationships between declarative and procedural knowledge, formal and informal knowledge, the origins and development of “metaknowledge” as a self-regulatory learning process, and the learned ability to judge “promisingness.” These questions help unpack the more amorphous and not terribly useful category of “creativity.”

Donald Schon can be regarded as the grandfather of expertise theory. An architect by training and a professor of Urban Studies at MIT, Schon was initially worried about the lack of transfer from the study of design to its practice, which of all disciplines has always been taught in rather practical ways. Schon originated the notion that in studying design, one should be learning how to be a designer—that is to learn to take on the identity of a designer. (Scott Turow’s

autobiography, *One L*, explores the same sort of transition into becoming a lawyer as he underwent it in his first year of at Harvard Law School.)

First in *The Reflective Practitioner* and later in *Educating the Reflective Practitioner*, Schon argues for importance of “reflection in action” as it is stimulated by what he calls the “reflective practicum.” The reflective practicum is centered around the completion of a project, by which Schon means an actual piece of work as it would be undertaken in any field. Unlike the traditional practica, in which students are more or less turned loose in the field, the reflective practicum involves ongoing field and classroom interactions with a coach in which the tacit knowledge of the coach is made the subject of joint reflection. Schon argued that this level of reflection was essential to displace the heavy emphasis on teaching mere techniques and routines. He believed that the intrusion of “technical rationality” as a model for professional training and practice threatened to squeeze out the essence of professional practice—the exercise of “wisdom and artistry”: “the growing power of technical rationality, where it is growing, reduces the professional school’s disposition to educate students for artistry in practice and increases its disposition to train them as technicians. And the perceived constriction of professional autonomy makes practitioners feel less free to exercise their capacities for reflection-in-action” (Schon 1987).

If this all sounds suspiciously like the “action learning” framework that is fairly well known in business circles, it is not coincidental. Schon’s work derives in part from a long collaboration with Chris Argyris of Harvard University beginning in the early 1970s (Argyris and Schon 1974).

Action learning is one application growing out of research on expertise that tries to address the vexing problem of developing effective, transformed, reflective practice. Although the term is associated with the British physicist Reg Revans and his work in the 1940s, action learning began to blossom in the 1990s largely spurred by the work of Argyris and others. A 1998 book on action learning pronounces it somewhat hyperbolically as *the* technique to solve the pending leadership crisis in business: “Organizations are rapidly heading toward a leadership crisis and may be there already. People emerging from executive development programs or who have been groomed for leadership through succession planning are not up to the task. . . . Action Learning provides leaders a chance to experiment with new behaviors. They may not learn everything they need to know, but they emerge from the program with one key attribute they may have lacked when they entered it. That attribute is increased self-awareness, and it will be something few twenty-first century leaders can do without” (Dotlich and Noel 1998).

Action learning claims applicability to problem solving, organizational learning, team building, leadership development, and professional growth/career development (Marquardt 1999). Although they are somewhat flexible in practice, action learning programs typically include these elements:

1. A problem or challenge framed in terms of a field-based project, often one that is slightly outside the normal work responsibilities of participants, to develop greater out-of-the-box thinking and to create more challenging situations for individuals and teams.

2. A team or action learning group whose work on the project becomes the team-building component
3. Systematic questioning or reflection (components of Schon's reflection in action as well as Mezirow's transformative learning)
4. Resolution of the initial problem or completion of the project that includes high levels of commitment to both the outcome and the process
5. A coach, sometimes called a "set advisor," who is especially skilled in high-level group and individual observations and interventions (adapted from Marquardt)

Another common feature of action learning is that it is a lengthy process, and time may be as much a factor in its effectiveness as any of the components listed above. A typical time frame for action learning is as follows:

- 3–4 days of orientation and team building
- 2–3 weeks of off-site project work and data gathering
- 1 week of data analysis and development of recommendations
- 90-minute presentations by each team to top levels of leadership
- 1 day debrief
- follow-up with senior management (Dotlich and Noel 1998)

Given the time commitment, action learning is usually pegged at upper levels of leadership.

Key elements in the action learning framework are the concepts of single- and double-loop learning. Single-loop learning refers to elementary problem solving: the room is too hot, so you lower the thermostat. Double-loop learning refers to learning that gets outside the single-loop by challenging the problem itself: Why should the temperature be set at the new level? Why use a thermostat instead of something else? Why did the room temperature drop in the first place? Double-loop learning, like other references to critical reflection, represents efforts to help adult learners get at otherwise unrecognized or undiscussable norms and the values, contexts, belief systems, or personalities that maintain the status quo. Double-loop learning is part of the action learning framework. It is a group- or team-based approach that includes four steps:

1. Discovery of the disparity between one's espoused theories or assumptions and one's "theory in use"
2. Creation of new meanings
3. Production of new actions congruent with those meanings
4. Generalization into new theories or assumptions

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## Implications for Executive Education

These theoretical foundations point toward a number of open questions and specific implications for best practice in executive education.

### 1. *Creating interpersonal intensity in an online environment*

Given the consistent theme in adult education literature of the need for critical reflection and personal transformation, executive education will inevitably remain an intensive personal and interpersonal encounter, with teachers, coaches, and facilitators to guide the process. The overriding challenge is to help people get beyond habitual ways of responding to new situations and to continue to develop more authentic, more creative, more courageous ways of being. A group environment is critical not just because groups bring multiple perspectives to confront an individual's point of view but also because the group environment becomes the learning environment for dealing with the interpersonal challenges of leadership.

Understandings of the technological implications for executive education are still in their infancy. There is much experimentation with various delivery systems to replace traditional classroom learning or supplement it with all kinds of adult populations and for all kinds of purposes from basic literacy to online graduate degrees. However, most of the research literature is confined to the work of educational institutions offering distance education and is informed largely by behavioral theories of learning. There is an emerging management literature for virtual teams and

other forms of telecommuting—for instance, Haywood (1998). For executive education, online materials can provide prework for a program; offer supplementary material; and deliver assessment instruments, feedback, and follow-up materials. Chat rooms and other electronic forms of networking are very useful to maintain communication among participants well after the program has ended. Online coaching is coming into use as well. For now, online capabilities seem best used in a supplementary fashion, although these enrichment possibilities should not be underestimated.

### 2. *Using new pedagogies to cultivate expert thinking*

The literature on expertise opens up richer ways of exploring the traditional area of creativity. Understanding what is meant by expert thinking (including the practices of leaders) and cultivating those expert practices challenge us to engage executives fully with these complex concepts and to explore what they mean to them in their work. There is rich material here to think about what it means to cultivate expertise in leadership. Using the “think aloud” protocol methodology developed for social science research is one possibility, as is the use of structured interviews in a seminar setting. William Perry used the simple interview question, “What has stood out for you during the year?” to derive his theory of how college students’ intellectual and ethical development changed over time. Lawrence Kohlberg and Carol Gilligan posed moral dilemmas to their subjects, listening for variations in how individual subjects reasoned about how they

might resolve the dilemma. These are rich but simple techniques easily adapted for other audiences. In a seminar setting, they yield data on individual assumptions and frameworks and on differences in thinking depending on context and experience, as well as providing participants with methodologies for probing the experiences and meanings held by others. Finally, more deliberate mixing of experts and novices through opportunities for novices to shadow experts or for executives to shadow each other are techniques worth exploring. Pedagogies of this sort point toward the positive effects of the “cognitive apprenticeship” advocated in much of the literature on expertise.

**3. *Integrating project-based and process-based learning***

Along with the theme of cultivating a capacity for self-reflection, the need for situated, or project-based, learning is dominant in the adult education literature. Our everyday work is in the form of projects: undertakings that extend over prolonged periods, with deep intellectual and often emotional investment, usually in collaboration with widely dispersed colleagues. The most productive projects are those that stretch us beyond the farthest reaches of our capabilities.

The U.S. Army's National Training Center epitomizes project-based learning. During a two-week period, 6,000 to 8,000 people participate in a real-time war simulation—as real as it gets without live ammunition. As in actual war situations, nothing ever goes as planned; the simulation designers make sure of that. Over 600 instructors, or

“observer/controllers,” shadow those in leadership positions in a “student:faculty ratio” of 1:1. Leaders are coached throughout the day, and each day ends with every unit coming together for a nonhierarchical debriefing called the After Action Review. This process is the heart of the NTC program: to push critical reflection about what went wrong and reframe assumptions about how to correct the problems. Videotapes and audiotapes of field performance, down to the firing of every weapon, accompany the observer/controllers’ feedback to leave no room for argument about what happened. This additional layer of feedback puts intentions up against execution and allows detailed analysis of behavior.

Brigadier General William S. Wallace describes the leadership model embedded in the After Action Review: “The After Action Review has democratized the army. It has instilled a discipline of relentlessly questioning everything we do. Above all, it has resocialized three generations of officers to move away from a command-and-control style of leadership to one that takes advantage of distributed intelligence. It has taught us never to become too wedded to our script for combat and to remain versatile enough to exploit the broken plays that inevitably develop in the confusion of battle” (Pascale, Millemann, and Gioja 1997).

The learning principles, extrapolated from that simulation, are these:

- A diverse team that must work across many functions and hierarchies is immersed in an intense and sustained situation.

- The team takes on an extremely tough project.
- As in the encounter groups of the 1960s, stress or exhaustion break down habitual ways of seeing or acting so new ones can take their place.
- Hierarchy must be suspended if feedback is to be open and complete.
- Hard data shows participants what happened.
- Highly skilled facilitators keep the focus on discovering what went wrong and steer clear of criticism and blame.
- Failures and mistakes are critical to learning, so criticism is avoided. The experience is about learning, not winning; breakdowns are essential for breakthroughs.

A number of organizations have exported that NTC program, notably Sears under the leadership of Gus Pagonis, an NTC alum. His success in adapting the program is seen as the fulcrum that turned Sears around.

#### 4. *Fostering metacognitive development in young leaders*

Since so many of the participants in executive education programs are in their mid 20s to mid 30s, developmental theory may help us understand how better to challenge and support them. These are people who often don't know that they don't know. They certainly encounter technical problems and know when they don't have the information or technique to solve the problem, but when it comes to interpersonal and systemic matters,

they don't yet have the contextual thinking capabilities to see the problem as a problem. When they encounter something that they "know" already, they lack the patience to revisit it, because they don't perceive it as a new problem or themselves as having refined capabilities. They have real trouble entering another person's frame of reference partly because they fear the interpersonal risk, partly because they don't really think another person's perspective is all that different from their own, and partly because they don't yet feel entitled to do so. They "know" these things cognitively but not operationally.

There are three key developmental milestones they must negotiate (more or less successfully):

- continuing to develop a less egocentric, more other-centered view of the world to get at the perspectives that other people hold, to recognize what that means in terms of understanding and acting, and to process how these perspectives differ from their own;
- understanding what it means both psychologically and socially to develop into the more public self that advanced levels of responsibility require;
- developing more ability to think metacognitively—to think about thinking. For instance, they must come to appreciate what it means that their actions have consequences for others, that decision making is more than the application of the right technique or method, that what they

say is listened to in more meaningful ways than it has been heretofore, that they need to find a balance between individuation (being themselves) and mutuality (being fully engaged with and responsible for others).

**5. Continuing development of metacognitive capabilities**

The shift to being able to think about thinking is the Newtonian revolution of adulthood. Every theory of adult learning refers to the continued need to develop reflective capabilities that enable adults to become more aware of themselves; of their impacts on others; and of their organizational, cultural, environmental, and historical contexts. For executive education, contextual thinking is the hallmark of metacognition. In *The Social Life of Information*, Brown and Duguid (2000) argue persuasively that knowledge, unlike information, doesn't travel well from one context to another. Knowledge is created by and lives within communities of practice, or, as the anthropologist Clifford Geertz put it, all knowledge is local knowledge. Thus Brown and Duguid argue that "the importance of people as creators and carriers of knowledge is forcing organizations to realize that knowledge lies less in its databases than its people" (121), which "helps explain why the same stream of information directed at different people doesn't produce the same knowledge in each" (129). The ability to use metacognition to understand context is the executive's best tool for reframing and retheorizing the present, for creating and leveraging knowledge, for understanding and managing change, and for resisting the latest disembodied fad.

**6. Using feedback to foster personal and organizational change**

Human behavior is hard to change because human thinking is hard to change. Feedback is perhaps the most reliable instrument for starting the change process. Feedback can come in a variety of forms: 360° feedback, self-assessment, debriefing, mentoring, coaching, videotape playback, and personal experience and observation. Conger's analysis of what makes feedback successful is useful, though, in describing its strengths and weaknesses, since feedback in and of itself does not necessarily work for the better.

- Feedback that powerfully contradicts one's self-image has a kind of shock value that can lead to serious self-examination. But if an individual is not motivated to change, or if the feedback is too devastating, the feedback is easily ignored.
- Surprisingly, positive feedback also has a high likelihood of promoting change. This kind of feedback tends to increase self-confidence, which, Conger notes, translates into greater initiative and risk taking, and more receptiveness to further feedback.
- Feedback overload can overwhelm the recipient, leading to rejection of all the feedback. Having skilled help to analyze, prioritize, and operationalize the feedback helps. A coach or guide who maintains contact with the recipient for a time after a feedback plan is developed also ensures continuity and discipline, as diet programs like Weight Watchers and Diet Center have demonstrated. The feedback itself may be

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less important than the interpersonal support for acting on it. Feedback on the feedback is a necessity.

- Context and source also determine the impact of feedback. Is the source trusted and credible? Is there organizational support for change? Is the purpose of the feedback clear? Is there opportunity to experiment with new behaviors with relative security? Has the feedback been invited?

Despite these caveats, feedback drives the kind of critical self-reflection necessary for change. Managed skillfully, as in the case of the After Action Review, feedback enables conceptual breakthroughs and can help to recontextualize shortcomings as growth opportunities.

## 7. *Considering the impact of gender*

Although there are still many unresolved questions at the theory level about women and work, at the empirical level it's beyond dispute that women represent a vast pool of managerial and leadership talent and that corporations have not been very successful in retaining and advancing women in significant numbers (McCracken 2000; Estrich 2000). At present, for instance, there are three female CEO's in the Fortune 500 and about 63 women among the top 2,500 executives. Women have specific needs for executive training that reflect a number of differences from men in style, in work values, and in their situatedness in organizations, specifically:

- They seem to learn better in collaborative rather than competitive situations (Belenky et. al 1986); they struggle more with self-confidence (McIntosh).
- They internalize often harmful perfectionistic standards because their relative underrepresentation creates unique pressures to perform (Lerner-Robbins 1996).
- They are subject to an array of double binds that often put them in no-win situations (Jamieson 1995; Rudman 1998; Tannen 1994).
- They experience more professional isolation than men (Catalyst 2000).
- Their differing communication styles reflect a stronger orientation than men to preserving interpersonal relations, and these strengths often go unrecognized and unrewarded (Tannen 1994; Fletcher 1999).
- They must balance more domestic and care-giving responsibilities with professional responsibilities than men and thus have greater difficulties working in situations where unbounded time is a measure of success (Meyerson and Fletcher 2000; Martin and Meyerson 1998).
- They are more likely to personalize their work because they tend to experience their lives in less compartmentalized ways than men do (Gilligan 1982); thus they respond to feedback differently.
- They tend to experience higher standards for performance and advancement than men, usually expressed in terms of the performance/potential dichotomy (Tannen 1994; Catalyst 2000; Meyerson 2000).

- They attach more significance to work that is intrinsically meaningful and less to work that is distinguished by titles, salary, and other perks than men (Sellers, 2000).
- They tend to commit later in life to specific kinds of work and more often defer careers or take time out from their careers for child-rearing.
- They report much greater importance in their career advancement than men do to the role of a mentor, and they experience and offer mentoring in different ways (Catalyst 2000; Duff 1999).
- They work in organizations in which male standards and behaviors are so normative as to be invisible and in which femaleness is a kind of deviation. (Ely and Meyerson 2000).

In a time of widespread corporate and systemic reorganization, the issue of gender also poses its own set of organizational challenges. “Fixing women” is only part of the equation; the larger issue is restructuring the workplace in ways that advantage everyone (Martin and Meyerson 1998). These issues, of course, become even more complex when questions of class, race, and ethnicity are factored in, since gender cannot be treated as a homogeneous experience that describes all women’s experiences, or all men’s experiences, as the same (Ely 1999). At its best, executive education for women entails both ends of this continuum (the individual and the systemic) to help develop both the personal and the organizational abilities that empower women to be fully effective for themselves and others.

#### 8. *Developing frameworks of ethical practice*

If the discovery of leadership formed the executive education agenda of the late eighties, the discovery of ethics displaced that agenda in the late nineties. Not that either of these themes is new, but the proliferation of books on these topics during their respective decades revealed dramatically the shifting foundations of senior leadership. Most cognitive development theories have long described moral reasoning as the highest level of cognitive development, so there is ample precedent for extending executive education into the realm of ethics. In the nineties, a host of business leaders began writing on the moral imperatives of business leadership in a global environment. Warren Bennis, for instance, identifies integrity as one of the three legs of leadership, along with competence and ambition (Bennis and Goldsmith, 1997). Other writers, such as John Dalla Costa (1998) in *The Ethical Imperative*, argue the business case for exercising what he calls “moral consciousness”—that an ethic centered around mutuality is the only sensible approach to doing business in an interdependent world. Still others, such as Robert Coles (2000) in *Lives of Moral Leadership*, trace the importance of moral behavior in leaders to the inspiration of ethical practices within the community.

Executive education needs to reflect moral consciousness in several ways:

- In subject matter, it can continue to develop the levels of self-consciousness about moral behavior that leaders need so that they can communicate the moral

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dimensions of their motives and decisions to others. If Noel Tichy is correct in stating that the highest level of effectiveness as a leader is being able to convey your leadership values in the form of stories (Tichy 1997), then all the psychological evidence suggests that such story-telling ability is both highly sophisticated and deeply personal. Educational methods such as those reflected in the transformative learning model provide ways to provoke self-examination of one's own standards of behavior.

- Executive education can help senior leaders link strategic planning with the organization's values. Too often, ethics are treated as tactical responses to errors in judgment. Texaco's blunder in racial relations, for instance, led to new programs centered around diversity. But a genuine commitment to ethical practice takes a more strategic approach. It involves introducing and reinforcing ethical habits of mind, developing methods of analysis to understand the day-to-day dynamics of ethical practice within the organization, and embedding ethical standards of practice in the organization's mission and culture.
- In form, executive education programming must reflect high standards of ethical practice. Stories to the contrary abound, from "diversity training" (in which minority participants are encouraged to discriminate against majority participants to let them experience discrimination) to "sensitivity

training" (in which men experience sexual harassment from women participants). The questionable effectiveness of such practices still begs the core question of their ethics. Whatever the topic of the educational program, executive education must be conducted at the highest level of ethical behavior. At best, executive education ought to model quite self-consciously a high ethical standard.

## Bibliography

- Argyris, Chris, and Donald Schon. 1974. *Theory in Practice: Increasing Professional Effectiveness*, San Francisco: Jossey-Bass.
- Belenky, Mary, et. al. 1986. *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, New York: Basic Books.
- Bennis, Warren, and Joan Goldsmith. 1997. *Learning to Lead*. Reading, Mass: Perseus Books.
- Bereiter, Carl, and Marlene Scardamalia. 1993. *Surpassing Ourselves: An Inquiry into the Nature and Implications of Expertise*, Chicago: Open Court Press.
- Brown, John Seely, and Paul Duguid. 2000. *The Social Life of Information*. Boston: Harvard Business School Press.
- Catalyst. 2000. *Cracking the Glass Ceiling: Strategies for Success*. New York: Catalyst.
- . 1999. *Creating Women's Networks: A How-To Guide for Women and Companies*. San Francisco: Jossey-Bass.
- Coles, Robert. 2000. *Lives of Moral Leadership*. New York: Random House.
- Conger, Jay. 1992. *Learning to Lead: The Art of Transforming Managers to Leaders*. San Francisco: Jossey-Bass.
- Costa, John Dalla. 1998. *The Ethical Imperative: Why Moral Leadership is Good Business*. Reading, Mass: Perseus Books.
- Cranton, Patricia. 1994. *Understanding and Promoting Transformative Learning: A Guide for Educators of Adults*, San Francisco: Jossey-Bass.
- Cross, K. Patricia. 1991. *Adults as Learners: Increasing Participation and Facilitating Learning*, 2nd ed., San Francisco: Jossey Bass.
- Dotlich, David, and James Noel. 1998. *Action Learning: How the World's Top Companies are Re-Creating Their Leaders and Themselves*. San Francisco: Jossey-Bass.
- Duff, Carolyn. 1999. *Learning from Other Women: How to Benefit from the Knowledge, Wisdom, and Experience of Female Mentors*. New York: Amacom.
- Estrich, Susan. 2000. *Sex and Power*. New York: Riverhead Books.
- Ely, Robin. December 1999. *Feminist Critiques of Research in Organizations*. Working Paper #6. Boston: Center for Gender in Organizations.
- Ely, Robin J. and Debra E. Meyerson. May 2000. *Theories of Gender in Organizations: A New Approach to Organizational Analysis and Change*. Working Paper #3. Boston: Center for Gender in Organizations.
- Fisher, Dalmar, and William R. Torbert. 1995. *Personal and Organizational Transformations: The True Challenge of Continual Quality Improvement*. New York: McGraw Hill.

Fletcher, Joyce K. 1999. *Disappearing Acts: Gender, Power, and Relational Practice at Work*. Cambridge: MIT Press.

Freire, Paulo. 1968. *Pedagogy of the Oppressed*. New York: Seabury.

Geisler, Cheryl. 1994. *Academic Literacy and the Nature of Expertise: Reading, Writing, and Knowing in Academic Philosophy*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Gilligan, Carol. 1982. *In A Different Voice: Psychological Theory and Women's Development*. Cambridge: Harvard University Press.

Haywood, Martha. 1998. *Managing Virtual Teams: Practical Techniques for High-Technology Project Managers*. Boston: Artech House.

Jamieson, Kathleen. 1995. *Beyond the Double Bind: Women and Leadership*. New York: Oxford University Press.

Kegan, Robert. 1982. *The Evolving Self: Problem and Process in Human Development*. Cambridge: Harvard University Press.

Knowles, Malcolm. 1970. *The Modern Practice of Adult Education: Andragogy Versus Pedagogy*. New York: Association Press.

King, Patricia, and Karen Kitchener. 1994. *Developing Reflective Judgment: Understanding and Promoting Intellectual Growth and Critical Thinking in Adolescents and Adults*. San Francisco, Jossey-Bass.

Kohlberg, Lawrence, and Carol Gilligan. 1972. The adolescent as a philosopher. In *Twelve to Sixteen: Early Adolescence*. Edited by J. Kagan and R. Coles. New York: Norton.

Kohlberg, Lawrence, and R. Mayer. 1972. Development as the Aim of Education. *Harvard Educational Review* 42: 442–96.

Lerner-Robbins, Helene. 1996. *Our Power as Women: Wisdom and Strategies of Highly Successful Women*. Berkeley, CA: Conari Press.

Marquardt, Michael J. 1999. *Action Learning in Action: Transforming Problems and People for World-Class Organizational Learning*. Palo Alto: Davies-Black Publishing.

Marsick, Victoria. 1990. Action learning and reflection in the workplace. In *Fostering Critical Reflection in Adulthood*. Edited by Jack Mezirow and Associates. San Francisco: Jossey-Bass.

Martin, Joanne, and Debra E. Meyerson. 1998. Women and power: conformity, resistance, and disorganized coaction. In *Power and Influence in Organizations*. Edited by R. Kramer and M. Neale. Thousand Oaks, CA: Sage Science Press.

Maslow, Abraham. 1971. *The Farther Reaches of Human Nature*. New York: The Viking Press.

McCall, Morgan W., Michael M. Lombardo, and Ann M. Morrison. 1988. *The Lessons of Experience: How Successful Executives Develop on the Job*. New York: The Free Press.

McCracken, Donald. 2000. Winning the talent war for women: sometimes it takes a revolution. *Harvard Business Review* 78, no.6: 159–67.

McIntosh, Peggy. *Feeling Like a Fraud*. Papers #18, 37, and 90. Wellesley, Mass: Stone Center, Wellesley College.

Meyerson, Debra E., and Joyce K. Fletcher. 2000. A modest manifesto for shattering the glass ceiling. *Harvard Business Review* 78, no. 1: 126–36.

Meyerson, Debra E. 2000. Women and leadership at McKinsey. Paper read at meeting, November 29, New York City.

Mezirow, Jack. 1991. *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.

Pascale, Richard, Mark Millemann, and Linda Gioja. 1997. Changing the way we change. *Harvard Business Review* 75, no. 6: 127–39.

Perry, William. 1970. *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. New York: Holt Rinehart Winston.

Rogers, Carl. 1961. *On Becoming a Person*. Boston: Houghton Mifflin.

Rudman, Laurie A. 1998. Self-promotion as a risk factor for women: the costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology* 74: 629–45.

Schon, Donald. 1983. *The Reflective Practitioner*. New York: Basic Books.

———. 1987. *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.

Sellers, Patricia. 2000. The Fifty Most Powerful Women in Business: Secrets of the Fastest-Rising Stars. *Fortune* October 16.

Tannen, Deborah. 1994. *Talking from 9 to 5: Women and Men in the Workplace*. New York: Avon Books.

Tichy, Noel. 1997. *The Leadership Engine: How Winning Companies Build Leaders at Every Level*. New York: HarperBusiness.

Voss, James F., T. R. Greene, T. A. Post, and B. C. Penner. Problem-solving skill in the social sciences. *The Psychology of Learning and Motivation: Advances in Research and Theory*. Vol. 17. Edited by G. H. Bower. New York: Academic Press, 165–213.

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Karen Spear brings a background in higher education to consulting and training engagements. She recently served as a faculty member on Lore's Inspirational Leadership program. She headed up Lore's design team for Personal Effectiveness program for women and is the lead faculty member for that program. She has also served other Lore clients including Chase Bank. Her special skills within Lore are on leadership development and interpersonal skills, particularly for women.

Karen was Dean of Arts and Sciences for nine years at Fort Lewis College in Durango, Colorado where she took a particular interest in curriculum and faculty development. She is the author of two books on collaboration in the teaching of writing that are widely used by secondary and higher education faculty. She has also published a wide variety of work on liberal education, cognitive development, writing development, and collaboration.

Her teaching career includes developing and teaching over 30 courses in literature, writing, teacher training, cognitive development, psychology, and interdisciplinary studies.

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